INFLUENCE OF HUMAN RESOURCE MANAGEMENT PRACTICES ON THE PERFORMANCE OF EMPLOYEES IN RESEARCH INSTITUTES IN KENYA

KEPHA OMBUI ANDREW

THESIS SUBMITTED TO JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY IN PARTIAL FULFILLMENT FOR THE REQUIREMENTS OF THE AWARD OF DOCTOR OF PHILOSOPHY (Ph.D.) IN HUMAN RESOURCE MANAGEMENT

DECLARATION

This thesis is my original work and lother University.	has not been presented for a degree in any
Signature	Date:
Kepha Ombui Andrew	
This thesis has been submitted for exsupervisors.	xamination with our approval as University
Signature	Date:
Prof. Elegwa Mukulu, Ph.D.	
JKUAT, Kenya	
Signature	Date:
Dr. Gichuhi, A. Waititu, Ph.D.	
JKUAT, Kenya	

DEDICATION

To my loving wife Betty Nasambu and our children Alvin Mongera, Romeo Matakala and Natasha Kemunto. You have been a source of my inspiration and strength. You have stood with me during the entire period of my studies. Your prayers have made me to excel in my studies and I would not have made this far without your encouragement and support. It is for this reason that I dedicate this work to all of you. God bless you.

ACKNOWLEDGMENT

I wish to sincerely convey my gratitude to my supervisors Professor Elegwa Mukulu and Dr. Anthony G. Waititu for their encouragement and guidance through out the entire process of writing this document despite their tight schedule. My special appreciation goes to KARI management for creating an enabling environment for learning besides the moral support that I received during the entire period of my studies. In this respect, I wish to thank Mr. S. M. Ndei in a special way for his unwavering support and moral courage. May God bless him and continue giving him wisdom and strength to serve the Institute. I also wish to thank my colleagues who in one way or another have contributed to the success of this document. My special appreciation goes to Mr. Patrick Maina, Peter K. Njau, Reuben Koskei, Ambrose Nzabi, Agnes Moshira, Lilian Njenga, Dixon Wamae, T.M.M. Osege, Margaret Wambale, Peter Getange and Emily Oudo among others. Others include Dr. Lawrence Mose and Dr.Lusike Wasilwa for their moral support. I would also wish to thank the entire Management of JKUAT, Nairobi CBD campus for their co-operation and all my PhD classmates especially Mr. Ayub Siagi and Assumptah Kagiri who have been encouraging me during the entire process of developing this document without also forgetting my parents who have been my mentors.

To the research institutes which provided information for this study, I will always be indebted for making this study a success. To the school of human resource development for taking care of the students' interests and ensuring that all was well and also to the Board of Postgraduate studies for ensuring that our work progress was good and up to date. My sincere appreciation also goes to my uncle, Francis Nyambisa who has been supportive and really encouraged me even when the circumstances appeared to be difficult. Finally, I wish to thank the entire Institute of Human Resource Management fraternity for their moral support and encouragement.

May God bless you all.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGMENT	iv
TABLE OF CONTENTS	Vi
LIST OF TABLES	xii
LIST OF FIGURES	XV
LIST OF APPENDICES	xvii
ACRONYMS AND ABBREVIATIONS	xviii
DEFINITION OF TERMS	xix
ABSTRACT	XXi
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background to the study	1
1.2 Statement of the Problem	10
1.3 Objectives of the Study	12
1.3.1 General Objective	12
1.3.2 Specific Objectives	12
1.4 Hypotheses	13
1.5 Significance of the study	13
1.6 Scope of the Study	14
1.7 Limitations of the Study	15
CHAPTER TWO	16
LITERATURE REVIEW	16
2.1 Introduction	16

2.2 Theoretical Framework	16
2.2.1 Resource-Based Theory (By Porter's)	17
2.2.2 Need hierarchy Theory (By Abraham H. Maslow, 1954)	18
2.2.3 Knowledge Management Effectiveness ("Black Box") Model	23
2.2.4 Human Capital Theory	25
2.2.5 Universalistic Theory	27
2.2.6 Michigan's Model	28
2.3 Conceptual Framework	31
2.3.1 Recruitment and Selection	33
2.3.2 Training and Development	35
2.3.3 Reward System	37
2.3.4 Human Resource Planning	40
2.3.5 Staff Welfare	42
2.3.6 Concept of Employee Performance	43
2.4 Empirical review	45
2.5 Critique of the existing literature relevant to the study	48
2.6 Research gaps	49
2.7 Summary	50
CHAPTER THREE	51
RESEARCH METHODOLOGY	51
3.1 Introduction	51
3.2 Research Design	51
3.3 Population	53
3.4 Sampling Frame	54
3.5 Sample and Sampling Techniques	55

3.6 Data collection instruments	58
3.7 Data Collection procedures	58
3.8 Data analysis and presentation	58
3.8.1 Data analysis	58
3.8.2 Data presentation	60
3.9 Hypothesis Testing	60
CHAPTER FOUR	62
RESEARCH FINDINGS AND DISCUSSION	62
4.1 Introduction	62
4.2 Response Rate	62
4.3 General Information	63
4.3.1 Gender	63
4.3.2 Category of Employees	64
4.3.3 Age of Respondents	66
4.3.4. Levels of Education	66
4.3.5 Experience on the Job	67
4.3.6 Position Held	68
4.4 Results of the Pilot Study	69
4.5 Employee Performance	71
4.5.1 Introduction.	71
4.5.2 Factor analysis for employee performance	71
4.5.3 Descriptive analysis results for Employee Performance	73
4.5.4 Normality of Employee Performance in research institutes	79
4.6 Recruitment and Selection.	83
4.6.1 Introduction	02

	4.6.2 Factor Analysis for Recruitment and Selection	84
	4.6.3 Descriptive analysis results for Recruitment and Selection	86
	4.6.4 Possible ways of improving Recruitment and Selection	98
	4.6.5 Correlation analysis of independent variables	100
	4.6.6 Recruitment and Selection Pearson correlation computation	101
	4.6.7 Results of the regression analysis on Recruitment and Selection	102
	4.6.8 Results of analysis of variance on Recruitment and Selection	103
	4.6.9 Results of the coefficients for regression between recruitment a selection and employee performance	
	4.6. 10 Recruitment and Selection Hypothesis Results	106
4.	7 Training and Development	107
	4.7.1 Introduction	107
	4.7.2 Factor analysis for training and development	107
	4.7.3 Descriptive analysis results for Training and Development	109
	4.7.4 Possible ways of improving Training and Development	125
	4.7.5 Training and Development Pearson correlation computation	128
	4.7.6 Results of the regression analysis on Training and development	129
	4.7.7 Results of analysis of variance on Training and Development	131
	4.7.8 Results of the coefficients for regression between Training a Development and employee performance.	
	4.7.9 Training and Development Hypothesis Results	134
4.	.8 Reward System	135
	4.8.1 Introduction	135
	4.8.2 Factor analysis for reward system	135
	4.8.3 Descriptive analysis results for Reward System	137
	4.8.4 Possible ways of improving Reward System in Research Institutes	150

	4.8.5 Reward System Pearson correlation computation	153
	4.8.6 Results of the regression analysis on Reward System	154
	4.8.7 Results of Analysis of variance on Reward System	156
	4.8.8 Results of the coefficients for regression between reward system and employee performance	157
	4.8.9 Reward System Hypothesis results	158
4.	9 Human Resource Planning	159
	4.9.1 Introduction.	159
	4.9.2 Factor analysis for human resource planning	159
	4.9.3 Descriptive analysis results for Human Resource Planning	161
	4.9.4 Ways of improving Human Resource Planning in Research Institutes	174
	4.9.5 Human resource planning Pearson correlation computation	177
	4.9.6 Results of regression analysis on Human Resource planning	178
	4.9.7 Results of Analysis of variance on Human resource planning	180
	4.9.8: Results of the Coefficients for regression between Human Resource planning and employee performance	181
	4.9.9 Human Resource planning Hypothesis results	183
4.	10 Staff Welfare	184
	4.10.1 1ntroduction	184
	4.10.2 Factor analysis for staff welfare	184
	4.10.3 Descriptive analysis results for Staff Welfare	185
	4.10.4 Possible ways of improving Staff Welfare in research institutes	193
	4.10.5 Staff welfare Pearson correlation computation	195
	4.10.6 Results of the regression analysis on staff welfare	197
	4.10.7 Results of Analysis of variance on Staff Welfare	198
	4.10.8 Results of the coefficients for regression between staff welfare and employee performance	199

4.10.9 Staff Welfare Hypothesis results	201
4.11 Multiple Linear regression analysis results for all variables	202
4.12 Optimal Model	205
CHAPTER FIVE	207
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	207
5.1 Introduction	207
5.2 Summary of Major Findings	207
5.2.1 Recruitment and Selection	208
5.2.2 Training and Development	209
5.2.3 Reward System	210
5.2.4 Human resource planning	210
5.2.5 Staff Welfare	211
5.3 Conclusion	212
5.4 Recommendations	213
5.4.1 Recruitment and Selection	213
5.4.2. Training and Development	214
5.4.3. Reward system	214
5.4.4. Human resource planning	214
5.4.5 Staff welfare	215
5.5 Areas for further research	215
REFERENCES	217
APPENDICES	239

LIST OF TABLES

	PAGE
Table 2.1: HRM Links to Strategy and Structure	30
Table 3.1 Study population	54
Table 3.2 Sampling frame	55
Table 3.3 Sample size.	57
Table 4.1 Response rate	63
Table 4.2 Gender of respondents	64
Table 4.3 Category of employees	64
Table 4.4 Age of respondents	66
Table 4.5 Levels of education.	67
Table 4.6 Experience on the job.	68
Table 4.7 Position held.	69
Table 4.8 Reliability coefficients	70
Table 4.9 Reliability statistics of all variables	71
Table 4.10 Component matrix for employee performance	72
Table 4.11 Reliability coefficient for employee performance	73
Table 4.12 Respondents opinion on employee performance	74
Table 4.13 Checking for Normality of employee performance	80
Table 4.14 Component matrix for recruitment and selection	85
Table 4.15 Reliability coefficient for recruitment and selection	86
Table 4.16 Respondents opinion on recruitment and selection	87
Table 4.17 Possible ways of improving recruitment and selection	99

Table 4.18 Recruitment and selection Pearson correlation computa	tion102
Table 4.19 Model summary for regression between recruitment and	1
selection and employee performance	103
Table 4.20 ANOVA results for recruitment and selection and emp	loyee
performance	104
Table 4.21 Coefficient for regression between recruitment and sele	ction
and employee performance	105
Table 4.22 Hypothesis testing for regression of coefficients between	n
recruitment and selection and employee performance	106
Table 4.23 Component matrix for training and development	108
Table 4.24 Reliability coefficient for training and development	109
Table 4.25 Respondents opinion on training and development	110
Table 4.26 Possible ways of improving training and development	126
Table 4.27 Training and development Pearson correlation computa	tion129
Table 4.28 Model summary for regression between training	
and development and employee performance	131
Table 4.29 ANOVA results for training and development and employed	loyee
performance	131
Table 4.30 Coefficients for regression between training and develo	pment
and employee performance	133
Table 4.31 Hypothesis testing for regression of coefficients between	n
training and development and employee performance	134
Table 4.32 Component matrix for reward system	136
Table 4.33 Reliability coefficient for reward system	137
Table 4 34 Respondents oninion on reward system	138

Table 4.35 Possible ways of improving reward system151
Table 4.36 Reward system Pearson correlation computation
Table 4.37 Model summary for regression between reward system and
employee performance
Table 4.38 ANOVA results for reward system and employee
performance156
Table 4.39 Coefficients for regression between reward system and
employee performance
Table 4.40 Hypothesis testing for regression of coefficients between
reward system and employee performance
Table 4.41 Component matrix for human resource planning
Table 4.42 Reliability coefficients for human resource planning161
Table 4.43 Respondents opinion on human resource planning162
Table 4.44 Possible ways of improving human resource planning175
Table 4.45 Human resource planning Pearson correlation computation178
Table 4.46 Model summary for regression between human resource
planning resource planning and employee performance180
Table 4.47 ANOVA results for human resource planning and employee
employee performance
Table 4.48 Coefficients for regression between human resource planning
and employee performance
Table 4.49 Hypothesis testing for regression of coefficients between human
resource planning and employee performance
Table 4.50 Component matrix for staff welfare
Table 4.51 Reliability coefficients for staff welfare 185

Table 4.52 Respondents opinion on staff welfare	.186
Table 4.53 Possible ways of improving staff welfare	194
Table 4.54 Staff welfare Pearson correlation computation	.196
Table 4.55 Model summary for regression between staff welfare and	
employee performance	.198
Table 4.56 ANOVA results for staff welfare and employee	
performance	.199
Table 4.57 Coefficients for regression between staff welfare and employ	/ee
performance	.200
Table 4.58 Hypothesis testing for regression between staff welfare and	
employee performance	.201
Table 4.59 Regression analysis results for all variables	202
Table 4.60 Model summary for regression of all variables	203
Table 4.61 Coefficients for regression of all variables	. 204
Table 4.62 Model summary for regression analysis on reward system	
and recruitment and selection	205

LIST OF FIGURES

	PAGE
Figure 2.1 Maslow's need hierarchy	19
Figure 2.2 Knowledge management effectiveness.	25
Figure 2.3 Conceptual framework.	32
Figure 4.1 Category of employees	65
Figure 4.2 Normality of employee performance	81
Figure 4.3 Normal Q-Q plot of employee performance	82
Figure 4.4 Detrended Normal Q-Q plot of employee performance	83
Figure 4.5 Optimal Model	206

LIST OF APPENDICES

	PAGE
Appendix 1: Introduction letter	239
Appendix 2: Questionnaire	240
Appendix 3: List of research institutes.	254

ACRONYMS AND ABBREVIATIONS

CRF Coffee Research Foundation

GOK Government of Kenya

HR Human Resources

HRM Human Resources Management

HRP Human Resource Planning

KARI Kenya Agricultural Research Institute

KEFRI Kenya Forestry Research Institute

KEMFRI Kenya Marine Fisheries Research Institute

KEMRI Kenya Medical Research Institute

KESREF Kenya Sugar Research Foundation

KIRDI Kenya Industrial Research and Development Institute

MDG Millennium Development Goals

R & D Research and Development

TRF Tea Research Foundation

DEFINITION OF TERMS

Motivation: Motivation may be rooted in a basic need to minimize physical pain and maximize pleasure, or it may include specific needs such as eating and resting, or a desired object (Bandura, 2003)

Human resource management: This is a strategic approach to acquiring, developing, managing and gaining commitment of the organization's key resource i.e. the people (Nyambegera, 2008)

Training: Training can be defined as a process that seeks to change the employees' behavior at work through the application of learning principles with a view to enhancing human performance (Dessler, 2011).

Development: Development can be defined as the planned growth and expansion of knowledge and expertise beyond the present job requirement (Bessant & Tidd, 2011).

Recruitment: Recruitment can be defined as a process of attracting qualified and interested individuals who are interested in working for an organization (Armstrong, 2008).

Selection: Selection can be defined as a process of screening interested candidates in order to reduce their number (Cole, 2006).

Reward management: Reward management is concerned with the formulation and implementation of strategies and policies whose purpose is to reward people fairly, equitably and consistently in accordance with their value to the organization and to help the organization to achieve its strategic goals (Nzuve, 2007).

Human resource planning: Human resource planning can be defined as a process of determining the total labour requirements that an organization require in order to achieve its objectives (Robbins & Coulter, 2005).

ABSTRACT

The purpose of this study was to investigate the influence of human resource management practices on the performance of employees of research institutes in Kenya. The specific objectives of the study were to determine how recruitment and selection, training and development, reward system, human resource planning and staff welfare influence employee performance in research institutes in Kenya. When good HRM practices are employed in an organization, it enhances employees' productivity, thus the achievement of organizational goals. As the world is becoming more competitive and unstable than before, organizations are seeking to gain more competitive edge at all cost and are turning to more innovate sources through HRM practices. The study adopted descriptive and correlational research designs. Stratified random sampling technique was used in the study while the study population consisted of all the employees in the selected cadres of all Government owned research institutes, whose total number was 986. The target population consisted of 760 employees while the sample size consisted of 255 employees. Linear regression analysis was used to establish the relationship between independent variables and dependent variable. Statistical package for social sciences (SPSS) version 20 was used to analyze quantitative data while qualitative data was analyzed through the use of questionnaires. t-test was conducted to test the significance of independent variables with the dependent variable at 5% level of significance. The Pearson correlation computation between all the independent variables and the dependent variable were highly significant at; recruitment and selection - 0.071, reward system - 0.791; training and development and staff welfare-0.000; human resource planning-0.049. The study findings indicate that training and development, human resource planning, staff welfare and recruitment and selection have a positive influence on employee performance. These findings suggest that there is a need for research institutes to adopt and consistently implement appropriate human resource planning, recruitment and selection, training and development as well as staff welfare in order to deliver on their mandates. The study recommends further research on other factors that may have an influence on employee performance.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Organizations worldwide primarily exist in order to achieve specific goals. For this happen, they therefore, need to embrace basic HRM practices such as recruitment and selection, training and development, reward management and human resource planning which are important for their survival (Walker, 2001). Nzuve (2007) observes that when good HRM practices are employed in an organization, they enhance employee productivity, thus the achievement of organizational goals. Nyambegera (2005) and Okumbe (2001) also observe that organizations with good HRM practices are able to not only retain its talented employees, but also able to attract the best employees from the labour market. Organizations which are results oriented must put in place good HRM practices (Petrovsky, 2009; Smith *et al.*, 2004

The notion of modern HRM practices has become an increasingly used way of referring to high levels of delegation of decisions, extensive lateral and vertical communication channels, high reward systems, often linked to multiple performance indicators, and other practices that either individually or in various bundles are deployed to achieve high levels of organizational performance (Ichniowski, 2007; Zenger & Hesterly, 2005; Colombo & Delmastro, 2002; Teece, 2007). Laurse and Foss (2005) supply a number of theoretical arguments for why HRM practices are favourable to innovative activity.

One prominent characteristic of many HRM practices is that they increase decentralization by delegating problem-solving rights to the shop floor. When implemented appropriately, these rights co-exist alongside access to relevant knowledge, much of which may be inherently tacit and thus requires decentralization for its efficient use.

As the world is becoming more competitive and unstable than before, organizations are seeking to gain competitive advantage at all cost and are turning to more innovate sources through human resource management practices (Sparrow & Jackson, 2005). Human resource management (HRM) practices have been defined in several aspects. Schuler and Jackson (2002) define HRM practices as a system that attracts, develops, motivate, and retains employees to ensure the effective implementation and the survival of the organization and its members. Besides, HRM practices is also conceptualized as a set of internally consistent policies and practices designed and implemented to ensure that a firm's human capital contribute to the achievement of its business objectives (Delery & Doty, 2004). Likewise, Minbaeva (2005) viewed HRM practices as a set of practices used by organizations to manage human resources through facilitating the development of competencies that are firm specific, produce complex social relation and generate organization knowledge to sustain competitive advantage. Against this backdrop, it is concluded that HRM practices relate to specific practices, formal policies, and philosophies that are designed to attract, develop, motivate and retain employees who ensure the effective functioning and survival of the organization.

There is growing evidence that human resource management practices can play an important role in attaining a high quality workforce (Marchington & Wilkinson, 2006; Phillips, 2005). Several research studies have described HRM practices as a means of achieving competitive advantage (Delery 2004; Pfeffer 2006; Walker 2001). Consistent with this perspective is an equally important issue for organizations to have motivated workforce who can perform and produce results. Studies of progressive HRM practices in recruitment and selection, training and development, reward management and human resource planning have realized that this can lead to reduced turn-over and absenteeism, better quality work and better performance (Arthur, 2005; Delery & Heselid, 2008; Shaw & Premush, 2004; Snell & Youndt, 2002).

The changing business environment in knowledge economy has also made the adoption of HRM practices imperative for competitive advantage. The impact of HRM practices on employee performance has been extensively studied in the recent past. These studies have found a positive influence between HRM practices and employee performance (Becker & Huselid, 2001; Chang & Kuo, 2004; Jarventus, 2007; Rizov & Crouches, 2008; Sang, 2005). Most of these studies have been undertaken in the United States and Europe (Baseli *et al.*, 2001; Hoqune, 2001) to examine the role of HRM practices and the performance of employees. These studies have indeed confirmed that HRM practices do have a bearing on the performance of employees.

Organizations develop HRM practices that genuinely reflect their beliefs and principles and the relationship between management and employees, or they may merely devise practices that deal with current problems or requirements (Dessler, 2002). These practices include recruitment and selection, training and development, performance management, remuneration systems, occupational health and safety, industrial relations, human resource information system and human resource planning (Delery & Doty 2004; Jackson & Schuler 2001; Oakland & Oakland 2001; Armstrong, 2006). Several theoreticians have argued that the human resources of an organization are potentially the only source of sustainable competitive edge for organizations (Becker & Gerhart 2003; Ferris, Hochwarter, Buckley, Harrell Cook & Fink 2005; Pfeffer 2004; Oyoo & Otike, 2002; Mutula, 2008).

Armstrong (2006) advocates that an organization's economic growth depends on its productivity. If an organization's productivity increases day by day, it will run smoothly and attain the highest possible level of productivity to ensure sustainability of the organization. In addition to this, there is the challenge of globalization or market competition. Given this situation, the success of an organization depends heavily on effective human resource management practices (Porter 2001). Whitener (2001) indicate that excellent organizations recognize that human resources are their number one asset. This is in the dynamic organization and industry.

A series of research conducted at the organizational level also suggests that human resource management practices affect employee performance by shaping their behaviours and attitudes (Arthur 2005; Huselid 2005; Tsui; Pearce, Porter & Tripoli 2003). Whitener (2001) indicates that employees interpret organizational actions such as human resource practices (Delery 2002; Settoon, Ostroff & Bowen 2000; Wayne, Shaw & Linden 2004) and the trustworthiness of management (Eisenberger, Huntington, Hutchison & Sowa, 2005) as indicative of the personified organization's commitment to them. They reciprocate their perceptions accordingly in their own commitment to the organization. A well established stream of research rooted in social exchange theory has revealed that employees' commitment to the organization derives from their perceptions of the employer's commitment to and support of them (Eisenberger *et al.* 2001; Hutchison & Garstka, 2004; Wayne *et al.* 2003). In this regard, a useful framework in which to visualize commitment behaviour is to view them as components of fair exchange between a company and its employees. This approach to motivation postulates that employees and the organizations are involved in an exchange relationship (Porter, 2001).

Human resource management practices are very crucial to the attainment of organizational goals (Gupta 2008). It is proven that human resource management practices directly relate to all managers and line staff facilitated and supported by a lean and competent human resource department. An organization must have the various types of employees who should be managed in a way that would enable them to achieve their personal as well as the organizational objectives simultaneously (Flippo 1999). Effective human resource management practices are assumed to improve the performance of employees and generate their

commitment (Benkhoff 1997; Dobbs 2003). The way to do this is through management philosophy which assumes that eliciting worker discretionary effort of enhancing motivation and generating employee commitment will lead to improved organizational performance. Essentially, in order to create a competitive advantage, an organization must implement a strategy that creates a positive value. The implementation of effective human resource management practices can create a source of competitive advantage as the practices are added and thus work together to generate positive value for the organization. Specifically, this positive value is created by means of influencing the discretionary effort of employees.

According to the resource based theory of the organization, the effective management of human resources is valued not only for its role in implementing of given competitive scenario, but also for its higher productivity in organizations (Porter, 2001). In such circumstances, effective human resource management practices have the potential to create organizations that are more intelligent and flexible than their competitors through the use of policies and practices that focus on hiring, developing talented staff and synergizing their contribution within the resource bundle of the organization (Armstrong, 2006). This can lay the basis for sustained competitive advantage because HRM practices are socially complex and competitors may not be able to replicate their diversity and depth. Moreover, the human resource is historically sensitive. Therefore, it takes time to develop a work force that is embedded in the operational systems of an organization so that it can enhance the organization's capacity and productivity (Cole, 2000).

On the global context, various scholars have also attempted to study the role of HRM practices on the performance of organizations. Studies conducted by Mutua et. al (2012) to establish the role of HRM practices on the performance of financial co-operatives based in Nairobi County found out that most studies dwell on financial performance and recommended the need for a balanced approach that considers non-financial measures dwelling on HRM practices. Kidombo et al (2012) also conducted studies to establish the role of HRM practices on organizational commitment in manufacturing firms in Kenya. They found out that the use of effective HRM practices is positively related to effective commitment in manufacturing firms in Kenya. The public sector in Kenya has embarked on the adoption of effective HRM practices in order to improve service delivery. One major initiative that has been undertaken is the adoption of performance contracting as a tool for measuring performance (GOK, 2005). Tabriz et. al (2012) also indicate that HRM practices have had an impact on cross cultural influences in most parts of Africa. This is due to the fact that Africa has potential markets and many international companies are interested in establishing businesses.

1.1.1 Background of Research Institutes in Kenya

Kenya is the leading country in East and Central Africa region in terms of research institutes with a growing demand for more industrial and academic outputs justifying the large numbers (GOK, 2007). The main categories of research institutions include agricultural crop research, livestock research, forestry, fisheries, academic research and socio-economic research. These

research institutes include: Kenya Agricultural Research Institute (KARI), Kenya Forestry Research Institute (KEFRI), Coffee Research Foundation (CRF), Tea Research Foundation (TRF), Kenya Sugar Research Foundation (KESREF), Kenya Industrial and Research Development Institute (KIRDI), Kenya Marine Fisheries Research Institute (KEMFRI) and Kenya Medical Research Institute (KEMRI). Vision 2030 blueprint for Kenya's economic development and achievement of MDGs has put research and development (R&D) as the leading factor in achieving the both goals.

The economies of sub-Saharan Africa grew at an impressive 5.7 percent in 2006 and are continuing to show signs of resurgence (WEC, 2007). Yet its performance has historically lagged far behind other developing regions as reflected in its current share of the global economy, which is barely over 2 percent (Shrestha *et al.*, 2008). Kenya is an example of that lag, having ranked 97 in the World Economic Forum's latest evaluation of the global competitiveness of 128 economies, a ranking which believes its relatively high innovative capacity, good institutions of scientific research, high R&D spending, strong cooperation between universities and industry, and a good supply of well-trained scientists and engineers (World Economic Forum, 2007). Kenya's lackluster economic performance can be generally attributed to poor human resource management practices that are closely intertwined with the constraints (and opportunities) presented by the country's underperforming socio-demographic, techno-economic, politic-institutional, and cultural environments, as well as their uncertainties. Often culturally molded and institutionally framed, human management practices

signal a behavioral (or even conditioned) response to societal constraints and uncertainties. Through government established or privately run research institutions, the government expects these to be overcome by good R&D.

Kenya's economy suffers from the same types of human resource management maladies many of its counterparts face: corrupt political leadership, weak private sector development and failure to recognize that research and development is the key to all development plans and gains in the past, present and future (Asiedu, 2006). The country is plagued with poor health care, low crop yields, recurrent famine from long droughts, poor policing, and judicial systems that carry no research on how to improve(Alsan et al., 2005; Globerman & Shapiro, 2002). The majority of its population remains mired in poverty and unemployment is high, severely sapping human capital development and limiting the ability of the poor to contribute to national and private sector growth, as well as to their own well-being (Noorbakhsh, Paloni, & Youssef, 2001; Perry & Blue, 2008). Only through such state (public sector) actions as research and development, support of innovations, entrepreneurship education and motivation of state officers can Kenya create the kind of systemic and systematic conditions necessary for the realization of its full potential as an economic giant that was once better than South Korea and other Tiger nations of East Asia. Those countries embraced research and development programmes and strengthened their research institutions whereas Kenyans concentrated on acquiring the products those countries created and efficiently delivered (Nwabuzor & Anyamele, 2002).

The challenge for the African governments and institutions is to harness the vast reservoir of knowledge, information, and innovative energy that exist in institutions of research and higher learning by investing on strong innovation systems, knowledge production infrastructure and on research and development (R&D) through research institutions.

1.2 Statement of the Problem

In order to remain relevant and competitive, research institutes in Kenya have undertaken various HRM practices. The basic HRM practices undertaken by research institutes are based on knowledge management effectiveness model and they include; recruitment and selection, training and development, reward system, human resource planning and staff welfare (Wright & McMahan, 2001). Research institutes like other organizations need to achieve their desired goals/objectives. However, this can only be possible if employees perform and produce results.

In undertaking the HRM practices, research institutes aim to: obtain and retain skilled employees, train and develop employees by providing continuous development opportunities, ensure that people are valued and rewarded for the work they do by coming up with attractive rewards system and to have the desired level of staff (Armstrong, 2006). The research institutes have therefore, established HR departments which are charged with undertaking these roles (HRM practices). In addition, the research institutes have also developed HR strategic plans which provide guidance on how the various HRM practices are to be operationalized. KARI's HR strategy for the period 2009-2013 recognized human resources (people) as its most valuable asset. Among the key highlights in

its HR strategic plan include development of staff, ability to recruit and retain skilled employees required by the organization. KEFRI'S HR Strategic plan for the period 2010-2014 also provided highlights on how the various HRM practices are to be operationalized such as training and development and staff motivation. All research institutes also view human resource planning as their first step in effective human resource management because their needs are constantly changing such as new innovations in research.

From the year 2008 to 2012, research institutes in Kenya have faced performance challenges. This has been attributed by the fact that they have not been able to achieve their desired results. Specifically, the performance contracting results for the financial years 2008/2009 and 2009/2010 respectively indicate that their performance was not impressive despite the fact that the Government has continuously improved its budgetary allocation towards research (GOK, 2010). Among the best performing research institutes were KARI and KEFRI with a performance of 2.86 and 2.83 respectively. On a scale of 5, this was considered to be slightly above average. On the other hand, some of the research institutes whose performance was not impressive were KEMRI and CRF with a performance index of 2.49 and 2.48 respectively (GOK, 2011). Also on a scale of 5, this was considered to be slightly below average.

Most of the studies conducted in Kenya such as (Mutua *et. al.*, 2012; Kidombo *et al.*, 2012) have dwelt on the role of HRM practices on organizational performance. There is little literature available on the role of HRM practices on

employee performance. However, effective HRM practices have the potential to influence employee performance. This study, therefore, sought to fill these gaps.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study was to investigate the influence of human resource management practices on the performance of employees of research institutes in Kenya.

1.3.2 Specific Objectives

The specific objectives of this study were:

- 1. To establish how recruitment and selection influence employee performance in research institutes in Kenya.
- 2. To determine how training and development influence employee performance in research institutes in Kenya.
- To establish how the reward system influence employee performance in research institutes in Kenya.
- 4. To determine how human resource planning influence employee performance in research institutes in Kenya.
- 5. To establish how staff welfare influence employee performance in research institutes in Kenya.

1.4 Hypotheses

The study was guided by the following hypotheses:

- 1. H₀: Recruitment and selection have no significant influence on employee performance in research institutes
- 2. H₀: Training and development have no significant influence on employee performance in research institutes
- 3. H₀: The reward system has no significant influence on employee performance in research institutes
- 4. H₀: Human resource planning has no significant influence on employee performance in research institutes
- 5. H₀: Staff welfare has no significant influence on employee performance in research institutes.

1.5 Significance of the study

The study sought to investigate factors influencing performance of employees in research institutes in Kenya. The various scholars (Petrovsky, 2009; Whitener, 2001; Dobbs, 2003; Benardin, 2003) have gaps for this study in that their studies were all carried out in developed countries and not in Africa. Similarly, they were studies of industrial firms and not research institutes as is the case in this study. These gaps created by other scholars in studying the aspect of performance are to be explored further to help explain how employees are affected in their performance by the independent variables in the study. This study sought to add

to the body of knowledge of the research professionals and academics in general. This study was of significant to research institutes in addressing issues regarding factors that influence performance of employees of research Institutes in Kenya. The findings may also assist Government officers to take appropriate measures that will improve the sector.

1.6 Scope of the Study

The study sought to investigate the influence of human resource management practices on the performance of employees of research institutions in Kenya by conducting studies in research institutes that are within Nairobi county and its environs. The study specifically covered basic HRM practices which aim to ensure that the employees are managed in an efficient and effective manner. The research institutes seek to ensure that they acquire the best candidates from the labour market through a transparent recruitment and selection process. On human resource planning, research institutes seek to ensure that they have the right people in the right jobs and at the right time at the right place and price.

In an effort towards ensuring that the employees are productive, research institutes seek to ensure that their employees acquire the relevant skills by having in place training and development programs. Staff retention is another key priority area embraced by research institutes. In order to achieve this objective, research institutes seek to develop attractive reward strategies such as staff welfare which enhance employee loyalty and productivity. These practices are, therefore, viewed as critical for the survival of research institutes.

1.7 Limitations of the Study

The respondents were cautious in providing information due to the sensitivity and suspicion normally associated with any kind of a research study. This was resolved by assuring the respondents of utmost confidentiality by disclosing the academic purpose and intention of the study. Some respondents were also not able to provide relevant information while completing the questionnaires while others took unnecessarily too much time to complete the questionnaires. This was solved by encouraging them to provide relevant information and ask them to complete the questionnaires within reasonable time

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature related to human resource management practices, both theoretical and empirical by describing the relationship between these practices (HRM) and employee performance.

Over the past decade, the way in which people are managed and developed at work has come to be recognized as one of the primary factors in achieving improvement in organizational performance (Marchington & Wilkinson 2004; Phillips 2007). This is reflected by popular idioms such as "People are our most important asset" (Accenture, 2001). From the review of existing literature, it is acknowledged that successful organizations share a fundamental philosophy of valuing and investing in their employees (Anand 2003; Maguire 2005). Infact several research studies have described human resource management as a means of achieving competitive advantage (Delery 2002; Pfeffer 2003; Waker 2001). Consistent with this perspective, is an equally important issue for organizations to have motivated workforce who can perform and produce results.

2.2 Theoretical Framework

A significant body of research has suggested specific HRM Practices which are expected to promote inimitable attributes in human resources that can help an organization to obtain a competitive advantage and enhance its performance (Ahmad & Schroeder 2003; Guest *et al.*, 2003). All the practices that lead to

superior performance have been termed as "best HRM practices" (Marchinton & Wilkinson, 2003), high performance work systems or practices" (Delery & Shaw, 2001), high investment practices" (Yahya & Goh, 2002), and finally "higher productivity and product quality practices" (Gloet, 2006). All these terms highlight the increased improvement in employee decision making and the improvement in employee motivation and commitment. The study, therefore, adopted the following theories;

2.2.1 Resource-Based Theory (By Porter's)

Porter's (1985) observes that the resource-based theory has been an important step in human resource management, since it has provided a new point of view to explain a firm's success. According to the focus on resources, a firm's success is due to joint resources and capabilities which an enterprise owns and makes it different from its competitors. Among such resources and capabilities are the human resources and the crucial attributes of knowledge, skill, Know how and talent. These resources and capabilities may constitute a source of competitive advantage. From this point of view, the HRM practices in an organization are geared towards strengthening those significant capabilities and knowledge.

Wright and McMahan (2001) observe that if resources are strategic for the firm, it implies that they are scarce, valuable, specific or difficult to transfer. This is possible if the firm implements HRM practices such as recruitment of essential employees, compensating them conveniently, training them to do a better job or to develop new capabilities and motivate them through incentives. Consequently, the HRM practices are likely to affect the competitive advantage. This idea has been

discussed by several authors. Wright and McMahan (2001) showed the relation between strategy, HRM practices and human resource capital pool. Mueller (2003) commented on the strategic utilization of human resources. Lado and Wilson (2004) studied human resources as source of competitive advantage in an organization.

In this way, the resource-based view of the firm is giving a new perspective to human resource management. The firm creates and implements new measures in areas such as recruitment and selection, training and career development, compensation among others. On training and career development, an enterprise will usually train its employees in order to increase productivity. For this reason, an enterprise will only train employees in those abilities and skills that are crucial to making tasks better and faster (Grant, 2004). On compensation, the focus is compensating individual performance and the value created by an employee.

The resource-based theory has thus made it possible to mark the importance of human resources for an enterprise because it is able to create competitive advantages. Consequently, human resource management is developing and implementing HRM practices which motivate employees, increase their abilities and develop new capabilities.

2.2.2 Need hierarchy Theory (By Abraham H. Maslow, 1954)

The behaviour of an individual at a particular moment is usually determined by his strongest need. Psychologists' claim that needs have a certain priority. As the more basic needs are satisfied, an individual seeks to satisfy the higher efforts to satisfy the higher needs. Abraham H.Maslow, a famous social scientist has given a framework that helps to explain the strength of certain needs. According to him, there seems to be a hierarchy into which human needs are arranged as shown in the model below:

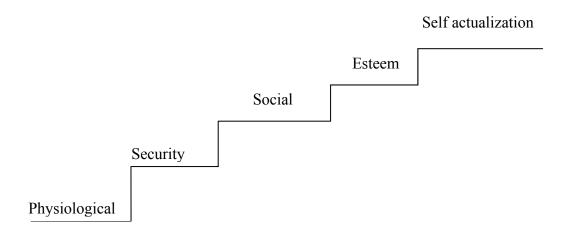


Figure 2.1 Maslow's need hierarchy

(Source: Adapted from Harper and Row, 1954).

1. Physiological Needs: The physiological needs tend to have the highest strength until they are reasonably satisfied. Until these needs are satisfied to the degree needed for the efficient operation of the body, the majority of a person's activities will probably be at this level and other levels will provide him little motivation. Dalton and Farland (2000) suggest that human beings first try to acquire necessities for survival. Develis(2011) argue that organizations should recruit employees with basic skills necessary to perform various tasks. Juang and Morissete (2008) indicate that organizations with effective HRM practices such

as reward system and staff welfare necessary for staff retention and motivation have high chances of achieving their objectives.

- 2. Safety Needs: Once the physiological needs are satisfied to a reasonable level, it is not necessary that they are fully satisfied and the degree of reasonableness is subjective since other levels of needs become important. In this hierarchy, comes the need for safety that is, the need for being free of physical danger or self-preservation. In the industrial Society, safety needs may take considerable importance in the context of the dependent relationship of employees to employers. As pointed out by McGregor, the safety needs may serve as motivators in such circumstances as arbitrary management actions, behavior which arouses uncertainty with respect to continued unemployment and unpredictable administration of policy (Campion & Thayer, 2004). Peter E. Drucker has suggested that ones' attitude towards security is an important consideration in choosing a job. Organization can influence these security needs either positively through pension plans, insurance etc or negatively by arousing fears of being fired, laid off or demoted (Campion & Thayer, 2004).
- 3. Social Needs: After the first two needs are satisfied, social needs become important in the needs hierarchy. Since man is a social being, he has a need to belong and to be accepted be various groups. When social needs become dominant, a person will strive for meaningful relations with others. If the opportunity for association with other people is reduced, men often take vigorous action against the obstacles to social intercourses. In the organization, workers form informal group environment. Such environment develops where the work is

routine, tedious or over-simplified. This situation is made worse when workers are closely supervised and controlled, but have no clear channel of communication with the management. In this type of environment, workers depend on informal groups for support of unfulfilled social needs as affiliation (Campion & Thayer, 2004).

- **4. Esteem Needs:** The esteem needs are concerned with self-respect, self-confidence, a felling of personnel worth, feeling of being unique and recognition. Satisfaction of these needs produces feelings of self-confidence, prestige, power and control. The satisfaction of esteem needs is not always obtained through mature or adaptive behaviour. It is sometimes generated by disruptive and irresponsible actions. Some of the social problems have their roots in the frustration of the esteem needs (Campion & Thayer, 2004).
- **5. Self-actualization:** Self-actualization is the need to maximize one's potential whatever it may be. This is related with the development of intrinsic capabilities which lead people to seek situations that can utilize their potential. These include competence which implies control over environment factors, both physical and social, and achievement. A man with high intensity of achievement needs will be restless unless he can find fulfillment in doing what he is fit to do. As Maslow has put it, "this need might be phrases as the desire to become more and more one is to become everything that one is capable of becoming (Campion & Thayer 2004).

Maslow suggests that the various levels are interdependent and overlapping, each higher-level need emerging before the lower level need has been completely satisfied. Since one need does not disappear when another emerges, all needs tend

to be partially satisfied in each area. When the peak of the need is passed, that need ceases to be primarily motivator thus the next level then begins to be dominated. Even though a need is satisfied, it still influences behaviour because of interdependent and overlapping characteristics of needs.

2.2.2.1 Application of Abraham Maslow's hierarchy of needs theory on HRM practices.

Organization benefits can play a large role on employee satisfaction and performance. Some organizations offer bonuses or extra benefits to certain employees who make the effort to improve their performance. This is however possible when an effective reward system is in place (Shili, 2008). This can include tuition performance or allocations to attend specialized conferences. These sorts of ancillary benefits can stimulate an employee to take on new opportunities to improve themselves and as a result, improve their performance on their current positions. It can also set their career paths in a better direction for future growth and promotion (McNamara, 2005). The method an organization chooses for performance reviews and evaluations can have the biggest effect on employee performance. Organizations that fail to review their employee performance or recognize a job well done may soon find disgruntled employees. Furthermore, organizations that stringently monitor employee work without providing them with opportunity to provide feedback may also resort in non-motivated employees (Cardy & Selvarajan, 2004).

The performance reviews to keep employees motivated and performing well include periodic regular and honest objective feedback(Collins &

Cooper,2005). However, the organization should also have some mechanisms in place for employees to give feedback about ways the organization could also improve itself and make itself a better place to work. Allowing open communication in both directions will keep the employees more satisfied with their performance review and happier with their compensation levels in relation to their work. The moment employees acquire higher skills, they would always strive to agitate for higher perks within the organizational hierarchy (Storey, 2004). When competition becomes stiff among organizations, there is need for them to forecast future human resource requirements in terms of relevant skills in order to gain a competitive edge (Robbins & Judge, 2009).

2.2.3 Knowledge Management Effectiveness ("Black Box") Model

A number of scholars, such as Hilsop (2003), Morrow and McElory (2001) and Monyihan et.al (2001) have argued on the missing link between HRM practices and employee performance. The missing link between HRM practices and employee performance illustrate the existence of a "black box". The "black box" Model indicates that there is an unknown apparatus which is apparently invisible in increasing employee productivity (Marinova & Phillimore, 2003). Knowledge management is recognized as the fundamental activity for obtaining, growing and sustaining intellectual capital in organizations. (Marr & Schiuma, 2001). Knowledge Management is not only served as predecessor to organizational innovation, but also an intervening mechanism between organizational factors and employee performance. Previous studies have examined the role of knowledge management as a mediator. For instance, Tung's study (2006) revealed that

knowledge management mediates the relationship between an organization's culture and structure and employee effectiveness. Rashid Alshekaili's study (2010) reveals that knowledge management mediates the relationship between human capital and innovation performance.

Since HRM practices are assumed to be a managerial process that allows organizations to manage effectively so as to improve the organizational innovation, it is important to view knowledge management effectiveness as the "black box" underlying the relationship between HRM practices and employee performance, which has been omitted in previous studies (Laursen & Foss, 2003; Shipton, 2005). Therefore, it is hypothesized that:

H₂: Knowledge management effectiveness meditates the relationship between HRM practices (Reward system, recruitment & selection, training & development and human resource planning) and employee performance (employee productivity, product innovation and process innovation).

H2a: Knowledge management effectiveness mediates the relationship between HRM practices (Reward system, recruitment & selection, training & development and human resource planning) and employee productivity.

H₂b: Knowledge management effectiveness mediates the relationship between HRM practices (Reward system recruitment & selection, training & development and human resource planning and product innovation.

H₂c: Knowledge management effectiveness mediates the relationship between HRM practices (Reward system, recruitment & selection, training & development and human resource planning) and process innovation.

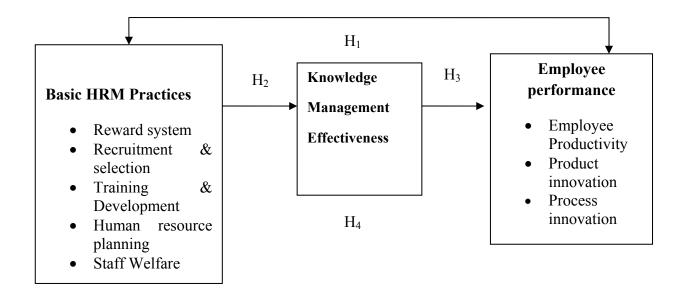


Figure 2.2 Knowledge management effectiveness model

2.2.4 Human Capital Theory

Recent challenges such as globalization, a knowledge based economy and technological evolution have promoted many countries and organizations to seek new ways to maintain competitive advantage (Allan *et.al*, 2008). In response, the prevailing sense is that the success depends in large part on the people with higher levels of individual competence. At the end, people are becoming valuable assets and can be recognized within a framework of human capital. Thus, this is the reason why organizations invest a lot on their employees through training and

development programs and appropriate reward systems. Broadly, the concept of human capital is semantically the mixture of human and capital.

In the economic perspective, the capital refers to factors of production used to create goods or services that are not themselves significantly consumed in the production process (Boldizzom, 2008). In research institutes, effective HRM practices should, therefore, be put in place in order to in prove employee effectiveness. HRM practices are viewed as interventions that can improve employee performance. Torrington (2008) explains that human capital signifies the combined intelligence and experience of staff as a source of competitive edge that cannot be initiated by rivals. He specifically indicate that effective HRM practices are an organization's source of competitive edge. The theory has, therefore, cross cutting significance in HRM practices such as recruitment and selection, training and development, human resource planning among others that are meant to help organizations achieve their goals

Along with the meaning of capital in the economic perspective, the human is the subject to take charge of all economic activities such as production, consumption and transaction. Human productivity should thus be improved through effective HRM practices (Rastogi, 2009). It can also be recognized that human capital means one of the production elements which can generate added values through effective HRM practices.

The method to create human capital can be categorised into two types. The first is to utilize human as labour force in the classical economic perspective (Schuler, 2007). This implies that economic added value is generated by the input of labour

force as other production factors such as financial, land, machinery and labour hours.

Throughout the investment of human capital, an individual's acquired knowledge and skills can easily transfer to certain goods and services (Ronner, 2005). Considering that accumulation of knowledge and skills through effective HRM practices take charge of important role for that of human capital, there is a widespread belief that learning is the core factor to increase human capital. This implies that learning is an important component to obtain such knowledge and skills through effective HRM practices (Sleezer *et.al*, 2006). Currently, it is acceptable that the conceptual foundation of one's human capital is based on something like knowledge and skills acquired through effective HRM practices. Assuming that knowledge can broadly include other factors of human capital such as skills ,experience and competency, human capital and knowledge therefore, has a broad implication that organizations should invest in their employees through effective HRM practices.

2.2.5 Universalistic Theory

In recent times, HRM has assumed new prominence because of continuing concerns about global competition, the internalization of technology and the productivity of labour through effective HRM practices (Bratton & Gold, 2006). It is argued that these market imperatives require Managers to change the way in which they manage the employment relationship in order to allow the most effective utilization of human resources. Managers and academicians argue that traditional approaches to managing workers are inappropriate and can no longer

deliver the services. Harnessing workers' full potential and producing the attitudes and behaviour is considered indispensable for the competitive edge that requires three aspects of managerial control to change i.e. organizational design, culture and effective HRM practices (Storey, 2004).

Over the years, researchers have found empirical evidence that certain HRM practices can directly affect performance, Studies by Youndt *et.al* (2005) show that comprehensive selection and training activities are frequently correlated with both productivity and firm performance. Moreover, researchers have also found that bundles or systems of HRM practices have more influence on performance than individual practices working in isolation (Husselid, 2004). An underlying theme is that firms should create a high degree of internal consistency or fit among their best HRM practices.

The logic connecting these universal HRM practices (i.e recruitment, training, reward management, job rotation and staff welfare) and firm performance is intuitively appealing and supported by theoretical arguments from a number of disciplines. Human capital theory suggest that people possess skills, knowledge and abilities through effective HRM practices that provide economic value to firms (Boxal, 2007). Increased productivity derived from human capital depends on the effectiveness of HRM practices in organizations (Storey, 2004).

2.2.6 Michigan's Model

Michigan's Model emphasizes the necessity of tight fit between business strategy, organizational structure and HRM which are also influenced by economic,

political and cultural forces. This model underlines the deployment of HRM practices in order to achieve business objectives. Accordingly, the model recognizes the various styles in managing people in organizations. The model emphasizes the application of HRM practices aimed at motivating employees in organizations such as the provision of welfare programs, reasonable employee benefits as well as equipping them with relevant skills through effective training and development programs.

In order to give a clear picture of the Michigan's model, Tichy *et.al* (2003) provide an illustration on how to fit among business strategy, organizational structure and HRM practices as shown in Table 2.1.

Table 2.1: HRM Links to Strategy and structure

Strategy	Structure	HRM			
		Selection	Appraisal	Rewards	Development
Single Product	Functional	Functional oriented: subjective criteria used	Subjective measure via personal contact	Unsystematic and allocate in paternalistic manner	Unsystematic largely through job experiences: single function focus
Single Product (Vertically Integrated)	Functional	Functional oriented: standardized criteria used	Interpersonal based on cost & productivity data	Related to performance & productivity	Functional specialists with some generalists; largely through job rotation
Growth by Acquisition (holding company of unrelated business)	Separate, self- contained business	Functionally oriented, but vary from business to business	Interpersonal: based on return on investment & profitability	Formula based & includes return on investment & profitability	Cross functional but not cross business
Related of Diversificatio n of Product Lines through Internal Growth & Acquisition	Multidivisional	Functionally & generalist oriented: systematic criteria used	Interpersonal: based on return on investment productivity, & subjective assessment of contribution to overall company	Large bonuses: based on profitability & subjective assessment of contribution to overall company	Cross functional, cross divisional, & cross corporate: formal

Source: Tichy et al. (2003)

2.3 Conceptual Framework

A conceptual framework refers to an organized way of thinking about how and why a project takes place and how we understand its activities. According to Kothari (2003), a framework can help us to explain why we are doing a project in a particular way. It can also help us to understand and use the ideas of others who have conducted similar studies. A framework can also be used like a travel map. The scale on a map tells us how far apart different places are. It is therefore, possible to get an idea on how long it might take to move from one point to the next (Mugenda & Mugenda, 2006).

The conceptual framework of this study includes five independent variables and one dependent variable. Independent variables are factors that (probably) cause, influence, or affect outcomes. They are also called treatment, manipulated, antecedent, or predictor variables while ddependent variables are factors that depend on the independent variables or outcomes or results of the influence of the independent variables. Other names for dependent variables are criterion, outcome, and effect variables (Cresswell, 2007).

The independent variables in the study consisted of human resource planning, recruitment and selection, reward system, training and development and staff welfare, which are aspects of HRM practices. The dependent variable is employee performance. The independent variables thus affect the dependent variable, which is employee performance. The study therefore, seeks to determine how the independent variables influence the dependent variable in research institutes in Kenya.

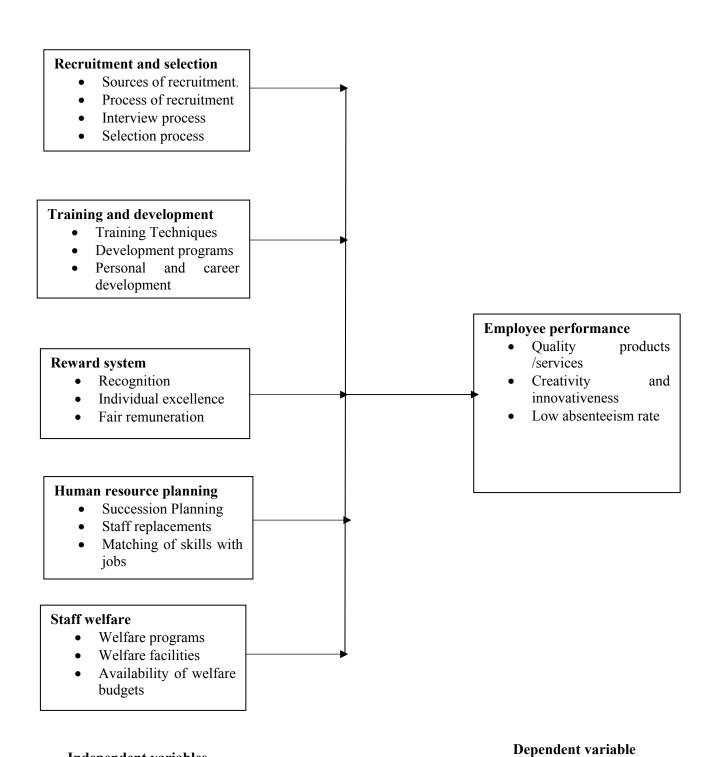


Figure 2.3 Conceptual Framework

Independent variables

32

2.3.1 Recruitment and Selection

The general theories of recruitment as highlighted by Cole (2002), Armstrong (2008) and Dessler (2006) pinpoint the fact that employees need to have a fit-in culture in order to survive in a new job environment puts pressure on the recruitment team to cultivate the organization culture that enhances good performance. Recruitment strategies by organizations should be tailored towards specific positions to be filled. These strategies in the modern global environment include advertisements in electronic and print media, agencies and services, schools and colleges/universities forum, professional associations and internal resources. All the strategies will produce particular employees with varying performances (Ndlovu *et al*, 2003).

Melum (2002) indicates that the common process by most organizations when carrying out recruitment will include a behavior-based interview which can help to some extent in predicting subsequent performance of employees better than lets say situational interviews. Nwabuzor and Anyamele (2002) observes that the theory of recruitment is a scholarly body of work about how people can most effectively be persuaded to apply for a job. Under normal circumstances, an increase in the pool of applicants will improve an employer's opportunities in selecting exactly the right people for job vacancies. Both sides of the application process should and do concern themselves with "fit". Studies conducted by Kamoche and Kamoche (2004) shows that applicants will be attracted to the organization to the extent they see it as a good match for them, or what in the literature is known as "Person-Organization (P-O) "fit". Potential applicants

make an initial assessment of the likely P-O fit through what they understand of the employer's culture.

Recruitment is central to any management process and its failure can increase difficulties for any organization including an adverse effect on its profitability and inappropriate levels of staffing or skills (Soliman, 2000). Gupta (2006) observes that selection can be conceptualized in either choosing the "fit" candidates or rejecting the candidates, or a combination of both. Selection process assumes rightly that there are more candidates than the number of job openings available (Prasad, 2005). The basic idea in selection process is to solicit maximum possible information about the candidates to ascertain their suitability for employment and given the fact that there are factors which affect the seeking of such information (Graham, 1996).

Armstrong (2009) observes that candidates can be selected using different methods in order to assess their suitability for a certain role. These methods include; individual interviews, interviewing panels, selection boards, and assessment centres. Despite a well-drawn plan on recruitment and selection and involvement of qualified management team, recruitment processes adopted by organizations can face significant obstacles in implementation. Theories of HRM may therefore provide insights on the best approaches to recruitment although organizations will have to use their in-house management skills to apply generic theories within specific organizational contexts.

2.3.2 Training and Development

Training is a key part of a broader field of human resource development and theories on learning have emphasized the need for strategic leadership that communicates the organization vision and mission clearly to enable employees understand the organization objectives for optimum performance (Cole, 2002). Opportunities for training and development are major factors in regards to people's career. Training factors are evaluated in recruitment process. Bartlett (2001) found a positive relationship between workplace training and organizational commitment. From an employee stand point, a training received is related to a significant portion of satisfaction experienced on the job, employee's value training and job. Examined on another level, employees view training as an aspect that allow them to be better able to offer customer satisfaction since they are already satisfied themselves and will increase their performance levels.

Training employees shows a strong commitment that an employer has with employees and demonstrate the value that an employer has on the employees. Schmidt (2004) in his study on the relationship between workplace training and overall job performance found out that components of job training and time spent in training determined a significant relationship to employee performance on the job. The quality of training has maximum impact on performance since work output of an employee would be dependent on the experience level that employee would have acquired (Sahu, 2000). The training impacts on performance in that it determines whether one will keep the job at hand or loose it altogether if not well done. A common cause of job dissatisfaction is that the staffs do not have the

basic skills required for their job. The struggle to finish or accomplish an assigned work is seen and as a result the gap between their skill level and the expected performance keep them away from job satisfaction. Armstrong (2006) points out that a needs analysis that is fully involving and inclusive of all employees must be carried out before any training is done. In particular, Mullins (2007) notes that employees need to be trained and developed inclusively to avoid talent loss that affect performance of other employees and the whole organization.

Teaching and training programs provided by tertiary education systems concerning lifelong adult learning is one of the trends in most organizations (Foley, 2004). In today's rapidly changing socio-economic environment, where the importance of competencies and skills acquired and refined has been widely recognized (Gove, 2012). Over the past decade, new dynamics have emerged in the domain of education that focuses on training and development of employees as well as accelerating the rate of knowledge economic growth (Powell& Snellman, 2004). The optimization of human resources, by reforming and upgrading their knowledge is the key to staff development, thus the achievement of organizational goals (Manente, 2008). However, the coexistence of intrinsically heterogeneous human capital requires the development of specific programs, especially for adult and other non-traditional learners in order to be consistent with the current trends of education and innovation (Walsh, 2009).

Human resource planning has been viewed as the most powerful tool of any organization's success and the training and development of employees is regarded as one of the most important functions of effective resources management (Nelson

& Wei, 2012). In order to obtain a competitive edge in providing the best services to the customers, training and development which will develop a well productive workforce is necessary (Hyz & Pappas, 2005). New professionals may, therefore, require the same in order to continuously improve on their productivity. Others may however need it for a specific purpose such as the development of a new service. In a situation of less development. People need training even more because if a job becomes drudgery, it cannot be performed effectively (Gottelmann-Duret& Bahr, 2012).

Training and development is particularly important for the maintenance of the human resource base of the organization and must be viewed as an integral part of the core organizational strategy, rather than an adhoc operational issue (Rowley, 2001). Lack of training and development, therefore, results into lack of skill to use the knowledge existing in a person, which causes in effective services, lack of self-satisfaction, customer satisfaction and ensuing lower productivity. Well trained and developed individuals understands the scope, expectations and depth of their jobs and will be able to add building blocks to their professionalism as they progress through their careers. Training and development is, therefore, critical for human resource planning and organizational/staff development.

2.3.3 Reward System

Armstrong and Murlis (2004) observes that reward is concerned with the formulation and implementation of strategies and policies that aim to reward people fairly, equitable and consistently in accordance with their value to the organization. Reward is thus, an operational concept for describing the positive

value an individual subscribes to an object, behavioral act or an integral physical state. Reward system serves several purposes in organizations. Effective reward system helps an organization to be more competitive, retain key employees and reduce turnover. Reward system also enhances employee motivation and reinforces the image of an organization among key stakeholders or future employees. Aydin (2009) observes that reward cab be done by way of empowerment, recognition, motivation and these will ultimately lead to organizational effectiveness. Recognition and empowerment have both a positive effect an employee motivation, which eventually leads to employee performance. Kamalian (2006) also observes that there exists a positive relationship between the reward system in place and employee performance.

Organizations should therefore, design their rules, policies and organizational structures that enable employees to perform and appreciate them on their task fulfillment and achievements. Armstrong (2008) views that a reward system serves several purposes which include; to reward people for the value they create, to develop a performance culture, to motivate people and obtain their commitment and engagement. Armstrong also argue that reward system creates total reward processes that recognize the importance of both financial and non-financial rewards.

Maslow (1971) explained that motivation is a complex and dynamic process in which one needs intelligence and knowledge to implement it fully since motivation to an individual will not be necessarily same to the other by all standard since wants and likes differs. Reward can be tangible or intangible and is

presented after the occurrence of an action (i.e. behavior) with the intent to cause the behavior to occur again. This is done by associating positive meaning to the behavior. If a person receives the reward immediately, the effect would be greater, and decreases as duration lengthens. Repetitive action-reward combination can cause the action to become a habit. Motivation comes from both an individual and the other people known to a person (Weightman, 2008). There is intrinsic motivation which comes from within a person and extrinsic motivation, which comes from others. Alderfers (1969) has stated that the individual's self-actualization helps motivate the person. This is the view shared by earlier scholars including McClelland (1961) and the father of motivational theory, Maslow (1971).

Herzberg (1965) two factor theory on the other hand points to employees who will be motivated or unaffected by the reward system. Herzberg observed that there are some conditions of a job that operate primarily to dissatisfy employees when they are not present – hygiene factors. These include salary, job security, work conditions, interpersonal and supervisor relations and administrative rules and regulations. On the other hand, there are factors that lead to high levels of motivation and job satisfaction – motivators. They include achievement, work itself, recognition, responsibility and advancement. The absence of motivators however does not prove highly dissatisfying.

However, in terms of employee performance, Owusu (2005) observed that rewards should be impromptu to avoid situations where it is an expectation rather than unexpected gift by employees. This could affect performance as employees

will be split between those who produce good performance for gifts and those who work hard regardless of gifts or rewards. This study will explore the linkage between rewarding system and employee performance.

2.3.4 Human Resource Planning

Armstrong (2008) observes that a rigorous human resource planning links people management to the organization's mission, vision, goals and objectives. In essence, planning will connect organization people to the strategic plan and budgetary resources. Drucker (1977) observed that a key goal of organization planning is to get the right number of people with the right skills, experience and competencies in the right jobs. Drucker adds that this has to be done at the right time and with the appropriate and right costs to avoid the case of wrong people being employed for unsuitable jobs that would negatively impact on the performance.

Cole (2000) has emphasized the need to have a good linkage between strategic planning and business planning in order to have employees performing up to the standards envisioned in the organization plan. Drucker had earlier pointed out that employees who are capable of completing designed jobs will help an organization achieve its main objectives and concentrate on their core duties that will improve performance of individual employees. According to Asiedu (2006), planning will involve four broad phases and the demand forecasting and succession planning should be well handled by good leadership to ensure the organization stays on top of the industry.

The future trend for human resource planning includes use of contingent workers and virtual employees that will keep increase of some employee types while reducing others and hence impacting heavily on the performance of some of the employees. This study will aim to explore how planning impacts on employee performance. Dessler (2005) observes that human resource planning involves gathering of information, making objectives, and making decisions to enable the organization achieve its objectives. Surprisingly, this aspect of human resource planning is one of the most neglected in the HR field (Ugboro & Obeng, 2000). When HR planning is applied properly in the field of HR management, it would assist to address the following questions; how many staff does the organization have? What type of employees as far as skills and abilities does the organization have? How should the organization best utilize the available resources? and how can the organization retain its employees?

Human resource planning has become a critical component for organization survival in the 21st century. HR Practitioners have enormous tasks of keeping the pace with all the changes and ensuring that the right people are available to the organization at the right time (Owusu, 2005). The changes to the composition of workforce have forced managers to pay attention to HR planning.

Okumbe(2001) observes that poor HR planning or lack of it in the organizations may result in huge costs and financial losses. The most important reason why HR planning should be managed and implemented in organizations is to reduce operational costs (Scarborough, 2003). Organizations are not static and the human

resources can transform drastically. HR inventory calls for collection of data while the HR audit requires systematic examination and analysis of this data/information. The audit looks at what had occurred in the past and at present in terms of labour turnover, age and gender groupings, training costs and absence. Based on this information, it is possible to predict the pattern of HR demand in organization in future (Thite, 2004).

2.3.5 Staff Welfare

Staff welfare is a corporate attitude or commitment reflected in the expressed care for employees at all levels, underpinning their work and the environment in which it is performed (Cowling & Mailer, 2007). specifically, Coventry and Barker (2009) asset that staff welfare includes providing social club and sports facilities as appropriate, supervising staff and works canteens, running savings schemes dealing with superannuation pension funds and leave grants, arranging legal aid and giving advice on personal problems, providing assistance to staff transferred to other areas and providing fringe benefits such as payment during sickness, luncheon vouchers and other indirect advantages.

Anderson (2002) observes that welfare practices are motivational avenues put in place by management to enhance productivity and motivate staff to give their best. These include incentive packages, training opportunities etc. Porter (2001) also observes that staff welfare includes all programs within an organization aimed at enhancing the comfort and improvement of employees. These programs are usually provided over and above the wages or salaries of employees. The staff welfare thus, need not to be in monetary terms, but can exist in any kind of form

and includes monitoring of working conditions, creation of industrial harmony through infrastructure for health, industrial relations and insurance against disease, accident and unemployment for the workers and their families. Porter (2001) further observes that there are two categories of staff welfare programs:

- 1. Intramural staff welfare programs which are provided within the organization and includes facilities such as canteens, rest rooms, crèche facilities, provision of staff uniforms, appropriate work environment conditions, maintenance of organizational sanitation and cleanliness as well as provision of clean drinking water.
- 2. Extramural programs which are provided outside the organization such as education facilities, training programs, child welfare programs and facilitation of staff to join Sacco's.

One of the major objectives of initiating staff welfare programs in organizations is to improve the living standards of employees (Anderson, 2008). Staff welfare programs thus, help the employees to get a sense of the management's concern over their general welfare, work and working conditions. Such programs include medical cover, provision of safe working environment, flexi-time arrangements and child day care facilities.

2.3.6 Concept of Employee Performance

The key concern of an organization is its viability to sustain itself in competitive market arena and hence its efficiency (Cole, 2000). The effective functioning of any organization goes along way where employees perform their jobs at a

satisfactory level of proficiency and also the organization provide opportunities for the continued development and training of employees not only on their jobs, but as well develop them for other jobs for which they might later be considered (Armstrong, 2008).

Maslow (1971) observed the hierarchy of needs and satisfaction for individuals as key to their individual performance. Humes (2000) observes that people are unique in that they have different needs, different ambitions, different attitudes, and different desires for responsibility, different levels of knowledge and skills and different potentials. Similarly, Katanbutra and Avery (2003) observed that when employee's needs have been satisfied ,then their performance have to be felt drastically in the organization and these brings the element of individual measurement in their respective duties and should be done in a timely basis while using appropriate tool.

Biddle and Evenden (2002) describe performance as a pattern of behavior which a manager or supervisor use in relationship with others, particularly subordinates or those of more junior status. It is concerned with the way the authority and leadership is exercised by the manager and the response that come from other people. Performance is the essence of management and relate to all functions, since performance goes with style.

Cohen (1991) observes that every business has its own style and whatever the style, it should support the individuals in their roles. Such manifestation as a clique, courtiers, gentlemen and players and intrigues are anathema to professional managers and must be discouraged by leaders. Cohen further notes

that the prolonged retention of ineffective executives due to excessive and misplaced kindness is frustrating to the person concerned. The passing of chain of authority, the reversal of a decision and setting of the head office against branches and reverse by senior people are all defeating the spirit of organization vitality. Cohen concludes by saying that generally only directors and senior executives can prevent the onset of some of these malpractices that heavily weigh on employee performance.

When observing performance appraisal, Stoner (2002) notes that individual's job performance is compared to standards developed for the individual's position. Kim (2005) concludes that low performance may prompt corrective action like additional training or demotion while high performance may merit reward, such as bonus or promotion. Organizations need highly performing individuals in order to meet their goals, to deliver the products and services they specialized in, and finally to achieve competitive advantage (Pulakos, 2009).Performance is also important to an individual. Accomplishing tasks and performing at a high level can be a source of satisfaction, with feelings of mastery and pride. Low performance and not achieving the goals might be experienced as dissatisfying or even as a personal failure (Vanscotter & Cross, 2006). Moreover, if performance is recognized by others within the organization will definitely motivate individuals.

2.4 Empirical review

Al-Hamadi (2007) found that the major factors influencing HRM in Oman were religion (Islam), civil service laws, expatriate workforce and social elites (Omanis

who were educated abroad). They conclude by emphasizing the need for more empirical studies investigating HR related issues in the Omani context. Aycan *et.al.* (2007) studied factors that influence the cultural orientations of Omani employees and how these in turn influence their preferences for HRM practices and policies. They discovered moderate support for their hypotheses pertaining to factors shaping cultural orientations. Stronger support was found for the relationship between cultural orientations and preferences for HRM practices and policies.

Several studies have tested the relationship between HRM practices and organizational performance with generally supportive results that HRM practices affect organizational performance (Boselie *et. al.*,2005; Collins & Smith, 2006; Hailey *et. al.*, 2005) However, recent reviews of the reason on the relationship between HRM practices and organizational performance have questioned the methodological rigour of these studies (Wall & Wood, 2005). Bae and Lawler (2000) conducted studies on two different frameworks of HRM practices. These were the internal development framework and the acquisition framework. These frameworks correspond respectively to high involvement HRM and traditional or the commitment and the control HR systems.

Boxall and Purcell (2003) in their study suggested that there is an "internal fit" among the practices such that there is a synergistic effect that is greater than the sum of their individual parts. The approach is the contingency perspective, which suggests that effective HRM practices have to be consistent with other aspect of the organization. The scholars also reviewed the configuration perspective which

suggests that effective HRM practices consist of a pattern of practices that are internally consistent and externally congruent with other organizational characteristics.

Guest *et. al* (2003) have argued that these perspectives are not necessarily in conflict and may simply operate at different levels. However, while best practices add value to the firm, firms can extract additional benefits by ensuring that these are internally consistent and externally congruent. Based on the universalistic perspective, it is reasonable to expect that high involvement HRM practices will be positively related to both subjective and quantitative measures of organizational performance (Michie & Shehan, 2001).

Yahya and Goh (2002) have highlighted the importance of HR in implementing knowledge management for best performance and the fact that people issues need to shift to centre stage in thinking about knowledge. Best HRM practices are also considered by some authors such as Scarbrough and Carter, 2000; Robertson and Hammersley, 2000 to constitute the basic factors of knowledge management success. For Seviby and Simons (2002), "the trouble is that knowledge is not a discrete object and that the most valuable knowledge is embedded in people and so difficult to transfer outside the immediate context that it becomes a major competitive advantage". Flood *et al.*., (2001) argue that the most important element here includes the personal nature of tacit knowledge, which requires the willingness on the part of those workers who possess it, to share, and communicate it. Therefore, an important point in this case is the idea that the success of any knowledge management initiative is likely to be critically

dependent on having suitably motivated and highly committed people taking an active role in the process (Roberson & Hammersly 2000; Storey & Quintas, 2001).

Soliman and Spooner (2000) argued that HRM practices play an important role in facilitating employees' absorption, transfer, sharing and creation of knowledge. Similarly, Scarbrough (2003) identified that HRM practices such as selection methods, compensation strategies and career systems seem to "have an influence on the flows of knowledge which is seeking to maximize employee performance that would result in the overall organization performance". Oltra (2005) observes that individual human beings are the ultimate knowledge creators and bearers. Other scholars such as Thite (2004) and Gloet (2006) who have conducted emphirical studies noted that the main purpose of HRM practices should be to enhance organizational performance.

2.5 Critique of the existing literature relevant to the study

Most scholars have highlighted the need to have the correct practices in human resource management applied in the organizations that practice them. However, they have focused their studies on organizational performance. Melum (2002) observed that in order for the organization to achieved good performance, human resource managers need to set standards that are measurable. Tronnel (2006) and Mcknight (2007) conducted studies on organizational performance and new public management in organizations but failed to address human resource management practices that can influence employee performance. Local scholars such as Nzuve (2007), Okumbe (2001) and Nyamberega (2005) have also addressed issues of

organizational performance in relation to good human resource management practices. There is therefore, need to conduct a study on how human resource management practices influence employees performance especially in Research Institutes in Kenya, since most International scholars concentrated their studies in the developed western countries.

2.6 Research gaps

Based on the available literature, a gap does exist in the area of study. Most researchers have concentrated their studies on the role of HRM practices on organizational performance. Mutua et.al (2012) conducted studies on the role of HRM practices on the performance of financial co-operatives based in Nairobi County. Their recommendations focused on coming up with appropriate measures aimed at improving organizational productivity. Kidombo *et.al* (2012) conducted studies to establish the role of HRM practices on the performance of key manufacturing firms in Kenya. Their studies failed to focus on how HRM practices can improve employee performance. Studies by Monipally (2004), McQuail and Wind-hahl (2006), Ludow and Panton (2007) explains the role and various forms of HRM practices that can improve organizational performance. Although there is great emphasis on the importance of HRM practices, the study does not explain how HRM practices can improve employee performance. In his study on the role of effective HRM practices, Mohan (2008) emphasizes on the importance of HRM practices on organizational performance.

2.7 Summary

An increase in profits implies that organizations are performing well. The growth of an organization and the ability to fulfil its mandate as well as its ability to generate more profits largely depends on the performance of its employee among other factors (Kotler, 2005). The leadership in an organization must determine what needs to be done in order to improve employee productivity. Organizations that are able to come up with appropriate measures towards improving employee performance have always a competitive edge (Alexander, 2004). West Ford and Ibrahim (2006) have highlighted the consequences of poor leadership and not putting in place measures aimed at improving employee performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out various stages, methods and procedures that were followed in executing the study. It aims at providing a background and justification to the study design and methodology. Social scientists have the fundamental belief that the material world of tangible objects do not exist unperceived (Mugenda & Mugenda 2006). They routinely collect data for both quantitative and qualitative variables in an attempt to interpret, understand and explain social life (Newman, 2005). They place high priority in identifying casual linkages between and amongst variables. This chapter, therefore, covers—the research design, the population, sample and sampling techniques, data collection instruments, data collection procedures, pilot testing and data processing and analysis.

3.2 Research Design

A research design is a presentation of the plan, structure or strategy of investigation, which seeks to obtain or answer various research questions. Kothari (2008) define research design as a detailed plan on how the research will be conducted. Donald (2006) observes that a research design is the structure of the research. It is the "glue" that holds all the elements in a research project together. According to Gall *et.al.* (2003), a research design is a plan for collecting and utilizing data so that the desired information can be obtained with sufficient

precision. Cooper and Schindler (2008) observe that a research design is a plan and structure of investigation formed to provide answers to research questions.

The study adopted descriptive and correlational research designs. Mugenda and Mugenda (2008) indicate that descriptive research designs are conducted in communities to establish the extent of a range of issues such as health, nutrition, education, crime etc. They argue that in descriptive designs, variables with greater dispersion indicate disparities within the community and provide important clues regarding the issues that the investigator should focus on. The study, therefore, adopted this design since it was easier to obtain information concerning the current status of the phenomenon and described what existed with respect to variables of the study. It was also possible to collect a large amount of data for detailed analysis since the study covered respondents from five research institutes which were within Nairobi County. Kothari (2001) observes that a descriptive research design is used when one wants to get information on the current status of a person or an object.

The study, therefore, focused on getting information on the current status on human resource management practices in research institutes in Kenya and how they influence employee performance. Mugenda and Mugenda (2008) also indicate that correlational research design is basically concerned with assessing relationships among variables. It is thus based on the premise that if a statistically significant relationship exist between two variables, then it is possible to predict one variable using the information available on another variable. Through correlational analysis, the study was able to determine the relationships between

the independent variables and how they influenced the dependent variable. The study, therefore, adopted these designs because the population of interest was drawn from different research institutes.

3.3 Population

Lumley (2004) defines population as a larger collection of all subjects from where a sample is drawn. It refers an entire group of individuals, events or objects having common observable characteristics (Mugenda & Mugenda, 2006). Cooper and Schindler (2008) observe that a population is the total collection of elements about which one wants to make inferences. Similar view is also expressed by Kothari (2006).

Target population is that population which the researcher wants to generalize results (Mugenda & Mugenda, 2003). The target population consisted of all Government research institutes formed under the Science & Technology Act. CAP. 250. Research institutes play a critical role on the attainment of economic and health development goals through research and training. This role has been reemphasized in Kenya's vision 2030 aspirations as well as in the Governments' budgetary allocations. At the operational level, this contribution can only be achieved through effective HRM practices.

These institutes are mandated to conduct research in various disciplines such as Livestock, Agriculture, Medical, Industrial and Forestry. The total number of these institutes currently stands at eight (8) and are spread across the country. They are: KARI, KEFRI, CRF, TRF, KESREF, KIRDI, KEMFRI and KEMRI.

The cadres that were selected for the study included scientific, technical and administrative support staff. The study population was, therefore, 986 employees as tabulated in Table 3.1.

Table 3.1 Study population

Name of the Institution	Total number of employees
KARI	330
KEFRI	200
CRF	100
KIRDI	60
KEMRI	70
KESREF	90
TRF	82
KEMFRI	54
Total	986

Source: (HR departments of respective institutes, 2012)

3.4 Sampling Frame

Kothari (2006) views a sample frame as all items in any field of inquiry that constitute a "Universe" or "Population". The sampling frame of the study consisted of 760 employees as shown in Table 3.2.

Table 3.2 Sampling frame

Name of the Institution	Total number of employees
KARI	330
KEFRI	200
CRF	100
KIRDI	60
KEMRI	70
Total	760

Source: (HR departments of respective Institutes, 2012)

3.5 Sample and Sampling Techniques

The study adopted stratified sampling technique due to homogeneity of the population. According to Baird (2007), stratified sampling technique produces estimates of overall population parameters with greater precision and ensures that a more representative sample is derived from a relatively heterogeneous population. Stratification aims to reduce standard error by providing some control over variance. The study grouped the population into various strata according to the categories of various staff. These Institutions have some common cadres such as Research Scientists, Technical and Administrative staff which the study intends to sample.

The sample size of the population was derived from the following formula:

$$nf = \frac{n \propto /2pq}{e^2}$$

$$nf = \frac{196(0.5)(0.5)}{(0.05)^2} = 384$$

Where;

n= The desired sample size

Z = The standard normal deviate at the required confidence level

P = The proportion in the target population estimated to have the characteristics being measured

$$q = 1 - P$$

$$n = \frac{nf}{1 + nf/N} = \frac{384}{1 + 760/384} = \frac{384}{1.98} = 255$$

At least 30% sample of the population is considered generally acceptable (Stanley & Gregory 2001; Kothari, 2004). The study, therefore, adopted a sample size of 34%. Kerlinger (1986) also indicate that at least 30 % sample allows for reliable levels of accuracy for testing significance of differences between estimates. Table 3.3 shows the sample size for the study.

Table 3.3 Sample size

Institution	Category of staff	Total	Sample Size (34%)
KARI	Scientists	200	68
	Technical	80	27
	Administrative	50	17
KEFRI	Scientists	120	40
	Technical	40	13
	Administrative	40	13
CRF	Scientists	50	17
	Technical	30	10
	Administrative	20	7
KIRDI	Scientists	30	10
	Technical	20	7
	Administrative	10	3
KEMRI	Scientists	30	10
	Technical	20	7
	Administrative	20	7
TOTAL		760	256

Source: (HRM departments of respective Institutions, 2012)

3.6 Data collection instruments

Mugenda and Mugenda (2006) observe that the choice of a tool and instrument depends mainly on the attributes of the subject, research topic, data and expected results. Primary data was collected through the use of structured questionnaires. Kothari (2008) observes that collecting data through the questionnaires saves time since it is possible to collect huge amount of information especially when the population of interest is large. Secondary data on the other hand was collected through published reports such as strategic plans and annual reports.

3.7 Data Collection procedures

Questionnaires were randomly distributed to the target population. In order to obtain information from the respondents, the researcher sought to address the purpose of the study and allay any fears by assuring them that the information was to be strictly used for academic purposes only. With the help of three research assistants, the researcher administered the questionnaires in the selected research institutes. All questionnaires were accompanied by an introduction letter which explained the purpose of collecting information.

3.8 Data analysis and presentation

3.8.1 Data analysis

This involved interpretation of data collected from the respondents. Qualitative data was analyzed through the use of questionnaires. The statistical package for social sciences (SPSS) was used to analyze quantitative data.

A linear regression model of the form

 $Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$ was used to test the relationship between independent variables and dependent variable.

Where;

y= Employee performance

 $\beta_o = \text{Constant}$

 X_1 = Recruitment and selection

 X_2 = Training and development

 X_3 = Reward system

X = Human resource planning

 X_5 = Staff welfare

e = error term

Other statistical tests were also applied in data analysis. A t-test was conducted to ascertain if two sets of data were significantly different from each other. The following formula is however applicable:

$$t - test \ Z = \frac{\bar{x}}{\frac{\delta}{\sqrt{n}}}$$

Where;

 \overline{x} = Sample mean of the data

n =Sample size

 δ = Population standard deviation

Normality test was used to test for the normality of the dependent variable Y. The study, therefore, conducted Kolmogorov- Smirnov and Shapiro-Wilk tests to test

the normality of the dependent variable Y. In addition, Analysis of Variance (ANOVA) test was also conducted to analyze the amount of variation within each of the sample relative to the amount of variation between samples. This was considered important since it makes use of the test in terms of sum of squares

effect over sums of squares residual (Sekaran, 2008; Herbert, 2011).

3.8.2 Data presentation

Kombo and Tromp (2006) observes that data can be presented using statistical techniques, graphical techniques or a combination of both in order to come up with comprehensive conclusions. Quantitative data was, therefore, presented using statistical techniques such as tables, pie charts and bar graphs while qualitative data was presented descriptively.

3.9 Hypothesis Testing

Multiple regression analysis of the form:

 $Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$ was applied to test the null and alternative hypothesis. Cooper and Schindler (2008) observe that multiple regression analysis indicates whether the individual hypothesis is statistically supported or not. t-test was used to test the significance of Y on the influence of independent variables X_1, X_2, X_3, X_4 and X_5 at 5% level of significance. The following test was applied in conducting t-test:

$$H_0: \beta_J = 0$$

$$H_i: \beta_i \angle 0$$
 where; $j = 1, 2, 3, 4, 5$

For the hypotheses to be accepted or rejected, comparison was done between the critical t values and the calculated t values. If the calculated t was greater than the critical t, then the alternative hypothesis was accepted (Shenoy & Madam, 2004). F test (ANOVA) was also conducted to ascertain the difference between groups on study variables.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the results and discussion based on the objectives of the study. The study sought to establish the influence of human resource management practices on the performance of employees of research institutes in Kenya. The chapter, therefore, involves the interpretation and presentation of findings obtained from the study. Descriptive and inferential statistics have been used to present and interpret the findings of the study.

4.2 Response Rate

A total of 256 questionnaires were distributed to the target population. This consisted of KARI, KEFRI, CRF, KIRDI and KEMRI. The number of questionnaires distributed included KARI with a total of 112, KEFRI with a total of 66, CRF with a total of 34, KIRDI with a total of 20 while KEMRI had a total of 24. Out of the 256 questionnaires distributed, a total of 184 were returned which represents a response rate of 71.9%. This response rate was satisfactory to draw conclusions from the study and was, therefore, representative. According to Mugenda and Mugenda (2009), a response rate of 50% is adequate for analysis and reporting, a rate of 60% is generally good while a response rate of above 70% is excellent. This is also the same position taken by Babbie (2010) who also asserts that a response rate of above 70% is deemed to be very good. Table 4.1 shows the distribution and response rate of questionnaires from the respondents.

Table 4.1 Response rate

Name of the organization	Total number of questionnaires distributed	Total number of questionnaires completed and returned	Response rate per organization
KARI	112	87	77.7%
KEFRI	66	37	56.06%
CRF	34	23	67.6%
KIRDI	20	17	85%
KEMRI	24	20	83.3%
Total	256	184	

All organizations had a response rate of above 50% and hence the conclusions drawn from the study are representative (See Table 4.1). Kenya Industrial Research and Development Institute had the highest response rate of 85%. This was closely followed by KEMRI at 83.3%, KARI at 77.7%, CRF at 67.6% while KEFRI had a response rate of 56.06%.

4.3 General Information

This section covers the demographic characteristics of the target population. This is aimed at ensuring that there is no biasness in the manner in which the respondents are selected to participate in the study.

4.3.1 Gender

Both gender participated in the study. Out of 184 respondents who participated in the study, 122 were male representing 66.3% while 59 were female representing 33.7%. Kothari (2004) asserts that a ratio of at least 1:2 in either gender

representation in the study is representative enough. The results of this information are presented in Table 4.2.

Table 4.2. Gender of respondents

Gender	Frequency	Percentage (%)
Male	122	66.3
Female	62	33.7
Total	184	100

4.3.2 Category of Employees

The study targeted various categories of employees in all the organizations. This information is presented in Table 4.3.

Table 4. 3. Category of Employees

Employee Category	Frequency	Percentage (%)
Scientific	41	22.3
Technical	65	35.3
Administrative	78	42.4
Total	184	100

The same information can also be presented in a bar graph as shown in Figure 4.1.

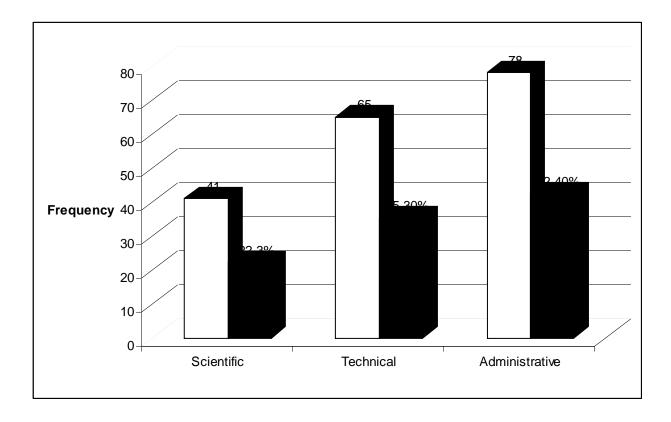


Figure 4:1 Category of Employee

The Administrative cadre was the highest at 78 which represents 42.4% (See Figure 4.1). This was closely followed by the Technical cadre at 65 which represents 35.3% while the scientific cadre was 41 which represents 22.3%. There was enough representation from both cadres since the ratio of Scientists to Administrative cadre currently stands at 1: 2 (GOK, 2011).

4.3.3 Age of Respondents

The study targeted respondents of different ages as shown in Table 4.4.

Table 4.4 Age of Respondents

Age	Frequency	Percentage (%)
20 – 25	2	1.1
26 - 30	9	4.9
31 – 35	17	9.2
36 – 40	31	16.8
Above 41	115	67.9
Total	184	100

Majority of the respondents were aged above 41 (See Table 4.4). Their total number was 125 which represent 67.9%. This was followed by those who were aged between 36 - 40 whose total number was 31 which represents 16.8%, between 31- 35 were 17 which represents 9.2%, between 26 - 30 were 9 which represents 4.9% while those who were aged between 20 - 25 were 2 representing 1.1%.

4.3.4. Levels of Education

The respondents of the target population had varied levels of education. This was aimed at ensuring that the researcher got views from respondents with different levels of education in order to avoid biasness. This information is presented in Table 4.5.

Table 4.5 Level of Education

Level of Education	Frequency	Percentage (%0
Certificate	32	17.4
Diploma	56	30.4
Degree	39	21.2
Masters	36	19.6
PhD	19	10.3
Others	2	1.1
Total	184	100

Majority of the respondents were Diploma holders whose total number was 56 representing 30.4% (See Table 4.5). This was closely followed by Degree holders who were 39 representing 21.2%, Masters degree holders 26 representing 19.6%, Certificate holders 32 representing 17.4%, PhD holders 19 representing 10.3% while the remaining 2 had less than Certificate level representing 1.1%. This clearly indicates that there was fair representation in levels of education thus, authenticating the results of the study to be quite objective.

4.3.5 Experience on the Job

The respondents who participated in the study had worked for their respective organizations in diverse years as shown in Table 4.6.

Table 4.6 Experience on the Job

Years	of Frequen	cy Percentage (%)
experience		
1-5	18	9.8
6 - 10	16	8.7
11 – 15	22	12.0
16 - 20	29	15.8
Above 21	99	53.8
Total	184	100

Majority of the respondents had worked for over 21 years whose total number was 99 which represent 53.8% (See Table 4.6). They were followed by those who had worked between 16 - 20 years whose total number was 29 representing 15.8%. Those who had worked between 11 - 15 years were 22 representing 12% while those who had worked between 6 - 10 years and 1 - 5 years were 16 and 18 representing 8.7% and 9.8% respectively. The results is a clear indication that since majority of the respondents had worked above 21 years, the results of the study indicate the true position in regard to the human resource management practices in research institutes in Kenya.

4.3.6 Position Held

The respondents who participated in the study had served their organizations in various positions. These positions were categorized into senior level management, middle level management and lower level management. This information is presented in Table 4.7.

Table 4.7 Position Held

Level of Management	Frequency	Percentage (%)
Senior level Management	46	25
Middle level Management	107	58.15
Lower Level Management	31	16.85
Total	184	100

Majority of the respondents held positions that were categorized in the middle level management whose total number was 107 representing 58.15% (See Table 4.7). This was followed by respondents who held positions that were categorized in the senior management level. The total number was 46 representing 25% while those who held positions categorized in the lower level management were 31 representing 16.85%. These results are a clear indication that there was adequate representation in all levels of management, thus making the results of the study to be more objective.

4.4 Results of the Pilot Study

The questionnaires were tested to ascertain validity and relevance. A total of twenty six questionnaires were randomly distributed to the target population which represented 10% of the target population. Mugenda and Mugenda (2003) indicate that prior to the main study, a pilot study consisting of 10% of the target population need to be conducted in order to ascertain the validity and reliability of the instruments. Marczyk, Dematteo and Festinger (2005) observes that a pilot is a start phase in data gathering of the research process. Pilot tests are therefore, conducted to detect weaknesses in design and instrumentation. According to Muus and Baker- Demaray (2007), a pilot test should draw subjects from the

target population and stimulate the procedures and protocols that have been designated for data collection. Cooper and Schindler (2006) observes that respondents in a pilot test do not have to be statistically selected. Cronbach's alpha was used to test the reliability of measures in the questionnaire. The Cronbach's alpha results need to range from 0.7 and above correlative for each content to be acceptable Gliem and Gliem(2003) also indicate that reliability refers to the consistency of measurement and that the closer is the coefficient to 1, the greater the consistency of the items in a scale. The results of the pilot study are shown in Table 4.8.

Table 4.8: Reliability Coefficients

Variable	Cronbach's Alpha	Number of Items
Recruitment & Selection	0.828	11
Training and Development	0.897	13
Reward system	0.883	8
Human resource planning	0.848	9
Staff welfare	0.735	6
Employee performance	0.818	8

Training and development had the highest reliability at 0.897 among the independent variables of the study (See Table 4.8). This was closely followed by reward system at 0.883, human resource planning at 0.848, recruitment and selection at 0.828 and staff welfare at 0.735. Employee performance which is the

dependent variable of the study had a reliability of 0.818. The reliability analysis of all the variables was 0.960 as shown in Table 4.9.

Table 4.9: Reliability Statistics of all Variables

Cronbach's Alpha	Number of items	
0.960	60	

4.5 Employee Performance

4.5.1 Introduction

Employee performance in research institutes in Kenya is very critical because it determines whether they are to achieve their objectives or not. Employee performance also tend to enhance their corporate image. The study, therefore, sought to measure the extent to which employee performance contribute to achievement of organizational objectives in research institutes in Kenya.

4.5.2 Factor analysis for employee performance

The dependent variable which is employee performance in research institutes in Kenya had a total of eight (8) items in which six (6) were confirmed valid and were, therefore, retained for subsequent analysis. However, two (2) items that is, the cost of work performed has some degree of control over costs and the employees in the organization are encouraged to appraise themselves were excluded from subsequent analysis since they had a factor loading of below 0.4. This information is presented in Table 4.10.

Table 4.10: Component Matrix for Employee Performance

Item	Extraction
Work performed by employees in the organization is of high quality	0.456
Employees in the organization usually meet deadlines while accomplishing their tasks	0.608
The cost of work performed has some control over costs	0.325
The employees in the organization achieve their specified targets	0.611
The rate of absenteeism in the organization is low	0.447
Employees in the organization are creative and innovative	0.427
Employees in the organization are encouraged to appraise themselves	0.199
Employees in the organization are aware of the organizational objectives, mission statement and vision	0.627

After the factor analysis was conducted, the reliability test was conducted using Cronbach's Alpha based on the items that were confirmed in order to ascertain the measure of the degree to which a research instrument would yield the same results of data after repeated trials (Devellis, 1991). Employee performance had a total of eight items, but two were dropped and a new reliability co-efficient determined as shown in Table 4.11.

Table 4.11: Reliability Co-efficient for Employee Performance

Cronbach's Alpha	Number of Items	_
0.795	6	

4.5.3 Descriptive analysis results for Employee Performance

Employee performance in research institutes in Kenya is very critical because it determines whether they are to achieve their objectives or not. Employee performance also tends to enhance their corporate image. The study, therefore, sought to measure the extent of the indicators of employee performance in research institutes in Kenya. The results are presented in Table 4.12.

Table 4.12: Respondents opinion on Employee Performance

Statement	Strongly	Disagree	Neutral	Agree	Strongly	Total
	disagree	(%)	(%)	(%)	agree (%)	(%)
	(%)					
The work performed by employees in the organization is of high quality	7.6	10.3	18.5	55.43	8.2	100
Employees in the organization usually meet deadlines while accomplishing their tasks	10.86	19.6	26.1	36.41	7.1	100
The employees in the organization achieve their specified targets	1.1	10.9	33.2	47.8	7.1	100
The rate of absenteeism by employees in the organization is low	2.2	10.3	20.1	58.2	9.2	100
The employees in the organization are creative and innovative	2.2	8.2	31	50	8.7	100
The employees in the organization are aware of organizational objectives, mission statement and vision	1.1	3.8	15.8	63	16.3	100
Average	4.18	10.52	24.1	51.8	9.4	100

The study sought to establish the extent to which work performed by employees in research institutes is of high quality. The study found that 7.6% of the respondents strongly disagreed. A further 10.3% of the respondents disagreed, 18.5% of the respondents were neutral, 55.43% of the respondents agreed while 8.2% of the respondents strongly agreed. Majority of the respondents (55.43%) agreed that work performed by employees in research institutes is of high quality. Overall, 17.9% of the respondents generally disagreed that work performed by

employees in research institutes was of high quality. On the other hand, 63.63% of the respondents generally agreed that work performed by employees in research institutes was of high quality.

The results of the study clearly indicate that work performed by employees in research institutes was of high quality. The findings of this study are a true reflection of the studies conducted by Kraut and Kormon (2000) who sought to establish factors influencing successful performance of organizations in the agricultural sector in parts of Germany. The study revealed that the basis for successful performance is the expectation that employees will perform above expectations. Chani and Fullenkamp (2002) argue that an organization cannot achieve its objectives if the quality of work is low. Kaser and Miles (2002) also indicate that organizations should focus on quality of work rather than quantity. The same sentiments are also shared by Dirks (2000), Bolman and Deal (2003) and Sharkie (2005).

On the extent to which employees in research institutes meet deadlines while accomplishing their tasks, the study established that 10.86% of the respondents strongly disagreed. A further 19.6% of the respondents disagreed, 26.1% of the respondents were neutral, 36.41% of the respondents agreed while 7.1% of the respondents strongly agreed. Majority of the respondents (36.41%) agreed that employees in research institutes meet deadlines while accomplishing their tasks. Overall, 30.46% of the respondents generally disagreed while 43.5% of the respondents generally agreed.

The results of the study clearly indicate that employees in research institutes meet deadlines while accomplishing their tasks. The results of this study corroborate studies conducted by Cornelius (2010) who sought to establish the indicators of employee performance in an organization. The study revealed that accomplishing the assigned roles on time played a major role. Torlak and Koc (2007) indicate that organizations can achieve their objectives if only they set their priorities right and meet the expected threshold on time .Bell (2000) and Sharkie (2005) also argue that most organizations would like to retain employees who achieve their targets on time.

The study further sought to establish the extent to which employees in research institutes achieve their specified targets. The study found that 1.1% of the respondents strongly disagreed .A further 10.9% of the respondents disagreed,33.2% of the respondents were neutral,47.8% of the respondents agreed while 7.1% of the respondents strongly agreed. Majority of the respondents (47.8%) agreed that employees in research institutes achieve their specified targets. Overall, 12% of the respondents generally disagreed while 54.9% of the respondents generally agreed. Another significant number of respondents (33.2%) were not sure whether or not employees in research institutes achieve their specified targets.

The results of the study, therefore, indicate that employees in research institutes achieve their specified targets. This is supported by studies conducted by Connell *et al* (2003) who sought to establish factors leading to successful performance of organizations .The study revealed that organizations are able to do better if their

employees are focussed and perform their tasks as expected of them. They argue that for this to happen, they (employees) must achieve their specified targets .Costa (2001) indicate that the level of organizations' profitability depends on how much their employees are able to achieve their specified targets. Gillespie and Mann (2004) argue that organizations cannot survive in turbulent competitive environment if their employees are not able to achieve their specified targets. Similar sentiments are also shared by Bijlsma and Koopman (2003) who argue that achievement of set targets by employees is the key to organizational performance because it facilitates discretionary effort to assist organizations improve on their performance.

The study also sought to establish the extent to which the rate of absenteeism by employees in research institutes is low. The study found that 2.2% of the respondents strongly disagreed. A further 10.3% of the respondents disagreed, 20.1% of the respondents were neutral, 58.2% of the respondents agreed while 9.2% of the respondents strongly agreed. Majority of the respondents (58.2%) agreed that the rate of absenteeism by employees in research institutes is low. Overall, 12.5% of the respondents generally disagreed while 67.4% of the respondents generally agreed.

The results of the study, therefore, indicate that the rate of absenteeism by employees in research institutes is low. The results of this study corroborate studies conducted by Green and Heywood (2008) who sought to establish factors leading to organizations' failure to achieve their corporate objectives. The study revealed that high rate of employee absenteeism was a major contributing factor.

Locke and Lathem (2005) indicate that organizations should develop appropriate policies to curb high rates of employee absenteeism since this will be a major obstacle towards success. Green and Heywood (2008) also indicate that organizations with low rate of absenteeism by their employees usually achieve their objectives.

The study further sought to establish the extent to which employees in research institutes are creative and innovative. The study found that 2.2% of the respondents strongly disagreed. A further 8.2% of the respondents disagreed, 31% of the respondents were neutral, 50% of the respondents agreed while 8.7% of the respondents strongly agreed. Majority of the respondents (50%) agreed that employees in research institutes are creative and innovative. Overall, 10.4% of the respondents disagreed while 58.7% of the respondents generally agreed.

The results of the study indicate that employees in research institutes are creative and innovative. The results of this study are e true reflection of the studies conducted by Kruse et. al (2010) who sought to investigate factors influencing employee productivity in an organization. The study revealed that creativity among other factors played a major role in employee productivity. Curme and Stefanec (2007) argue that employees who are creative and innovative are able to steer their respective organizations to greater heights of prosperity. Geddes and Heywood (2003) also indicate that organizations should encourage their employees to be creative and innovative if they have to achieve their goals.

The study finally sought to establish the extent to which employees in research institutes are aware of their organizational objectives, mission and vision. The

study found that 1.1% of the respondents strongly disagreed. A further 3.8% of the respondents disagreed, 15.8% of the respondents were neutral, 63% of the respondents agreed while 16.3% of the respondents strongly agreed. Majority of the respondents (63%) agreed that employees in research institutes were aware of their organizational objectives, mission and vision. Overall, 4.9% of the respondents generally disagreed while a significant majority of the respondents (79.3%) generally agreed.

The results of the study indicate that employees in research institutes are aware of their organizational objectives, mission and vision. The results of the study are a true reflection of studies conducted by Brown and Sessions (2006) who sought to establish the influence of employees' awareness of their organizational objectives, mission and vision on organizational performance. The study found that majority of the employees (73%) who were aware of their organizational objectives, mission and vision tend to be more focused on what is expected of them and, therefore, become more productive. Additionally, both Goddard (2001) and Baner (2004) indicate that if employees in an organization are to be focused and productive, then organizations should clearly define their objectives, mission and vision. Smith and Hitt (2008) also argue that organizations that are able to achieve their targets are those that have clearly defined their objectives, mission and vision.

4.5.4 Normality of Employee Performance in research institutes

Following the descriptive analysis, normality of the dependent variable was conducted. For inferential analysis to be done such as correlation, regression or

related linear techniques, the dependent variable should have a normal distribution. In case the dependent variable is not normally distributed, then normality has to be sought for before proceeding with any further analysis (Anthony, 2007; Annette, 2002; Alan, 2003). Thus, employee performance was subjected to normality test to check if the data was normally distributed or not. The testing of normality of employee performance in this study was conducted using Kolmogorov Smirnov test and Shapiro Wilk test. The test was done such that given H0 and H1, with α =0.05, the rule of thumb according to (David, 2012; Rencher, 2002) is that reject H0 if p-value is less than α or else fail to reject H0: where,

H0: The data is normal

H1: The data is not normal

Table 4.13: Checking for normality of employee performance

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Employee performance	0.9862	183	0.069	0.9853	183	0.06

Thus, Table 4.13 indicate that using both tests of normality that is Kolmogorov Smirnov test and Shapiro-Wilk tests, the p-value for both tests is greater than 0.05, thus the study failed to reject H_0 and a conclusion made that employee performance variable was normal in distribution and as a result subsequent analysis was be done.

Figure 4.2, shows a histogram of the dependent variable fitted with a normal curve, the figure shows that employee performance was approximately normal with a mean of 17.47 and standard deviation of 4.538. The quantile- quantile (Q-Q) plot and the detrended Q-Q were also established and are illustrated on Figures 4.3 and 4.4. The Q-Q plot is an excellent way of observing whether data deviate from normal, while the detrended Q-Q plot is useful for spotting outliers (David, 2012; Brian 2005).

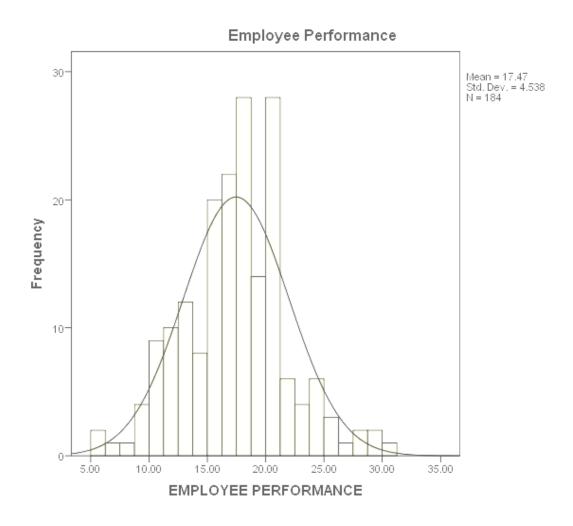


Figure 4.2 Normality of Employee Performance

According to David (2012), for a variable to be normally distributed, most of the cases should lie on the theoretical quantile line. From figure 4.3, the normal Q-Q plot of employee performance had most of its cases lying on the 45⁰ line, thus the observed values of employee performance in research institutes in Kenya are in conformity with the hypothetical distribution and hence normally distributed. Further, the detrended Q-Q plot in Figure 4.3 affirmed the normality of the data.

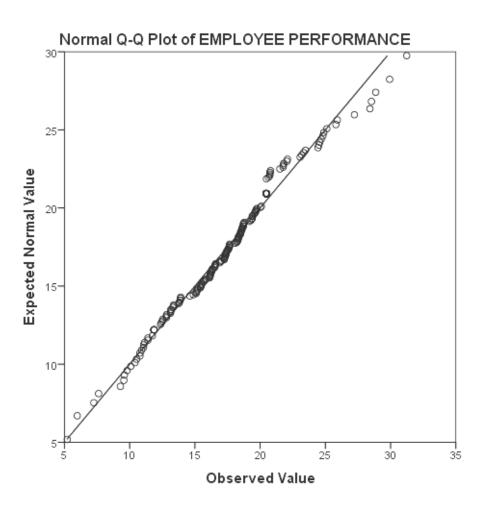


Figure 4.3 Normal Q-Q plot of Employee Performance in research institutes in Kenya with theoretical quantile line

In the detrended normal Q-Q plot in Figure 4.4, most data points appears to be clustered around the horizontal zero (0) line. The plot indicates that there were no

outliers in the sense that there were no cases more than \pm 0.32 standard deviation away. According to Garson (2012), cases more than \pm 1.96 standard deviations away are outliers at the 0.95 confidence level. Therefore, the dependent variable was found to be normally distributed and subsequent analysis was carried out.

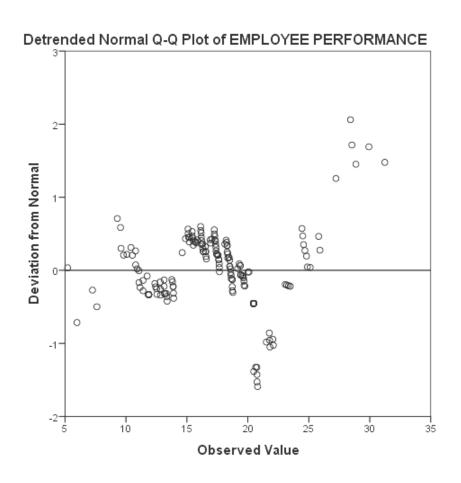


Figure 4.4 Detrended Normal Q-Q plot of Employee Performance

4.6 Recruitment and Selection

4.6.1 Introduction

Recruitment and selection is a critical component of the human resource management function since it enables research institutes to acquire staff it requires in order to achieve their objectives. Organizations exist to achieve certain goals through people who are acquired through recruitment and selection.

4.6.2 Factor Analysis for Recruitment and Selection

Recruitment and selection as an independent variable had a total of Eleven (11) items. All the items in the variable were confirmed valid since their factor loading values were more than 0.4. They were, therefore, retained for subsequent analysis. This information is presented in Table 4.14.

Table 4.14: Component Matrix for Recruitment and Selection

Item	Extraction
The organization recruits immediately positions are declared vacant	0.401
The organization fills vacant positions from internal and external sources	0.593
The organization has a policy which guides in recruitment activities	0.671
The staff are made aware of an existing vacancy or vacancies	0.497
The employees are involved in making decisions regarding recruitment of staff	0.659
There is transparency in the short listing of job candidates	0.601
All Divisional/Departmental heads are involved in the selection process	0.584
Only candidates with the relevant skills are considered during the selection process	0.620
The organization does not encourage the influence of external factors during the selection process	0.492
The organization takes into account affirmative action during the recruitment and selection of staff	0.627
The organization acknowledges all application letters as a sign of seriousness on its part	0.491

Recruitment and selection had a total of eleven items and all of them were confirmed valid and had an acceptable reliability co-efficient of above 0.7 as shown in Table 4.15.

Table 4.15: Reliability coefficient of Recruitment and Selection

Cronbach's Alpha	Number of Items	
0.828	11	

4.6.3 Descriptive analysis results for Recruitment and Selection

Recruitment and selection is a critical component of the human resource management practises. This is because it enables organizations to attract employees needed to perform various functions in organizations. The respondents were provided with a likert scale questionnaire ranging between 1 to 5 and asked to provide objective opinions that best describe their responses. The results of these findings are presented in Table 4.16.

Table 4.16: Respondents opinion on Recruitment and Selection

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
	(%)	(%)	(%)	(%)	(%)	(%)
Recruitment is done immediately positions are declared vacant	22.3	39.7	19.0	15.2	3.8	100
Vacant positions are filled from both internal and external sources	5.4	9.8	15.8	56.0	13.0	100
The organization has a policy which guides recruitment activities	3.3	10.3	28.8	45.7	12.0	100
The staff are made aware of an existing vacancy or vacancies	11.4	21.2	16.8	42.4	8.2	100
The employees are involved in making decisions regarding recruitment of staff	35.9	39.7	11.4	10.3	2.7	100
There is transparency in short listing of job candidates	7.6	21.7	38.6	29.3	2.7	100
All divisional/ departmental heads are involved in the selection process	13.6	36.4	27.7	19.6	2.7	100
Only the candidates with relevant skills are considered during the selection process	5.4	9.8	31.0	44.0	9.8	100
The organization does not encourage the influence of external forces during the selection process	4.3	12.5	44.0	30.4	8.7	100
The organization takes into consideration affirmative action during the selection of staff	5.4	16.3	38.6	32.6	7.1	100
The organization acknowledges all application letters as a sign of seriousness on its part	15.2	19.6	33.2	27.2	4.9	100
Average	11.8	21.5	27.7	32.1	6.9	100

The study sought to establish whether recruitment is done immediately positions are declared vacant. The above table shows that 22.3% of the respondents strongly disagreed, 39.7% of the respondents disagreed, 19% of the respondents were

neutral, 15.2% of the respondents agreed while the remaining 3.8% of the respondents strongly agreed.

This shows that majority of the respondents (39.7%) disagreed that recruitment is done immediately positions are declared vacant. A further 22.3% of the respondents strongly disagreed that recruitment is done immediately positions are declared vacant. The results are a clear indication that research institutes do not commence recruitment immediately positions are declared vacant. This notwithstanding, it is advisable that research institutes put in place urgent measures of ensuring that work does not stop when some positions fall vacant. Recruitment and selection is a critical component of succession planning in any organization and the success of this (succession planning) will entirely depend on the speed with which vacant positions in an organization are filled.

It is also important to note that if vacant positions are not filled within a reasonable period of time, this may lead to anxiety and discontent amongst staff. The findings of this study contradict studies conducted by Barber (2001) who found out that recruitment should be on a continuous basis as and when the need arises. Similar studies on recruitment were also conducted by Breaugh (2008), Rynes (2003) and Wanous (2004) who equally found out that that for an organization to achieve its objectives, work should not stop by way of having some positions in an organization vacant, thus organizations should commence recruitment process immediately positions are declared vacant.

The study further sought to establish the extent to which research institutes fill vacant positions from both internal and external sources. The above table shows

that 5.4 % of the respondents strongly disagreed that research institutes fill vacant positions from both internal and external sources. A further 9.8% disagreed that research institutes fill vacant positions from both external and internal sources, 15.8% of the respondents were neutral, 56% of the respondents agreed that the research institutes fill vacant positions from both internal and external sources while 13% of the respondents strongly agreed that research institutes fill vacant positions from both internal and external sources. The results clearly indicate that research institutes fill vacant positions from both internal and external sources since this is the position taken by majority of the respondents (56%). A further 13% also strongly agreed, thus making a total of 68% who generally agreed that vacant positions are filled from both internal and external sources.

It is, therefore, important that organizations adopt both sources in filling vacant positions. However, this will depend on the nature of the position that is being filled. Filling vacant positions from both sources is advantageous to the organization and the employees as well. Brown and Hesketh (2004) indicate that organizations should adopt both sources when filling vacant positions. McIntosh (2004), Furlong and Cartnel (2005), Sutton (2006) and Goldthorpe and Jackson (2007) indicate that an organization should consider its employees in the event of vacant positions within the organization. Huddleston and keep (2009), Gleeson and Keep (2004) and Lloyd (2007) all indicate that when an organization recruits from external sources it stands to gain by way of having new blood injected in terms of bringing changes which could drive it forward.

On whether the research institutes do have a policy in place to guide on the recruitment activities, the study found out that 3.3% of the respondents strongly disagreed that research institutes do have a policy to guide on recruitment activities. A further 10.3% of the respondents disagreed that research institutes do have a policy in place to guide on recruitment activities, 28.8% of the respondents were neutral, 45.7% of the respondents agreed that research institutes do have a policy in place to guide on recruitment activities while 12% of the respondents strongly agreed that research institutes do have a policy in place to guide on recruitment activities. Overall, a total of 57.7% of the respondents generally agreed that research institutes do have a policy to guide on recruitment activities. The results, therefore, clearly indicate that research institutes do have a policy in place to guide on recruitment activities. The results also indicate that 28.8%were not sure whether or not research institutes do have a policy in place to guide on recruitment activities while another 13.6% of the respondents generally disagreed that there was no policy in place to guide on recruitment activities.

This may, therefore, imply that research institutes do not fully communicate to their employees on various human resource policies that are in place. This notwithstanding, organizations should have policies which provide clear guidelines on how the recruitment process should be undertaken. These findings corroborate the studies conducted by Nickson and Andreson (2003) who found that successful organizations should have policies in place to guide on recruitment activities. Ashton and Sung (2006) and Lloyd (2007) further indicate that for any

recruitment to be meaningful, it must be guided by an organizational policy regarding recruitment.

On whether the staff knew of an existing vacancy or vacancies in their respective organizations, the study found that 11.4% of the respondents strongly disagreed that they knew of an existing vacancy or vacancies in their respective organizations. A further 21.2% of the respondents disagreed that they knew of an existing vacancy or vacancies in their respective organizations, 16.8% of the respondents were neutral, 42.4% of the respondents agreed that they knew of an existing vacancy or vacancies in their respective organizations while 8.2% of the respondents strongly agreed that they knew of an existing vacancy or vacancies in their respective organizations. The results are, therefore, a clear indication that staff are notified of an existing vacancy or vacancies in their organizations.

It is always important that staff in an organization be notified of an existing vacancy or vacancies. This is because they can be a source of labour force depending on the policy of an organization regarding recruitment. Jackson (2006), Bowles and Gintis (2002) and Osborne (2005) indicate that employees are an organizations' ambassadors and they can be useful in sourcing for labour force required by the organization. McWilliam and Haukka (2008) also indicate that recruitment is a shared responsibility between the management and employees.

The study further sought to establish whether employees are involved in making decisions regarding recruitment of staff in their respective organizations. The study established that 35.9% of the respondents strongly disagreed that they are involved in making decisions regarding recruitment of staff. A further 39.7% of

the respondents disagreed that they are involved in making decisions regarding recruitment of the staff, 11.4% of the respondents were neutral, 10.3% of the respondents agreed that they were involved in making decisions regarding recruitment of staff while 2.7% of the respondents strongly agreed that they are involved in making decisions regarding recruitment of staff. The results are clear indication that research institutes do not involve employees in making decisions regarding recruitment of staff. A total of 75.6% of the respondents generally disagreed that they are involved in making decisions regarding recruitment.

Generally, there is need for employees to be involved in decision making since they will feel to be part of the organization. When employees are also involved in decision making, the level of resistance reduces. These findings of this study contradict studies conducted by Mitchell and Mickel (2001) and Woodruffe (2009) who found that employees should be involved in crucial decision making since they are also major stakeholders. This is also supported by Baron et. al. (2003) who suggested that recruitment is a shared responsibility between the major parties. i.e. the management and the employees.

Short listing of job candidates is a critical component of the selection process. The study, therefore, sought to establish if there was transparency in the short listing of job candidates. The study established that 7.6% of the respondents strongly disagreed that there is transparency in the short listing of job candidates. A further 21.7% disagreed that there is transparency in the short listing of job candidates, 38.6% of the respondents were neutral, 29.3% of the respondents agreed that there is transparency in the short listing of job candidates while 2.7% of the respondents

Strongly agreed that there is transparency in the short listing of job candidates. Overall, the results are a clear indication that majority of the respondents are not sure whether or not research institutes practice transparency when short listing job candidates and another 29.3% generally disagreed that there is transparency in short listing of job candidates. It can, therefore, be concluded that there is no transparency in short listing of job candidates. This is a major blow to research institutes since this will compromise on the quality of the staff recruited.

The selection process will also be compromised since the wrong candidates end up getting jobs which they do not deserve. The findings of this study are contrary to Machin and Vignoles (2001), McIntosh (2004) and Jenkins et. a.l (2007) who have indicated that organizations need to provide clear guidelines on how they will short list job candidates in order to make a recruitment process to be objective. This is also asserted by Johnson and Burden (2003) who have equally indicated that the outcome of a selection process will entirely depend on how the organization conduct short listing of job candidates.

The study further sought to establish the extent of involvement of divisional /departmental heads in the selection process. The study found out that 13.6% of the respondents strongly disagreed that departmental/ divisional heads are involved in the selection process. A further 36.4 % of the respondents disagreed that departmental/ divisional heads are involved in the selection process, 27.7% of the respondents were neutral, 19.6% of the respondents agreed that departmental/divisional heads are involved in selection process while 2.7 % of the respondents strongly agreed that departmental/divisional heads are involved in

selection process. It is, therefore, noted that 50% of the respondents generally disagreed that departmental/divisional heads are involved in the selection process. Another significant number of respondents (27.7%) were not sure whether or not departmental /divisional heads are involved in the selection process. These results are a clear indication that research institutes do not fully involve the departmental/divisional heads in the selection process.

In an ideal situation, the selection panel should consist of a representative from the top management the human resource manager and a technical person from a department/division which require additional staff. This is because a technical person understands the various technical aspects in terms of the activities in the department/division. These findings contradict the studies conducted by Lockyer and Scholarios (2007) who found that organizations with the best talents and skills are those whose selection panel is constituted objectively. Gallagher and O' Leary (2007) are also of the view that the selection process is a shared responsibility between the management, the human resource management and the operating departments. The same sentiments are also shared by Jenkins and Wolf (2002), Kersley (2006) and Parry and Tyson (2008).

On whether only candidates with relevant skills are considered during selection process, the study established that 5.4% of the respondents strongly disagreed. A further 9.8% of the respondents disagreed that only candidates with relevant skills are considered during the selection process, 31% of the respondents were neutral, 44% of the respondents agreed that only candidates with relevant skills are considered during the selection process while 9.8% of the respondents strongly

agreed that only candidates with relevant skills are considered during the selection process. Therefore, 53.8% of the respondents generally agreed that only candidates with relevant skills are considered during the selection process. The results are a clear indication that research institutes to a great extend considers candidates with relevant skills to occupy vacant positions.

If an organization is to achieve its goals then it must ensure that it has the right skills throughout its hierarchies. Organizations should, therefore, avoid a mismatch of skills and have the right people in the right departments/divisions. These findings are a true reflection as indicated by Lindsay and Mc Quiad (2004) and Nickson and Leung (2008) who shared the view that organizations should strictly adhere to job specification in order to get the best during the selection process. Other scholars such as Baron. (2006) Grimshaw (2002), Atkinson and Williams (2003), Green and Heywood (2004) and Tomlison (2006) indicate that policy makers in an organization should come into terms with reality and ensure that they adhere to various organizational policies regarding the recruitment and selection of staff. They should thus ensure that only candidates with the relevant skills are offered positions in the organization.

On whether research institutes do not encourage external influence during the selection process, the study established that 4.3% of the respondents strongly disagreed. A further 12.5% of the respondents disagreed that the research institutes do not encourage external influence during the selection process. 44% of the respondents were neutral, 30.4% of the respondents agreed that research institutes do not encourage external influence during the selection process while

8.7% of the respondents agreed that research institutes do not encourage external influence during the selection process. The results indicate that 39.1% of the respondents generally agreed that research institutes do not encourage external influence during the selection process. A majority of the respondents (44%) were not sure as to whether or not research institutes do not encourage external influence during the selection process. The results are, therefore, a clear indication that research institutes do not clearly come out and state how they settle on the candidates being offered various jobs.

Data on all job applicants should be easily accessible for reference. This will help to ascertain whether the candidates offered the candidates offered various positions applied for the same and if they qualified for the same. This will, therefore, help to avoid a situation where some candidates are offered some various jobs even when they had not applied for the same. These findings, therefore, contradict Baron and Harman (2002) and Collins and Smith (2006) who are of the view that the results of the selection process should be easily accessible for scrutiny. However, Geringer et.al (2005) concurs with the findings of the study and indicate that the results of the selection process should be confidential and accessible only to senior level management of an organization.

On whether research institutes takes into consideration affirmative action during the selection of staff, the study established that 5.4 % of the respondents strongly disagreed. A further 16.3% of the respondents disagreed that research institutes takes into consideration affirmative action during the selection of the staff, 38.6% of the respondents were neutral, 32.6% of the respondents agreed that research

institutes takes into consideration affirmative action during the selection process while 7.1% of the respondents strongly agreed that the organization takes into consideration affirmative action during the selection process. Overall, 39.7% of the respondents generally agreed that research institutes takes into consideration affirmative action during the selection process. The results are a clear indication that research institutes do not seriously take the issue of affirmative action during the selection process.

All institutions especially public are required to adhere to government policy on affirmative action during the recruitment and selection process. This is to ensure that the candidates are not discriminated on the basis of age, gender, physical disability and it also ensures regional balancing. These findings contradict Barber (2001) who indicate that organizations should come up with a criterion during the selection process in order to ensure that no one is disadvantaged in the process. The same sentiments are also shared by Rynes et. al (2000), Harris and Frink (2002) and Dipboye (2003).

Finally, the study sought to establish whether research institutes—acknowledges all application letters as a sign of seriousness on their part. The study established that 15.2% of the respondents strongly disagreed. A further 19.6% of the respondents disagreed, 33.2% of the respondents were neutral, 27.2% of the respondents agreed while 4.9% of the respondents strongly agreed. Overall, 32.1% of the respondents generally agreed that research institutes—acknowledge all application letters. The results are a clear indication that research institutes do not take acknowledgement of application letters seriously.

Acknowledgement of application letters is an indication of seriousness on the part of the organization. This will also help to boost the corporate image of an organization. Besides this, it will also boost an organization's future plans regarding recruitment and selection of staff. These findings contradict Barber and Roehling (2003), Philips (2008) and Hause (2004) who indicate that organizations should not discriminate job applicants by only responding to successful candidates. This is because some of the candidates considered unsuccessful may be useful in future.

4.6.4 Possible ways of improving Recruitment and Selection

The study also sought to establish how recruitment and selection can be improved in research institutes in Kenya. This was an open ended question where respondents were asked to provide an in depth information on the way forward. The respondents proposed various solutions as shown in Table 4.17.

Table 4.17: Possible ways of improving Recruitment and Selection

Statement/ proposed solution	Frequency	Percentage %
Review current recruitment	102	55.4
policies and make them clear		
Fill positions from both external and internal sources.	89	46.4
Give priority to existing	107	58.2
employees		
Automation of recruitment	78	42.4
process		
Consultation between	113	61.4
departmental heads and human		
resource manager		
Form a recruitment committee.	99	53.8
Involve experts/consultants in	103	56
recruitment		
Promote employees when due	96	52.2
Selection to be on merit	121	65.8
Recruitment and selection to be	133	72.3
objective.		
Develop clearly defined job	106	57.6
description and job		
specification.		
Average		56.5

Table 4.17 shows that 55.4% of the respondents indicated that the current recruitment policies need to be reviewed, 46.4% of the respondents indicated that the positions should be filled from both internal and external sources, 58.2% indicated that priority should be given to existing employees when filling vacant

positions, 42.4% indicated that there is need to automate the recruitment process, 61.4% indicated that there is need for consultation between departmental heads and human resource manager. A further 53.8% indicated that there is need to form a committee to handle recruitment activities, 56% indicated that there is need to involve an expert or a consultant to help in recruitment, 52.2% felt that there is need to promote employees when due to fill some positions, 65.8% indicated that selection should be based purely on merit, 72.3% indicated that the recruitment and selection exercise should be objective while 57.6% indicated that there should be clearly well defined job descriptions and job specification. The findings indicate that majority of the respondents focused on the objectivity of the recruitment and selection process. These findings are in agreement with Brown and Hesketh (2004) who are of the view that for any organization to achieve its objectives, then the selection of its manpower should be based purely on merit.

4.6.5 Correlation analysis of independent variables

Pearson correlation coefficient is a measure of linear association between two variables. Values of the correlation coefficient are always between -1 and +1. A correlation coefficient of +1 indicates that two variables are perfectly related in a positive linear sense whereas a correlation coefficient of -1 indicates that two variables are perfectly related in a negative linear sense. On the other hand, a correlation coefficient of 0 indicate that there is no linear relationship between the two variables (Kothari, 2004; Sekaran, 2008).

4.6.6 Recruitment and Selection Pearson correlation computation

Based on the results in Table 4.18, the correlation coefficient (P) between employee performance and recruitment and selection was found to be 0.374 at (P=0.000). These results indicate that according to the study, there was a highly significant linear correlation between the two variables (Recruitment and selection and employee performance). This implies that the relationship between the two variables is very close. A relationship therefore exist since it is above the recommended 30% (Mugenda & Mugenda, 2003). This supports the argument by Rynes and Barber (2000), Shippman *et.al* (2000) and Lievens *et.al* (2002) who indicate that the way organizations conduct recruitment and selection will either improve the performance of employees or not. They argue that if recruitment and selection is conducted in an objective and professional manner, then it is likely to improve employee performance.

Bowles and Gintis (2002) and Osborne (2005) indicate that personality type appears to have a major impact on performance and this will depend on the qualifications of employees. They argue that the effectiveness of recruitment and selection will determine whether organizations will get the right persons who are ready to deliver, Shury *et. al* (2008) indicate that the caliber of employees obtained during the recruitment and selection process will determine whether they will perform or not.

Table 4.18: Recruitment and Selection Pearson correlation computation.

		RECRUITMENT AND SELECTION	EMPLOYEE PERFORMANCE
RECRUITMENT AND SELECTION	Pearson Correlation	1	.374**
AND SELECTION	Sig. (2-tailed)		.000
	N	244	184
EMPLOYEE	Pearson Correlation	.374**	1
PERFORMANCE	Sig. (2-tailed)	.000	
	N	184	184

^{**.} Correlation is significant at the 0.01 level (2-tailed).

4.6.7 Results of the regression analysis on Recruitment and Selection

The model equation $y=\beta_1x_1+\varepsilon$ explained 13.5% as measured by the goodness of fit as shown in Table 4.19. The results indicate that recruitment and selection explained 13.5 % of the variation in employee performance as shown by the adjusted R^2 . This, therefore, indicate that 13.5% of the corresponding change in employee performance can be explained by a unit change in recruitment and selection. This supports the argument by Stewart (2007) who indicate that recruitment and selection is a critical component of the human resource management function. He argues that if the process of recruitment and selection is not done objectively, then organizations will not get the right people and thus affect the performance of employees. Jancowicz (2009) also indicate that organizations whose performance is above board are those who ensure that recruitment and selection process is not compromised.

Table 4.19: Model summary for regression between Recruitment and Selection and Employee Performance.

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.374 ^a	.140	.135	4.221

a. Dependent variable: EMPLOYEE PERFORMANCE

b. Predictors (Constant): RECRUITMENT AND SELECTION

4.6.8 Results of analysis of variance on Recruitment and Selection

The Analysis of Variance results (ANOVA) indicated that the model of employee performance with recruitment and selection at F test =29.549, P > 0.05 indicate that there was a highly significant relationship between recruitment and selection and employee performance in research institutes in Kenya. The results of ANOVA are presented in Table 4.20.

Table 4.20: ANOVA results for Recruitment and Selection and Employee Performance.

ANOVA

	Sum of	df	Mean Square	F	Sig.
	Squares				
Regression	526.417	1	526.417	29.549	.000 ^b
Residual	3242.298	182	17.815		
Total	3768.715	183			

According to these results, recruitment and selection plays a critical role in employee performance. This supports Zahidi and Afzanizam (2009) who indicate that organizations that are able to achieve their goals are those who take recruitment and selection seriously. Zula and Chermack (2008) also indicate that employees who are procured objectively tend to be better employees.

4.6.9 Results of the coefficients for regression between recruitment and selection and employee performance

According to the regression results, recruitment and selection was found to have a positive influence on employee performance. This is illustrated by the regression results at 5% level of significance with unstandardized beta coefficient of 12.502 and t-value of 12.598 with a P-Value of 0.000.

Table 4.21: Coefficients for regression between Recruitment and Selection and Employee Performance.

	Unstandardized Coefficients β	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	12.502	.965		12.958	.000
RECRUITMENT AND SELECTION	.271	.050	.374	5.436	.000

In supporting the findings of the study on the significance of recruitment and selection on employee performance, previous studies conducted by Stewart and Knowles (2008) indicate that large organizations value what are now termed as acquisition of relevant skills through effective recruitment and selection process. They argue that if recruitment and selection is done objectively, it will have a positive influence on employee performance since it will enable organizations to recruit the best workers. Various strategic plans for research institutes for the period 2010 to 2015 suggest that recruitment and selection of staff shall be done on merit. This involves both internal and external recruitment.

4.6. 10 Recruitment and Selection Hypothesis Results

There is no significant linear relationship between recruitment and selection and employee performance.

The hypothesis that

$$H_{o}$$
: $\beta j = 0$

$$H_i: \beta j \neq 0$$

were tested by comparing the calculated t value and the critical t-value using a two tailed test.

Table 4.22: Hypothesis testing for Coefficients of regression between Recruitment and Selection and Employee Performance

Coefficients

β	t.cal	t-critical
12.502	12.958	
0.271	5.436	1.96
		12.502 12.958

Since the calculated t=5.436 is greater than critical $t(_{184-1})(_{0.05})$ as shown in Table 4.22, the study rejected the null hypothesis that there is no significant linear relationship between recruitment and selection and employee performance in research institutes in Kenya. Therefore, the study accepted the alternative

hypothesis that there is a significant linear relationship between recruitment and selection and employee performance.

In supporting this, Armstrong (2008) indicate that if recruitment and selection process is not compromised, then an organization is capable of procuring employees who are committed to the ideals of the organization. He argues that employees who are recruited and selected objectively tend to be more productive. Kloot and Martin (2000) also indicate that recruitment and selection process is a critical component of the human resource management function since it will have a direct effect on employee performance.

4.7 Training and Development

4.7.1 Introduction

Training and development is a critical component of the HRM function since it enables research institutes to have employees who are skilled.

4.7.2 Factor analysis for training and development

Training and Development as an independent variable had a total of Thirteen (13) items. All the items in the variable were confirmed valid since their factor loading values were more than 0.4. They were, therefore, retained for subsequent analysis. This information is presented in Table 4.23.

Table 4.23: Component Matrix for Training and Development

Item	Extraction
People are properly oriented and trained upon joining the organization	0.486
The organization does provide regular opportunities for personal and career development	0.507
Innovation and creativity are encouraged in the organization	0.490
The organization has career development activities that help employees identify/improve their abilities, goals, strengths and weaknesses	0.534
The organization accords equal training opportunities for all cadres of staff	0.603
After formal training, the organization recognizes employees' efforts	0.519
The organization has put in place well elaborate development programs aimed at improving employee performance	0.410
The workshops and seminars organized by the organization are relevant to the needs of the organization	0.500
The organization conducts workshops both within and outside its premises	0.493
The organization embraces both on the job and off the job training	0.547
There is an elaborate policy in the organization to guide on training and development activities	0.497
The organization has set up a committee that reviews and evaluate training needs assessment	0.508
There is a budget set aside in the organization to carter for training and development activities	0.463

Training and development had a total of thirteen items and all of them were confirmed valid and had an acceptable reliability co-efficient of above 0.7 as shown in Table 4.24.

Table 4.24: Reliability Co-efficient for training and development

Cronbach's Alpha	Number of Items	
0.828	13	

4.7.3 Descriptive analysis results for Training and Development

Training and development is a critical component of the human resource management function. It enables organizations to have the relevant skills necessary to achieve the desired objectives. Organizations with good training and development programmes have a competitive edge over their rivals. The study sought to establish the influence of training and development on employee performance in research institutes in Kenya. The results are represented in Table 4.25.

Table 4.25: Respondents opinion on Training and Development

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
	(%)	(%)	(%) 23.9	(%)	(%)	(%)
People are properly oriented upon joining the organization	9.2	30.4	23.9	30.4	6.0	100
The organization does provide regular opportunities for personal and career development	7.1	23.4	21.7	42.9	4.9	100
innovation and creativity are encouraged in the organization	6.0	15.2	25.0	42.4	11.4	100
The organization has career development activities that help employees identify/improve abilities, goals, strengths and weaknesses.	4.9	28.8	31.5	29.3	5.4	100
The organization accords equal training opportunities to all cadres of staff	20.1	38.0	19.0	19.6	3.3	100
The organization recognizes employee efforts after training.	13.0	21.2	23.9	38.6	3.3	100
The organization has put in place development programmes for improving performance of employees.	3.8	22.3	28.3	40.8	4.9	100
The workshops and seminars organized by the organization are relevant to the needs of the organization	1.1	8.7	28.8	49.5	12.0	100
The organization organizes workshops from both within and outside its premises	2.2	7.1	21.2	58.2	11.4	100
The organization embraces both on the job and off the lob training	5.0	15.8	27.2	47.8	8.7	100
There is an elaborate policy in the organization to guide on training and development	3.8	16.8	38.0	33.2	8.2	100
The organization has set up a committee that reviews and evaluates training needs assessment	1.6	9.8	22.8	53.3	12.5	100
The organization has set aside a budget to carter for training and development activities	6.0	7.6	34.8	40.8	10.9	100
Average	6.3	18.8	26.5	40.5	7.9	100

The study sought to establish the extent to which people are properly oriented upon joining the organization. The study found out that 9.2 % of the respondents strongly disagreed. A further 30.4% of the respondents disagreed, 23.9% of the respondents were neutral, 30.4% of the respondents agreed while 6% of the respondents strongly agreed. The findings, therefore, indicate that majority of the respondents (30.4%) both disagreed and agreed respectively that people are properly oriented upon joining the organization. Overall, 39.6% of the respondents generally disagreed that people are properly oriented upon joining the organization. On the other hand, 36.4% of the respondents generally agreed that people are properly oriented upon joining the organization. The results are, therefore a clear indication that research institutes do not take seriously employee orientation especially when joining service.

Employee orientation is a very important activity because it basically exposes new employees to organizational cultural practices. Employee orientation also motivates staff thus increasing productivity. These findings, therefore, contradict studies conducted by Wetland (2003) who found out that organizations with well defined orientation programmes will avoid a situation of indispensability amongst some employees. Jamreg (2002), Clarke (2001) and Messmer (2000) also indicate that employees who understand organizational prevailing practices tend to be more productive because they understand all operations in an organization.

On whether research institutes do provide regular opportunities for personal and career development, the study established that 7.1% of the respondents strongly disagreed. A further 23.4% of the respondents disagreed, 21.7% of the

respondents were neutral, 42.9% of the respondents agreed while 4.9% of the respondents strongly agreed. Overall, 47.8% of the respondents generally agreed that research institutes do provide regular opportunities for personal and career development. The results are a clear indication that although the research institutes do provide regular opportunities for personal and career development opportunities, they need to improve since it is only a simple majority who concurred with this statement i.e. less than 50%.

In order to motivate staff and enhance productivity, it is desirable, therefore, for organizations to take seriously career development. Employees will be motivated when their career paths in an organization are clearly defined. Upward mobility for employees is very essential if employees have to be productive. The results of these findings corroborates with the studies conducted by Oakland and Oakland (2004) who found out that employees in an organization need not to stagnate in their current positions for quite an unreasonable period of time. Scorely and Siason (2001) have also indicated that employees will be motivated to acquire new skills if the career guidelines are clearly defined.

The study sought to establish the extent to which innovation and creativity are encouraged in research institutes. The study found out that 6% of the respondents strongly disagreed. A further 15.2% disagreed, 2.5% of the respondents were neutral, 42.4% of the respondents agreed while 11.4% of the respondents strongly agreed. Overall 53.8% of the respondents generally agreed that innovation and creativity are encouraged in research institutes. It is desirable that organizations encourage their employees to be more creative and innovative. Creativity will

enable employees to come up with new ideas, thus help an organization to achieve its goals. Vision 2030 blue print recognizes research as the leading factor towards the realization of this dream. This, therefore, requires a lot of creativity and innovativeness.

The results are a clear indication that research institutes encourage creativity and innovation. This is quite necessary since they need to develop appropriate new technologies which are aimed at improving the agricultural and livestock sectors. In order to achieve this, research institutes must encourage their employees to continuously acquire new skills. Employees who are highly skilled usually tend to be more creative and innovative. These findings corroborate the studies conducted done by Accenture (2001) who found out that there is a relationship between employee training and the level of creativity and innovativeness. Derek (2005) also indicate that once employees are through with their training, organizations should allow them to freely utilize their newly acquired skills and come up with new ideas. The same sentiments are also shared by Jardine and Amig (2005) and Farnham (2006) who also indicate that organizations should continuously review their training and development programs in order to encourage creativity and innovativeness.

On whether research institutes have career development activities that help an employee identify/ improve activities, goals, strengths and weaknesses, the study established that 4.9% of the respondents strongly disagreed. A further 28.8% of the respondents disagreed, 31.5% of the respondents were neutral, 29.3% of the respondents agreed while 5.4% of the respondents strongly agreed. In an ideal

situation, organizations are supposed to come up with development activities that will help employees to improve on their performance. As Harrison (2005) puts it, employees are the blood stream of any business and the success or failure of any organization depends on employee performance. He stressed on the importance of organizations coming up with development programs. The rapid change of technology has made it possible for organizations to put in place development programs which are tailor made.

Overall, 34.7% of the respondents generally agreed that research institutes have career development activities while 33.7% of the respondents generally disagreed that there are career development activities in place. The results are, therefore, a clear indication that even though research institutes have career development activities there needs to be improvement on this matter since the difference between those who indicated that research institutes have career development activities and those who did not is statistically insignificant (1%). A significant number of respondents (31.5%) were not sure whether or not there were development activities in place. These findings contradict Armstrong (2009) who indicated that the capability of the organization to achieve its business strategies in the light of the critical success factors for the business (innovation, quality, cost, leadership etc) depends entirely on the capability on its managers as developed within the organization to meet its particular demands and circumstances. Fonda (2005) also emphasizes the far-reading nature of the management capabilities that should possess relevant skills through various development activities.

The study further sought to establish the extent to which research institutes accord equal training opportunities to all cadres of staff. The study found that 20.1% of the respondents strongly disagreed. A further 38% of the respondents disagreed, 19% of the respondents were neural, 19.6% agreed while 3.3% of the respondents strongly agreed. Overall, 58.1% of the respondents generally disagreed that research institutes accord equal training opportunities to all cadres of staff while those who generally agreed were 22.9%. People are the key organizations' resource and the extent to which organizations will achieve their results will depend on their performance. There is need, therefore, to treat all people fairly, equitably and consistently without discrimination of any nature.

The results are a clear indication that research institutes do not accord all cadres of employees equal training opportunities. This is a dangerous trend which might affect the performance of employees who may feel discriminated. These findings contradict studies conducted by Frazis *et. al.* (2003) who found out that for organizations to achieve their objective they need to come up with relevant training programs irrespective of their professional background. The same sentiments are also shared by Accenture (2001), Walker (2001) and Jamrog (2002) who indicated that all employees in an organization irrespective of their professional background contribute to the success of the organization and should be equipped with the necessary skills if possible.

The study also sought to establish the extent to which research institutes recognize employees' efforts after formal training. The study found that 13% of the respondents strongly disagreed. A further 21.2% of the respondents disagreed,

23.9% of the respondents were neutral, 38.6% of the respondents agreed while 3.3% of the respondents strongly agreed. Overall, 34.2% of the respondents generally disagreed that research institutes recognize employees' efforts after formal training while 41.9% generally agreed. Staff in an organization will be motivated to undertake a training program if they expect some rewards. This is specifically to those employees who are on the lower level needs as suggested by Maslow (1971). It is therefore, desirable that organizations come up with clear career guidelines based on merit, suitability and level of training or professionalism.

The results are a clear indication that research institutes recognize individual efforts after formal training although they need to improve and make it even better. As evidenced by the results, less than 50% of the respondents generally agreed that there was such recognition. These findings concur with Munford (2001) who indicate that training should create an impact to the organization. This is by ensuring that after formal training, staff are motivated and even encouraged to work hard. Bryant (2003), Gumbus and Johnson (2005) and Bass (2005) have all indicated that employee status in an organization should change after formal training.

The study further sought to establish the extent to which research institutes have put in place development programs for improving performance of employees. The study found that 3.8% of the respondents strongly disagreed, 22.3% of the respondents disagreed, 28.3 % of the respondents were neutral, 40.8% of the respondents agreed while 4.9% of the respondents strongly agreed. Overall,

45.7% of the respondents generally agreed while 26.1% of the respondents generally disagreed. Organizations need to come up with development programs which suits their expectations. This is aimed at improving the skills of their employees. Development programs also help organizations to plan for future and realize emerging trends in the industry.

The results are a clear indication that research institutes have put in place development programs aimed at improving the performance of its employees. These institutes need to continuous improve on their development programs so that they can even attract funding necessary for conducting research. These findings are a true reflection of Kanter (2006) who indicate that organizations with good development programs will enhance the skills of their employees and achieve their goals and objectives. Bilison (2005) also indicated that organizations with good development plans enhance creativity and innovativeness and achieve its long term goals and objectives.

On whether the workshops and seminars organized by research institutes are relevant to their needs, 1.1% of the respondents strongly disagreed. A further 8.7 % of the respondents disagreed, 28.8% of the respondents were neutral, 49.5% of the respondents agreed while 12% of the respondents strongly agreed. Overall, 61.5% of the respondents generally agreed that the workshops and the seminars organized by the research institutes are relevant to their needs while 9.8% of the respondents generally disagreed. In an ideal situation, employee training/development programs are supposed to be tailor made in order to suit the needs of the organization. Organizations should, therefore, conduct training needs

assessment in order to ascertain the validity/ relevance of training. This ensures that organizations become more competitive and even able to achieve their goals as specified.

The results of the study clearly indicate that research institutes organize workshops and seminars that are relevant to their needs. This issue is taken seriously by research institutes since more than 60% of the respondents generally agreed. These findings corroborates the studies conducted by Balkin (2005) who found that training should provide employees with specific skills or help correct deficiencies in their performance. This, therefore, implies that any training offered by an organization should be specific and relevant. Gomez *et. al.* (2009), Wilk and Cappelli (2003) and Ashkanasy (2004) are also of the view that development should be geared towards providing employees the abilities that organizations require in future. Lawler and Mirvis (2006) also emphasize on the need for organizations to develop programs which are tailor made to specific organizations since this is the best way to improve on their effectiveness and efficiency.

The study also sought to establish the extent to which research institutes organize workshops and seminars from both within and outside their premises. The study found that 2.2% of the respondents strongly disagreed. A further 7.1 % of the respondents disagreed, 21.2% of the respondents were neutral, 58.2% of the respondents agreed while 11.4% of the respondents strongly agreed. Overall, 69.6% of the respondents generally agreed that research institutes organize workshops and seminars within and outside the working environment while

23.4% of the respondents generally disagreed. It is necessary for organizations organize workshops and seminars from both within and outside their premises so that the participants (employees) could have a relaxed mood, thus reducing the levels of stress. It is healthy for employees to be away from the working environment at times—so that they can share the real experiences with other people. Due to rapid—changes in technology, there is need for employees to get exposure and learn the new trends in business activities.

The results of the study clearly indicate that research institutes organize workshops and seminars from both within and outside the working environment. This was the position taken by more than 60% of the respondents. These findings corroborates the studies conducted by Travagllone and Connelf(2002) who found that course participants will be very productive and active when they are away from the working environment. Muligen and Koopmen (2003) also indicate that workshop participants tend to get more exposure when they interact with people who are not necessarily members of staff. Similar studies conducted Johns et. al (2004) revealed that employees are motivated to learn more if the workshop/seminar is conducted both from within and away from the working environment. However, the findings contradicts Clarke(2006) and Levine(2002) who argue that organizations should focus more on organizing workshops and seminars at the workplace since the course participants(employees) can freely share their experiences and ideas with their colleagues at the work place.

On whether research institutes embrace both on the job and off the job training, the study established that 5% of the respondents strongly disagreed. A further 15.8% of the respondents disagreed, 27.2% of the respondents were neutral, 47.8% of the respondents agreed while 8.7% of the respondents strongly agreed. Overall, 56.5% of the respondents generally agreed that research institutes embrace both on the and off the job training while 20.8% of the respondents generally disagreed. Research institutes are being viewed as learning organizations and they, therefore, need to embrace both on the job and off the job training. Due to rapid changes in technology, there is need for research institutes to come up with ways of coping with the changes. The most appropriate way doing this is by equipping their employees with relevant skills. The training should, therefore, be specific to individual employees. Organizations should adopt off the job training where it is necessary for employees to undergo a particular training for a specific period of time. On the job training involves learning on the job through practical experience and this helps employees to be practical oriented.

The results of this study, therefore, indicate that research institutes embrace both on the job and off the job training. It is noted that more than 50% of the respondents concurred with this statement. The findings are a true reflection Armstrong (2010) who argue that organizations should embrace both on the job and off the job training in order to make them more efficient and effective. Thomas (2004) emphasize that organizations should expose their employees to real work experiences. Kazana (2004) argues that once employees have acquired specific skills, they should be exposed to the real working environment and gain

first hand experience. Davies(2001) also argue that employees who are offered training opportunities both within the job and outside the job tend to be more committed and supports their organizations in the achievement of their respective goals and objectives.

The study further sought to establish the extent to which research institutes have elaborate policies to guide on training and development activities. The study found that 3.8% of the respondents strongly disagreed. A further 16.8 % of the respondents disagreed, 38% of the respondents were neutral, 33.2% of the respondents agreed while 8.2% of the respondents strongly agreed. Overall, 20.6% of the respondents generally disagreed while 41.4% of the respondents generally agreed. A significant number of respondents (38%) were not sure whether or not research institutes do have policies in place to guide on training and development activities. A training policy helps an organization to determine its training needs. Organizations should, therefore, develop appropriate guidelines to manage training and development activities. A training policy will also act as a guide for organizations to conduct training needs assessment and ensure that there is objectivity and consistency on the manner in which employees are selected for training.

The results indicate that research institutes have policies in place to guide on training and development activities. Although this is the case, it appears that the policies in place do not serve the interests of employees adequately. Only a simple majority of the respondents (41.4%) indicated that there were policies in place to guide on training and development activities Research institutes, therefore, need

to review the existing training policy to correspond with the current needs. The findings of this study corroborate the studies conducted by Desimone et. al (2002) who investigated factors affecting training in Australian organizations. The findings revealed that most organizations do not succeed on training and development activities due to lack of appropriate policy. They, therefore, recommended that organizations should develop appropriate policies. Anderson and Boocok(2002) also indicate that if organizations' training programmes are to be effective, then there must be proper guidelines in place. Hayes Allinson (2007) and Duffy (2003) have also indicated that a training policy is a foundation within which organizations' training needs are based upon. Sinkula (2002) also indicate that organizations without guidelines on training and development do not enhance their employees' skills.

On whether research institutes have set up committees that review and evaluate training needs assessment, the study found that 1.6 % of the respondents strongly disagreed. A further 9.8 % of the respondents disagreed, 22.8% of the respondents were neutral, 53.3 % of the respondents agreed while 12.5 % of the respondents strongly agreed. Overall, 11.4 % of the respondents generally disagreed that research institutes have set up committees to review and evaluate training and development programmes while 65.8 % of the respondents generally agreed. In order for training and development programmes to be effective in organization, a committee to oversee such activities must be formed. Training committees must be all inclusive and objective. The success of any organization will entirely depend on the nature of skills possessed by its employees. The effectiveness of

training needs assessment will also depend on the nature of training committees in place.

The results of this study clearly indicate that research institutes have set up committees to guide on training and development activities. Research institutes are perceived as learning organizations and the kind of training offered is dependent on the kind of decisions made by respective training committees. The findings of this study corroborate the studies conducted by Zahidi and Yiva (2005) who investigated factors affecting effectiveness of training and development programmes in the Swedish context. The study revealed that one of the most important factors contributing to either the success or failure of training and development programmes will depend on the kind of committees in place.

Zell (2003) indicate that training committees should be objective in order to have effective training and development programmes. Lepine et. al (2006) also conducted studies on the relationship between training committees and the effectiveness of training and development programmes. The study revealed a strong positive correlation of 0.85 between training committees and the kind of training and development programmes. Berthon et.al (2001) also indicate that organizations should form training committees to oversee training and development activities. The same sentiments are also shared by Becker and Huselid (2001) and Zairi (2002).

The study also sought to establish the extent to which research to which research institutes have set aside a budget to carter for training and development activities. The study found that 6% of the respondents strongly disagreed. A further 7.6% of

the respondents disagreed, 34.8% of the respondents were neutral, 40.8% of the respondents agreed while 10.9% of the respondents strongly agreed. Overall, 13.6% of the respondents generally disagreed while 51.7% of the respondents generally agreed. Training and development programmes in organizations will be effective if only there is a budget for the same. Research institutes need to be on the frontline in enhancing the skills of its employees due to rapid change in technology. Capacity building is very essential for organizations to achieve their goals.

The results of this study indicate that research institutes have set aside a budget for training and development programmes. Research in Kenya plays a crucial role towards the dissemination of modern farming techniques to farmers. The findings of this study corroborate studies conducted by Lepine et. al (2004) who sought to investigate factors influencing the effectiveness of training and development at the workplace. They concentrated their studies in selected formal organizations in Australia. The study established that 78% of the respondents indicated that the effectiveness of training and development programmes in an organization will depend on the availability of adequate budget. Similar studies were also conducted by Miller et.al (2002) whose study established that organizations with adequate budget for training development will always have a competitive edge over rivals.

Berth (2003) indicate that organizations need to give priority to capacity development and set aside adequate budget towards the same. However, these findings contradict Teo (2005) who argue that a budget for training could be

expensive to an organization which might eventually reduce its profit margins. He is of the view that it is cheaper for organizations to recruit employees who are already trained. Scott (2003) further indicate that organizations should set aside a certain portion of their profits and be channelled towards training and development programmes. The development partners have provided various grants to research institutes towards training and development programmes. These amounts to about Ksh. 80,000,000 annually (World Bank report, 2011). The Government of Kenya equally provides funding to research institutes towards training and development programmes (GOK, 2011). Buxter(2000) and Duffy(2003) have equally emphasized on the need to set aside a budget for training and development programmes.

4.7.4 Possible ways of improving Training and Development

The study also sought to establish how training and development can be improved in research institutes. This was an open ended question where respondents were not restricted on the kind of responses that they should provide. The respondents proposed various solutions as shown in Table 4.26.

Table 4.26: Possible ways of improving Training and Development in research institutes

Statement/Proposed solution	Frequency	Percentage
		(%)
Allocate adequate funds and equal	147	79.9
opportunity for all cadres of staff		
Conduct training needs assessment	134	72.8
Clearly defined policy	107	59.2
Exchange programmes with	71	38.6
international research organizations		
Train on a continuous basis	101	54.9
Engaging consultants in training	99	53.8
during seminars/workshops		
Employees to be involved in	105	57.1
making decisions regarding training		
Increase budget allocation to	109	59.2
training and development		
programmes		
Training budget to be managed by	93	50.5
the human resource manager		
Employees to compete fairly for	83	45.1
training slots		
Average		57.1

Table 4.26 shows that majority of the respondents (79.9%) indicated that research institutes should allocate adequate funds for training and development programmes and also offer equal opportunities to all cadres of staff. A further 72.8% of the respondents indicated that research institutes need to conduct training needs assessment, 59.2% of the respondents indicated that research

institutes need to have in place clearly defined policy, 38.6% of the respondents indicated that research institutes need to have exchange programmes with international research organizations while 54.9% of the respondents indicated that research institutes should train on a continuous basis. On a related development, 53.8% of the respondents indicated that research institutes need to engage training consultants when they are conducting seminars/ workshops, 59.2% of the respondents indicated that research institutes need to increase their budget allocation on training and development programmes, 50.5% of the respondents indicated that training budget should be managed by the human resource manager while 45.1% of the respondents indicated that employees need to compete fairly for training slots.

The results of the study clearly indicate that research institutes need to allocate adequate funds to carter for training and development programmes. The results also indicate that research institutes need to conduct training needs assessment so that the training offered to employees is consistent with the needs of the institutes. These were the views of over 70% of the respondents, thus making an objective view. The findings of this study corroborate the studies conducted by Robertson et. *al* (2000) who investigated factors affecting the effectiveness of training and development programmes in an organization. The studies revealed that offering relevant training to employees will be beneficial to the organization. Ulrich (2007) also indicate that training is one of the most important human resource management practices and organizations, therefore, need to set aside adequate

budget for this activity. He argues that organizations cannot achieve their goals unless they equip their employees with the relevant knowledge and skills.

DeGeus(2004), Currie(2001), McCracken and Wallace(2001) and Becker *et. al* (2001) have all indicated that employees are the key organizations' resource and organizations should, therefore, invest in them by equipping them with relevant skills. Results of a survey of London University graduates conducted by Pricket (2005) showed that 90% of them expect their employers to help them in acquiring relevant skills. Hayes and Allinson (2007) also indicate that the best performing organizations are those who invest a lot on their employees by equipping them with the relevant skills. They argue that organizations should, therefore, set aside adequate budget for training.

4.7.5 Training and Development Pearson correlation computation

Based on the results in Table 4.27, the correlation coefficient (P) between employee performance and training and development was found to be 0.383 at (P=0.000). This, therefore, implies that there is a relationship between the two variables (38.3%) since it is above the recommended 30% (Sekaran,2005). The findings of this study therefore, indicate that there was a highly significant linear correlation between the two variables (Training and development and employee performance). This implies that the two variables are very close. This supports the argument by Miller et.al (2002) who indicate that there is a strong relationship between training and development and employee performance. They argue that employees who are skilled tend to be more productive than those who are not. Becker (2001) indicate that organizations should invest in their employees

through training and development in order to boost their performance since this is the only way for organizations to improve on their portfolio. Kokkos (2005), Walsh (2009) and Herod (2012) also indicate that once organizations have procured employees, they should continuously develop their skills in order to improve on performance.

Table 4.27: Training and Development Pearson correlation computation

Correlations

		EMPLOYEE PERFORMANCE	TRAINING AND DEVELOPMENT
EMPLOYEE	Pearson Correlation	1	.383**
PERFORMANCE	Sig. (2-tailed)		.000
	N	184	184
TRAINING AND	Pearson Correlation	.383**	1
DEVELOPMENT	Sig. (2-tailed)	.000	
	N	184	244

^{**.} Correlation is significant at the 0.01 level (2-tailed).

4.7.6 Results of the regression analysis on Training and development

The model equation $y=\beta_2x_2+\mathcal{E}$ explained 14.2 % as measured by the goodness of fit. This is shown in Table 4.28. This showed that Training and Development explained 14.2 % of the variation in employee performance as shown by the adjusted R^2 . This, therefore, indicate that 14.2 % of the corresponding change in employee performance can be explained by a unit change in training and development. This supports the argument by Hyz and Papas (2005) who argue that employees who are trained and developed are likely going to be motivated

and this will improve their performance. Guri-Rosenbilt (2010) indicate that organizations with well-defined training and development programmes tend to have a competitive edge over its rivals. He argues that employees cannot perform effectively if they are not trained and developed since this will have an overall effect on organizational performance.

Gove (2012) indicate that there is a strong relationship between training and development and employee performance since employees who are skilled tend to focus more on the achievement of organizational goals. Smart and Paulsen (2012) also indicate that training and development of employees in organizations represent an indication of seriousness on the part of organizations. They argue that organizations which equip their employees with relevant skills enhance their corporate image as well as employee performance.

Table 4.28: Model summary for regression between Training and Development and employee performance.

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.383ª	.147	.142	4.203

- a. Dependent variable: EMPLOYEE PERFORMANCE
- b. Predictors(Constant): TRAINING AND DEVELOPMENT

4.7.7 Results of analysis of variance on Training and Development

The ANOVA results indicated that the model of employee performance with training and development at F-test = 31.329, p > 0.05 indicate that there was a highly significant relationship between training and development and employee performance in research institutes in Kenya. The results of ANOVA are presented in Table 4.29.

Table 4.29: ANOVA results for Training and Development and employee performance.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	553.470	1	553.470	31.329	.000 ^b
Residual	3215.245	182	17.666		
Total	3768.715	183			

The results of the study, therefore, indicate that if research institutes in Kenya have to achieve their goals, then they must adopt relevant training and development programs. In support of these results, Kossek et.al (2011) indicate that organizations with appropriate training and development programs normally post good results. Labadie (2005) has pointed out that employees must be equipped with relevant skills in order to perform. Cassoni et. al (2004) also indicate that organizations must set aside adequate budget for training in order to improve the performance of their employees.

4.7.8 Results of the coefficients for regression between Training and Development and employee performance.

According to the results of the regression, training and development was found to have a positive influence on employee performance. This is illustrated by the regression results at 5% level of significance with unstandardized beta coefficient of 0.240 and t value of 5.597 with a p-value of 0.000. These results are presented in Table 4.30.

Table 4.30: Coefficients for regression between Training and Development and employee performance

Coefficients

		Unstandar Coefficien		Standardized Coefficients	t	Sig.
		β	Std. Err	or Beta		
	(Constant)	11.213	1.159		9.672	.000
1	TRAINING AND DEVELOPMENT	0.240	0.043	0.383	5.597	.000

In supporting the findings of the study on the significance of training and development on employee performance, previous studies conducted by McIlrath et.al (2012) revealed that achievement of organizational objectives will depend on the skills available in the organization. They argue that skills possessed by employees have a strong influence on employee performance. Kismihok et.al (2012) also conducted studies to establish the influence of training and development on employee performance. The study revealed that training and development had a positive impact on employee performance. It was established that organizations which were able to achieve their goals are those that had imparted relevant skills to its employees.

4.7.9 Training and Development Hypothesis Results

There is no significant linear relationship between training and development and employee performance.

The hypothesis that

$$Ho: Bj = 0$$

$$H_i$$
: $Bj \neq 0$

were tested by comparing the calculated t value and the critical t-value using a two tailed test.

Table 4.31: Hypothesis testing for Coefficients of regression between Training and Development and employee performance

Coefficients

	β	t.cal	t. critical
Constant	11.213	9.672	
Training and Development	0.639	5.597	1.96

Since the calculated t=5.597 is greater than critical $t(_{184-1})(_{0.05}) = 1.96$, the study rejected the null hypothesis that there is no significant linear relationship between training and development and employee performance. The study, therefore, accepted the alternative hypothesis that there is a significant linear relationship between training and development and employee performance in research institutes in Kenya. In supporting this, Evans, Kelley and peoples (2010) indicate

that there is a positive relationship between training and development and employee performance. They argue that employees who are trained tend to be more efficient. Fischer and Smith (2003) also indicate that organizations should develop effective training and development programs in order to improve the performance of their employees.

4.8 Reward System

4.8.1 Introduction

Research institutes consider reward system as critical component of the HRM function aimed at retaining their talented employees besides attracting highly skilled employees.

4.8.2 Factor analysis for reward system

Reward system as an independent variable had a total of Eight (8) items. All the items in the variable were confirmed valid since their factor loading values were more than 0.4. They were, therefore, retained for subsequent analysis. This information is presented in Table 4.32.

Table 4.32: Component Matrix for Reward System

Item	Extraction
Employees are given positive recognition when they produce high quality work	0.520
The organization pays well	0.533
The organization offers good benefits package compared to other organizations	0.543
The organization values individual excellence over team work	0.475
The organization offers good opportunities for promotion	0.716
Employees in the organization are awarded salary increments when they meet their targets	0.426
The employees who perform are the ones who are highly paid	0.485
There is fairness in the manner in which the reward system is managed in the organization	0.581

Reward system had a total of eight items and all of them were retained since they were confirmed valid. It had an acceptable reliability co-efficient of above 0.7 as shown in Table 4.33.

Table 4.33: Reliability Co-efficient for Reward System

Cronbach's Alpha	Number of Items
0.883	8

4.8.3 Descriptive analysis results for Reward System

A reward system is a critical component of the HRM practices in an organization. This will determine the extent to which an organization has the ability to motivate its employees besides playing a critical role in staff retention. Recent trends in reward system in organizations has frequently centred on the relationship between rewards and performance (Cohen *et. al* 2005; Dunphy & Bryant, 2003; McDuffie; 2002; Thompson &Wallace, 2003). The study, therefore, sought to establish how reward system influence employee performance in research institutes in Kenya. The respondents were asked to indicate the degree to which they agreed with each statement on a scale of 1 to 5 with 1 representing strongly disagree and 5 representing strongly agree (Likert scale questionnaire). The results are presented in Table 4.34.

Table 4.34: Respondents opinion on Reward System

Statement	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Total (%)
Employees are given positive recognition when they produce quality work.	20.1	27.2	24.5	25	3.3	100
The organization pays well	16.3	32.6	37	13	1.1	100
The organization offers good benefits package compared to other organizations	14.1	26.6	42.4	13.6	3.3	100
The organization values individual excellence over teamwork	11.4	28.8	39.7	17.9	2.2	100
The organization offers good opportunities for staff promotions	15.2	27.7	33.7	21.7	1.6	100
Employees in the organization are awarded salary increments when they meet their targets	22.3	33.2	25	15.8	3.8	100
The employees who perform are the only ones who are highly paid	37	42.9	15.2	1.6	3.3	100
There is fairness in the manner in which the reward system is managed in the organization	26.1	30.4	35.9	6	1.6	100
Average	20.3	31.2	31.7	14.3	2.5	100

The study sought to establish the extent to which employees in research institutes are given positive recognition when they produce quality work. The study found that 20.1% of the respondents strongly disagreed.

A further 27.2% of the respondents disagreed, 24.5% of the respondents were 25% of the respondents agreed while 3.3% of the respondents strongly Overall, 47.3% of the respondents generally disagreed that employees agreed. are given positive recognition when they produce high quality work while 28.3% of the respondents generally agreed. It is important that organizations recognize individual effort. Organizations which recognize individual effort tend to motivate employees, increasing productivity. Provision their thus enables organizations to achieve their goals as expected. services/products Provision of quality services/products implies less wastage in the organization.

The results of the study clearly indicate that research institutes do not motivate employees whose work is of high quality. These findings contradict Willis (2004) and Parker and Wright (2002) who indicate that quality of work is an indicator of an organization's success. They, therefore, argue that employees whose output is of high quality should be recognized. Vianen (2002) also indicate that employees whose work is of high quality should be rewarded by organizations. Studies conducted by Judge *et. al* (2004) to investigate the impact of quality work on organizational performance in manufacturing firms in Malaysia revealed that there is a relationship between organizational performance and quality of work performed by employees.

Similar studies were also conducted by Podsakoff (2006) who found that most organizations do not succeed because they do not emphasize on quality of work performed by employees. He was of the view that organizations should come up with ways of motivating such employees. Cohen et. *al* (2003), MacDuffie (2001),

Delbridge *et. al* (2002) and Mueller (2006) have all indicated that there is economic efficiency in an organization whose employees are committed to duty and quality of work.

The study also sought to establish the extent to which research institutes remunerate their employees. The study found that 16.3% of the respondents strongly disagreed that they are properly remunerated. A further 32.6% of the respondents disagreed, 37% of the respondents were neutral, 13% of the respondents agreed while, 1.1% of the respondents strongly agreed. Overall, 48.9% of the respondents disagreed that research institutes remunerate their employees well while 14.1% of the respondents generally agreed. A significant number of respondents (37%) were not sure whether or not research institutes remunerate their employees well. Remuneration and other fringe benefits are usually the primary source of employee income in an organization. This implies that the employees in an organization can be motivated to work hard if the kind of remuneration they earn is reasonable. In most cases, employees will bench mark by comparing with other organizations in terms of what they might be compensating their employees for similar skills. Studies conducted by Kessler (2004) to investigate factors leading to high labour turnover in factories in UK revealed that one of the single most reasons why employee organizations experience high labour turnover is poor remuneration. However, Lawler (2003) indicate that pay is not the only predictive factor that organizations should bear in mind while trying to ensure that staff turnover is kept at low levels since pay/remuneration is relative.

The results of this study, therefore, indicate that the pay received by employees of research institutions appear to be inadequate. This contradicts Bender (2007) and Ogden and Watson (2008) who indicate that compensation/pay is the most critical issue when it comes to attracting and maintaining the best talents. A fair pay is the corner stone of the contractual and implied agreements between employees and employers, an underlying assumption being that money can influence behaviour (Parker & Wright 2001) .Bassi and Burden (2000) found that leading edge firms, defined as firms that use high performance work practices such as total quality management and training provide adequate compensation.

Burke and Hsieh (2006) indicate that the level of pay is the most indicator in employee performance. They are of the view that organizations should develop appropriate techniques of remunerating their employees and have singled out job evaluation as the most critical factor. Studies conducted by Jackson and Schuler (2007) to investigate the relationship between levels of pay and employee performance in a few selected companies in the US revealed that there is a strong relationship between the levels of pay and employee performance in an organization. Pay continues to be important in determining motivation to perform. (Mc callum, 1998). Past motivational theories such as expectancy and equity theories have predicted variations in motivation as a result of varying valences of outcome such as pay (Das, 2002). Lewis *et. al* (2003) also conducted similar studies and established that the level of pay employees in an organization earn may lead either to their families stability or breakdown. This will have an impact

both to the employees' performance and the performance of the organization in general.

The study further sought to establish the extent to which research institutes offer good benefits package as compared to other organizations. The study found that 14.1% of the respondents strongly disagreed. A further 26.6% of the respondents disagreed, 42.4% of the respondents were neutral, 13.6% of the respondents agreed while 3.3% of the respondents strongly agreed. Overall 40.7% of the respondents generally disagreed while 16.9% of the respondents generally agreed. Another significant number of respondents (42.4%) of the respondents were not sure whether or not research institutes offer good benefits package compared to other organizations. Other than the level of pay, employees also attach a reasonable amount of importance to the benefits that they receive and research institutes should bear this fact in mind. Some organizations experience high level of labour turnover, not because of the level of pay but because they could be lacking certain benefits offered by other organizations. Employees will be most committed and motivated if organizations offer them attractive benefit package (Gerhart & Rynes, 2003).

The results of this study, therefore, indicate that research institutes appear not to offer good benefits package to their employees. These findings contradict Hackman (2001) who indicated that organizations can only attract the best talents from the labour market if they offer attractive benefits package. Studies conducted by Lawler and Cohen (2005) to investigate the influence of benefits on employee performance in Australian organizations revealed that numerous reward systems

that operate within the organization are often used as a key management tool that can contribute to a firm's effectiveness by influencing individual and group behaviour. They specifically singled out attractive benefits package that can change behaviour of employees in an organization. A reasonable number of projects in research institutes are funded by World Bank, and there have been concerns on the rate at which highly skilled employees managing the projects are resigning. In this regard, the World Bank commissioned a study to be conducted to establish the reasons behind this scenario.

The findings revealed that most of the employees are resigning due to lack of attractive benefits package as compared to other international research organizations (World Bank report, 2010). Mercer (2003) observes that organizations can only retain the best talents and skills if they offer reasonable benefits package. Singh (2005) also indicate that traditional reward systems have been dominated by base payments determined by specific jobs, the need to maintain equity among employees and the need to pay salaries and wages that are competitive in market place. Under this system, individual employees are paid according to the skills they possess. He argues that organizations need to embrace seriously the kind of benefits package they offer in order to continue attracting and retaining highly skilled employees. Agarwal (2000) is also of the view that reward systems based on traditional, bureaucratic models which only advocate the level of pay have been overtaken by events.

On whether research institutes value individual excellence over team work, the study established that 11.4% of the respondents strongly disagreed. A further

28.8% of the respondents disagreed, 39.7% of the respondents were neutral, 17.9% of the respondents agreed while 2.2% of the respondents strongly agreed. Overall, 40.2% of the respondents generally disagreed that research institutes value individual excellence over team work while 20.1% of the respondents generally agreed. A significant number of respondents (39.7%) were not sure whether or not research institutes value individual excellence over teamwork. Although performance management systems advocate more on team work, this may be sometimes a source of conflict especially if the team is not coherent. Recognizing individual efforts will put pressure on individual employees to be fully committed and achieve their desired goals and objectives. This notwithstanding, it is desirable that employees in an organization work as a team so that they can focus towards common goals.

The results of this study are clear indication that research institutes do not value individual excellence over team work implying that they prefer team work. These findings contradict studies conducted by Wagemen (2001) who investigated the influence of team work in an industrial set up in the US revealed that weaknesses of team based reward systems are often explained by relation theories of motivation. These—include the difficulty that individual employees may have in seeing how their effort is translated into group performance on which rewards are based. There has also been criticism of ability of teams to foster co-operation, mutual assistance or job satisfaction (Wageman, 2004). Team based rewards may also foster competition between teams, encouraging teams to focus on their own performance at the expense of other teams' performance (Mohrman, 2002).

This may lead to reluctance to share information or assist other teams. This is especially problematic when the teams' work is highly integrated with those of others (Gupta & Govingarajan, 2006; Lawler & Cohen, 2004). Nonetheless, the results are a true reflection as indicated by Bartol and Locke (2003) who are of the view that most organizations which achieve their goals and objectives are those that embrace team based rewards.

The study also sought to establish the extent to which research institutes offer good opportunities for staff promotions. The findings indicate that 15.2% of the respondents strongly disagreed. A further 27.7% of the respondents disagreed, 33.7% of the respondents were neutral, 21.7% of the respondents agreed while 1.6% of the respondents strongly agreed. Overall, 42.9% of the respondents generally disagreed that research institutes offer opportunities for staff promotions while 23.3% of the respondents generally agreed. A significant number of respondents (33.7%) were not sure whether or not research institutes offer opportunities for staff promotions.

Organizations can only attract the best talents and skills from the labour market if they have clearly defined staff development policy. Employees especially highly skilled employees can work for an organization for a reasonable period of time if they are assured of occupying higher positions which may fall vacant or if there are prospects of upward mobility within the organizational hierarchy. Most employees in an organization may be de motivated if they stagnate on the same position for a long period of time. Staff promotions have become a contentious issue and organizations should come up with policies which ensure fairness and

objectivity in handling promotion matters. Therefore, proper career guidelines should be developed and strictly adhered to. This is the only solution in ensuring that there is no biasness in staff promotions.

The results clearly indicate that research institutes appear not to take staff promotions seriously. This may affect their overall general performance. These findings contradict studies conducted by Heneman *et. al* (2000) who wanted to establish the relationship between development opportunities and employee performance in some selected factories in the US. The study established that employees need to be rewarded by way of promotion so that they can be fully committed to the ideals of an organization. Other studies conducted by Wyatt(2002) and Perrin(2003) have highlighted the rewards-retention link and provided insights into what organizations are doing, how they feel and what employees have to say on the rewards issue. The studies suggest that organizations are embracing staff promotions as a way of developing their employees. Employees on the other hand are of the view that they can continue working for an organization so long as there are future prospects for upward mobility.

The study also sought to establish the extent to which research institutes award their employees salary increments when they meet their targets. The study found that 22.3% of the respondents strongly disagreed. A further 33.2% of the respondents disagreed, 25% of the respondents were neutral, 15.8% of the respondents agreed while 3.8% of the respondents strongly agreed. Overall, 55.5% of the respondents generally disagreed while 19.6% of the respondents

generally agreed. Organizations should embrace performance related pay as a way of recognizing high performers. When this does not happen, employees who are perceived to be hard working are likely going to be de motivated. This will affect employee performance, thus affect organizational performance in the long run. When organizations recognize high performing employees, they improve their corporate culture besides meeting their objectives.

The results clearly indicate that research institutes do not award their employees salary increments when they meet their objectives. The findings of this study contradict Mitchell and Nickel (2001) who indicate that individual motivation is an important factor in determining employee motivation. They argue that employees should be rewarded relative to their performance. Saunders *et. al* (2003) conducted studies in a Pharmaceutical Firm in Australia to investigate factors affecting the effectiveness of reward systems. The study established that if individuals who are performers cannot be recognizes, then the reward system cannot be effective. Thorpe and Homan (2000) also indicate that organizations should develop appropriate policies of rewarding employees who are committed and able to achieve their targets. The same sentiments are shared by Salaman (2005), Lewis (2001) and Cox (2006).

On whether employees who perform are the ones who are highly paid, the study established that 37% of the respondents strongly disagreed. A further 42.9% of the respondents disagreed, 15.2% of the respondents were neutral, 1.6% of the respondents agreed while 3.3% of the respondents strongly agreed. Overall, 79.9% of the respondents generally disagreed while a partly 4.9% of the

respondents generally agreed. Organizations must appreciate their employees especially the ones who are hard working. Organizations, should, therefore recognize the contribution made by such employees and offer certain rewards. The rewards could be either financial or non-financial. It is, therefore, important for pay to be pegged to performance, thus a performance related pay is most ideal. The results of the study clearly indicate that research institutes do not consider performance as a basis for determining the level of pay for individual employees. This may have a negative impact to research institutes employees who are perceived to be hard working will be demotivated, thus reduce the organizational productivity. This may also affect the corporate image of the research institutes. This has led to high employee turnover especially skilled employees (GOK 2010). The findings of this study contradict Dey (2003) who indicate that organizations should treat employees as key resource. According to him, he is of the view that employees who are performers should receive pay commensurate to their efforts. Norman (2007) also indicate that employees could be motivated to work hard if the level of pay will be equivalent to performance. Perkins and White (2008) argue that organizations should have different classes of pay such that those employees who meet their targets are paid over and above those employees establish the influence of reward systems on employee performance and established that pay is the most predictive indicator on the performance of employees. They are of the view that organizations should develop a criterion of rewarding the best performing employees.

The study also sought to establish the extent to which there is fairness in the manner in which the reward system is managed in research institutes. The study found that 26.1% of the respondents strongly disagreed. A further 30.4% of the respondents disagreed, 35.9% of the respondents were neutral, 6% of the respondents agreed while 1.6% of the respondents strongly agreed. Overall, 56.5% of the respondents generally disagreed while 7.6% of the respondents generally agreed. A significant number of respondents (35.9%) were not sure whether or not research institutes practice fairness in the manner in which reward systems are managed. Organizations are supposed to be consistent in the manner in which they manage their reward systems. Research institutes are, therefore, supposed to be transparent and objective while managing their reward systems. This is the best possible way they can motivate their staff and also retain the best talents.

The results of the study clearly indicate that research institutes do not advocate for fairness while managing their reward systems. The findings of this study contradict Prendergast (2004) who indicate that rewards in the organization should be distributed fairly and equitably throughout the entire organization. Karestener and Simon (2002) are of the view that organizations should avoid discrimination of any kind at all costs when administering reward systems.

Eisenhardt (2005) argue that organizations should develop appropriate policies that will ensure objectivity and fairness in managing rewards. He is of the view that organizations should only reward those employees who deserve and avoid the issue of patronage. Ogden and Watson (2008) also argue that the best performing

employees should be rewarded irrespective of age, religion, cultural background or sex. Kessler (2000) also provide evidence from an IPM study which revealed that 77% of the employees will work for the organization for a reasonable period of time provided that the organization is objective on the manner in which it manages its rewards. Dematteo and Werner (2005) also conducted a study in an automotive component plant located in UK to assess the influence of reward systems on employee performance. The study revealed that 73% of the employees were of the view that the reward systems should be objective and equitable.

4.8.4 Possible ways of improving Reward System in Research Institutes

The study also sought to establish how the reward system can be improved in research institutes in Kenya. This was an open ended question where respondents were asked to provide an in depth information on the way forward based on their own understanding. The respondents proposed various solutions as shown in Table 4.33.

Table 4.35: Possible ways of improving Reward System in Research
Institutes

Statement/Proposed Solution	Frequency	Percentage
		(%)
Promotion to be based on qualifications and performance	119	64.7
Develop an appropriate reward Policy.	107	58.2
Remuneration to be adequate	111	60.3
Form an independent committee to oversee the reward system	89	48.4
Management to be trained on reward management skills	93	50.5
Review the current terms and conditions of employment	127	69
Rewards to be based on performance	137	74.5
Rewards to be distributed fairly and equitably.	140	76.1
Involve all categories of employees when designing a reward system	139	75.5
Job evaluation should be a basis for rewards	79	42.9
Market survey to be conducted in order to determine appropriate rewards	94	51.1
Reward System to be reviewed periodically	105	57.1
Average		60.7

Majority of the respondents (64.7%) indicated that staff promotions should be based on qualifications and performance (See Table 4.33), 58.2% of the respondents indicated that research institutes should develop appropriate reward policy, 60.3% of the respondents indicated that staff remuneration need to be adequate while 48.4% of the respondents indicated that research institutes should

form independents committees to oversee the reward systems. A further 50.5% of the respondents indicated that the management should be trained on reward management skills, 69% of the respondents indicated that the current terms and conditions of employment need to be reviewed, 74.5% of the respondents indicated that the rewards need to be based on performance, 76.1% of the respondents indicated that rewards should be distributed fairly and equitably, 75.5% of the respondents indicated that the management should involve all categories of employees when designing a reward system, 42.9% of the respondents indicated that job evaluation should be used as a basis for reward, 51.1% of the respondents indicated that research institutes need to conduct market survey in order to determine appropriate rewards while 57.1% of the respondents indicated that the reward system need to be reviewed periodically.

The results of the study indicate that majority of the respondents (over 70%) indicated that rewards should be based on performance, distributed fairly and equitably and that all stakeholders should be involved when designing a reward system respectively. These findings are a true reflection of Spector and Fox (2002) who indicate that designing a reward system is a shared responsibility between the management and the employees. They argue that this is the best way of avoiding biasness in designing appropriate reward systems.

Harison et. al (2006) conducted studies to investigate factors influencing effectiveness of reward systems and concentrated their studies on Agri-based organizations in Florida State. The study revealed that lack of objectivity and equity affect reward systems negatively. Cropanzano (2007) also indicate that

organizations should treat all employees fairly and equitably when determining appropriate rewards to be offered to them.

4.8.5 Reward System Pearson correlation computation

Based on the results in Table 4.36, the correlation coefficient (P) between employee performance and reward system was found to be 0.360 at (P=0.000). This, therefore, implies that there is a relationship between the two variables (36%) since it is above the recommended 30% (Szewczak & Snodgrass, 2005). The findings of the study, therefore, indicate that there was a highly significant linear correlation between the two variables (Reward system and employee performance). This implies that the relationship between the two variables is very close. In support of this, Alles *et.al* (2006) indicate that the reward system incorporates popular trends and practices that enhance employee performance since the two are closely related. Johnson and Lord (2010) argue that organizations which post good results are an indication that employees are motivated by appropriate reward system in place.

Table 4.36: Reward system Pearson correlation computation

Correlations

		EMPLOYEE PERFORMANCE	REWARD SYSTEM
EMPLOYEE	Pearson Correlation Sig. (2-tailed)	1	.360** .000
PERFORMANCE	N	184	184
REWARD SYSTEM	Pearson Correlation		1
REWIND STOTEM	Sig. (2-tailed) N	.000 184	244

^{**.} Correlation is significant at the 0.01 level (2-tailed).

4.8.6 Results of the regression analysis on Reward System

The model equation $y = B_3 x_3 + \varepsilon$ explained 12.5 % as measured by the goodness of fit. This is shown in Table 4.37. The results show that reward system explained 12.5 % of the variation in employee performance as shown by the adjusted R^2 . This, therefore, indicate that 12.5% of the corresponding change in employee performance can be explained by a unit change in the reward system. This supports the argument by Jackson *et.al* (2007) who indicate that there exist a strong relationship between reward and employee behavior. They argue that employees whose efforts are recognized and rewarded tend to have a positive attitude towards the organization.

Podsakoff *et.al* (2006) indicate that organizations with good reward systems tend to motivate their employees and thus become more productive. Judge and Picolo (2004) indicate that employees' behavior in organizations is strongly related with

the kind of reward system in place. They argue that employees who are valued and reward for the work they do tend to be happy and would always want to be associated with their organizations. This will eventually improve their (employees) performance. Folger and Cropanzano (2004) indicate that organizations which reward their employees are basically doing justice to them. They argue that when justice is done to employees, they tend to be motived, thus improving their performance.

Lord and Brown (2004) indicate that an understanding of how and why employee reward behaviors affect their work performance is vital to the achievement of organizational goals. They argue that unless organizations come up with reward polices that enhance employee performance, they cannot be able to achieve their goals/ objectives. These views are also shared by Ambrose and Schminke (2009), Johnson and Lord (2010) and Kim and Leung (2007).

Table 4.37: Model summary for regression between Reward System and employee performance

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.360a	.130	.125	4.245

a. Dependent variable: EMPLOYEE PERFORMANCE

b. Predictors (Constant): REWARD SYSTEM

4.8.7 Results of Analysis of variance on Reward System

The ANOVA results indicated that the model of employee performance with reward system at F test =27.137, P > 0.05 indicate that there was a highly significant relationship between reward system and employee performance in research institutes in Kenya. The results of ANOVA are presented in Table 4.38.

Table 4.38: ANOVA results for Reward System and employee performance.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	489.014	1	489.014	27.137	.000b
Residual	3279.701	182	18.020		
Total	3768.715	183			

According to the results, reward system is influential in predicting employee performance. Norman *et al* (2007) indicate that the extent of effectiveness of the reward system will determine whether employees will be able to perform and achieve their desired objectives. The same sentiments are also shared by Nafukho *et al* (2004) who also indicate that successful performance of employees depends on the attractiveness of the reward system in an organization.

4.8.8 Results of the coefficients for regression between reward system and employee performance.

According to the results of the regression, reward system was found to have a positive influence on employee performance. This is illustrated by the regression results at 5% level of significance with unstandardized beta coefficient of 0.315 and t-value of 5.209 with a P value of 0.000. The results are shown in Table 4.39.

Table 4.39: Coefficients for regression between Reward System and employee performance.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. Error	Beta		
(Constant)	14.163	0.707		20.027	.000
REWARD SYSTEM	0.315	0.060	0.360	5.209	.000

In supporting the results of the study on the significance of reward system on employee performance, Colquittet.al (2002) conducted studies to establish the

effects of reward system on the performance of employees in Electrical companies in the United Kingdom. The results revealed that reward system and employee performance were positively correlated at 0.76. Shore *et.al* (2004) indicates that when organizations have put in place attractive reward systems, employees therefore, need to reciprocate by being more productive. This implies that reward systems are aimed at improving employees' performance in organizations.

4.8.9 Reward System Hypothesis results

There is no significant linear relationship between reward system and employee performance

The hypothesis that

$$H_o$$
: $\beta j = 0$

$$H_i: \beta j \neq 0$$

were tested by comparing the calculated t-value and the critical t-value using a two tailed test.

Table 4.40: Hypothesis testing for Coefficients of regression between reward system and employee performance.

Coefficients

Model	β	t cal.	t critical
Constant	14.163	20.027	
Reward System	0.315	5.209	1.96

Since the calculated t=5.209 is greater than critical $t(_{184-1})$, the study rejected the null hypothesis that there is no linear relationship between reward system and employee performance. The study, therefore, accepted the alternative hypothesis that there is a significant linear relationship between reward system and employee performance. In support of this, Sama and Papamarcos (2009) indicate that the quality of services provided by employees will depend on the reward system available. Evans *et.al* (2010) further indicate that a good reward system in an organization motivates employees hence performance improvement.

4.9 Human Resource Planning

4.9.1 Introduction

Human resource planning is so important to research institutes since it enables them to have the desired levels of staff necessary to achieve their objectives.

4.9.2 Factor analysis for human resource planning

Human resource planning as an independent variable had a total of Nine (9) items. All the items in the variable were confirmed valid since their factor loading values were more than 0.4. They were, therefore, retained for subsequent analysis. This information is presented in Table 4.41.

Table 4.41: Component Matrix for Human Resource Planning

Item	Extraction
Staff replacements in the organization are done immediately an employee leaves the organization	0.732
The organization determines in advance the positions that are to fall vacant	0.671
The organization has an ideal number of staff required to perform its functions	0.469
The skills acquired by staff in the organization determine their area of deployment	0.402
There is an elaborate succession planning in the organization	0.508
The organization has put in place a human resource plan that helps it in achieving its goals	0.587
The human resource plan in the organization takes into account relevant labour legislations	0.605
The organization has elaborate plans for all its labour requirements	0.672
The human resource plan in place supports the organization's mission, vision and values	0.639

Human resource planning had a total of nine items in which all of them were confirmed valid. It had an acceptable reliability of above 0.7 as shown in Table 4.42.

Table 4.42: Reliability Co-efficient for Human Resource planning

Cronbach's Alpha	Number of Items
0.848	9

4.9.3 Descriptive analysis results for Human Resource Planning

Human resource planning is a critical component of HRM practices because it enables organizations to have the right people in the right numbers with the right skills at the right time and price. Human resource planning is the basis upon which organizations forecast their future human resource needs and have the desired levels of staff. It is for this reason that the study sought to establish the influence of human resource planning on employee performance in research institutes in Kenya. The results are presented in Table 4.43.

Table 4.43: Respondents opinion on Human Resource Planning

Statements	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Total (%)
Staff replacements in the organization are done immediately employees leave the organization	31	49.5	12.5	4.3	2.7	100
The organization determine in advance the positions that are to be vacant	17.4	35.9	29.3	15.8	1.6	100
The organization has an ideal number of staff required to perform its functions	11.4	34.2	25.5	25.0	3.8	100
The skills acquired by staff in the organization determine their area of deployment	8.7	18.5	25.0	40.8	7.1	100
There is an elaborate succession planning in the organization	20.1	36.4	31.0	11.4	1.1	100
The organization has put in place a human resource plan that helps in achieving its goals	7.6	20.7	36.4	29.9	5.4	100
The human resource plan in the organization takes into the account relevant labour legislations	6.5	10.9	40.8	38.0	3.8	100
The organization has elaborate plans for all its labor requirements	4.9	19.0	46.2	26.1	3.8	100
The human resource plan in place supports the organizations ' mission, vision and values	3.3	10.9	31.5	47.3	7.1	100
Average	12.3	26.2	30.3	26.5	4.7	100

The study sought to establish the extent to which staff replacements in research institutes are done immediately vacant positions arise either due to reorganization, retirement, dismissal or death. The study found that 31% of the respondents

strongly disagreed. A further 49.5% of the respondents disagreed, 12.5% of the respondents were neutral, 4.3% of the respondents agreed while 2.7% of the respondents strongly agreed. Overall, 80.5% of the respondent generally disagreed while 7% of the respondents generally agreed. Organizations are required to have the optimum levels of staff at all times in order to ensure that production does not stop. It is therefore, desirable that organizations fill vacant positions whenever they fall vacant. Filling vacant positions when they fall due will also boost organizations' corporate image.

The results of the study clear indicate that research institutes do not fill vacant positions immediately they fall vacant. The findings of this study contradict Wagner *et. .al* (2005) who conducted studies to establish factors affecting the effectiveness of human resource planning in health institutions in Slovakia. The results of the study revealed that health institutions have been able to achieve their objectives since they fill positions immediately they fall vacant.

Bhati (2008) also indicate that organizations need to ensure that they have the desired levels of staff at all times in order to achieve their objectives. However, the findings of the study are a true reflection of Vareta (2010) who indicate that organizations need not to replace staff who leave for various reasons, but instead they should utilize the remaining staff in order to maximize on profits. Parker and Caine (2004) also indicate that organizations which do not carry out staff replacements immediately positions fall vacant do not achieve their desired objectives as expected. The same sentiments are also shared by Ruse (2005), Kazan (2005) and Weiss and Finn (2006).

On whether research institutes determine in advance the positions that are to be vacant, the study established that 17.4% of the respondents strongly disagreed. A further 35.9% of the respondents disagreed, 29.3% of the respondents were neutral, 15.8% of the respondent agreed while 1.6% of the respondents strongly agreed. Overall.53.3% of the respondents generally disagreed while 17.4% of the respondents generally agreed. It is desirable that organizations develop a human resource plan that determines in advance the positions that are to fall vacant. This will help them to cope with the anticipated demand. Determining positions to fall vacant in advance will also help organizations to plan for human resources they may require in order to achieve their objectives.

The results of the study clearly indicate that research Institutes do not determine in advance the positions that are to fall vacant. These findings contradict Armstrong (2010) who indicates that for organizations to move forward, they need to establish in advance the positions that are to fall vacant in order to fill the gaps at the right time. He is of the view that if organizations determine in advance the positions that are to fall vacant, they will have adequate time for preparation and identifying the right individuals to fill the positions. These findings also contradict studies conducted by Norhidayah *et.al* (2006) who investigated factors influencing ideal levels of workforce in Malaysian construction industry. The study revealed that construction firms in Malaysia determine in advance the major activities and the kind of labour force required. By doing this, they are able to put appropriate measures in place and ensure that they get the right skills.

Abhishek (2009) indicate that human resource planning allow organizations to restructure, reduce or expand their labor force. He argues that organizations, therefore; need to determine in advance the nature of activities and the kind of labour force required. Deborah *et.al*(2003) indicate that the analysis of workforce issue is to highlight the future workforce requirements by determining in advance what kind of positions need to be in place and the nature of activities as well. The same sentiments are also shared by Toolle (2002), Busing and Gold (2009) and Ramstad (2007) who equally indicate that there is need for organizations to determine in advance what kind of employee they require.

The study also sought to establish the extent to which research institutes have ideal number of employees required to perform their functions. The study found that 11.4% of the respondents strongly disagreed. A further 34.2% of the respondents disagreed, 25.5% of the respondents were neutral, 25% of the respondents agreed while 3.8% of the respondents strongly agreed. Overall, 45.6% of the respondents generally disagreed while 28.8% of the respondents generally agreed.

A significant number of respondents (25.5%) were not sure whether or not research institutes have the ideal number of employees required to perform organizational functions. One of the main purposes of human resource planning is to ensure that organizations have the desired levels of staff necessary to perform organizational activities. Organizations with the desired levels of staff have an advantage of maximizing on efficiency and effectives. In addition, such organizations achieve their objectives as expected.

The results of this study, therefore, indicate that research institutes do not have the desired levels of staff required for effective performance of organizational functions. The findings of this study contradict studies conducted by Nafukho et.al (2004) who investigated factors influencing successful achievement of organizational goals in higher education institutions in Jordan. The results established that having the desired levels of staff among other factors contributed to successful achievement of goals. Zidan (2001) also indicate that most organizations fail to achieve their objectives due to inadequacy of employees. Weiss and Finn (2005) also indicate that the need for human resource planning in organizations is generally regarded as a process of determining organizational needs and selecting a future course of action to accomplish them. They argue that human resource planning should help organizations to have the desired levels of staff in order to achieve their objectives.

Huselid and Barnes (2002) also indicate that human resource planning that human resource planning systematically forecasts an organization's future demand in terms of the number of employees that they require in order to accomplish their goals. They argue that if organizations are to achieve their goals, then they must have the desired levels of staff. Werther and David (2009) argue that organizations with the desired levels of staff benefit from improvements in the utilization of human resource in coordinating different human resource programs.

The study further sought to establish the extent to which skills acquired by employees in research institutes determine their area of deployment. The study found that 8.7% of the respondents strongly disagreed. A further 18.5% of the

respondents disagreed, 25% of the respondents were neutral, 40.8% of the respondents agreed while 7.1% of the respondents strongly agreed. Overall, 27.2% of the respondents generally disagreed while 47.9% of the respondents generally agreed. Human resource planning is increasingly being used to indicate a system-wide intervention that ensures employees are performing the right duties. Organizations should, therefore, avoid mis match skills during deployment of staff. It is thus desire able that organizations should focus on having the right people in the right jobs.

The results of the study indicate that research institutes deploy their employees based on the skills acquired. These findings are a true reflection of Walker (2009) who indicate that organizations should deploy their employees to the right jobs based on their area of specialization. Azreen (2005) also indicate that one of the major purposes of human resource planning is to avoid mis match of skills within the organization. This is by ensuring that employees deployed to various functions have the relevant skills and knowledge.

Panthi *et. al* (2008) conducted studies to investigate factors leading to successful performance of line managers in an organization. The study revealed that one of the major reasons why line managers successfully perform their functions in organizations is because their deployment entirely depends on their professional background. Similar studies were also conducted by Jenny *et. al* (2010) who investigated the effects of staff deployment and organizational performance. The study revealed that organizations that deploy staff based on their professional background tend to achieve their objectives than those who do not. Amin and Abu

(2010) also indicate that organizational functions can make sense if those people appointed to manage them are professionals in their relevant fields. Griffin (2008) also indicate that organizations should ensure that only people with the right skills are appointed to perform the right duties.

On whether there is an elaborate succession planning in research institutes, the study established that 20.1% of the respondents strongly disagreed. A further 36.4% of the respondents disagreed, 31% of the respondents were neutral, 11.4% of the respondents agreed while 1.1% of the respondents strongly agreed. Overall, 56.5% of the respondents generally disagreed while 12.5% of the respondents generally agreed. There is need for organizations to put in place elaborate succession plans to enhance continuity of service provision. Organizations should, therefore, try to forecast staff turnover so that they can take appropriate measures in advance to ensure that there is continuity of services. One of the reasons why organizations undertake human resource planning is that it facilitates succession planning.

The results of the study indicate that research institutes do not have elaborate succession plans and this may affect their service delivery. More than 50% of the respondents indicated this while a significant number of respondents (31%) were not sure whether or not research institutes have elaborate succession plans. The findings of this study contradict Zahidi and Afzanizam (2009) who indicate that once an organization identifies a position to fall vacant, a suitable replacement should be sought to avoid inconveniences. Susan and Randall (2004) also indicate that managers in organizations should have designated deputies since this will

ensure that organizations do not suffer any loss in the event that a manager leaves the organization for whatever reasons.

Idris and Eldridge (2009) observe that modern succession planning dates way back 1940s when organizations could easily identify suitable replacements to take over from those who are leaving. Kaur (2006) also indicate that organizations with elaborate succession plans tend to enhance their corporate image besides achieving their objectives. He argues that such organizations cannot experience any crisis in the course of service delivery. The same sentiments are also shared by Denzin and Lincoln (2005) who equally indicate that elaborate succession plans in an organization is the beginning of prosperity.

The study further sought to establish the extent to which research institutes have put in place human resource plans that help them in achieving their goals. The study found that 7.6% of the respondents strongly disagreed. A further 20.7% of the respondents disagreed, 36.4% of the respondents were neutral, 29.9% of the respondents agreed while 5.4% of the respondents strongly agreed. Overall, 28.3% of the respondents generally disagreed while 35.3% of the respondents generally agreed. A significant number of respondents (36.4%) of the respondents were not sure whether or not research institutes the human resource plans in place help them to achieve their goals. Organizations worldwide exist to achieve certain goals. It is, therefore, important that organizations formulate human resource plans that help them to achieve their goals. Proper human resource planning should be consistent with organizations' strategic plans which explain how the goals will be achieved.

The results of the study indicate that the human resource plans in place seems not to help research institutes to achieve their goals. The findings of the study contradict Tulacz (2000) who indicate that there is need for intensive planning for future human resource needs in order for organizations to achieve their goals. Leng (2005) conducted studies in Malaysia to investigate factors influencing poor performance in the construction industry. The results of the study indicated that the industry could not achieve its goals due to poor human resource planning. The study recommended that there should be proper human resource planning that will support their strategic plans, aimed at helping them to achieve their goals. Loosemore *et. al* (2003) also conducted similar studies to ascertain the reasons why some organizations do not achieve their goals and yet they have human resource plans in place. The results of the study indicated that these organizations formulate human resource plans which are not consistent with their strategic plans thus, making it difficult for them to achieve their goals.

On whether research institutes have human resource plans that take into account relevant labour legislations, the study established that 6.5% of the respondents strongly disagreed. A further 10.9% of the respondents disagreed, 40.8% of the respondents were neutral, 38% of the respondents agreed while 3.8% of the respondents strongly agreed. Overall, 17.4% of the respondents generally agreed while 41.8% of the respondents generally agreed. When planning for human resource requirements, organizations should strictly adhere to the relevant labour legislations. The Employment Act. 2007 discourages discrimination of either

gender in job opportunities. Organizations should, therefore, strike a gender balance when filling vacant positions.

The results of the study indicate that research institutes takes into account relevant labour legislations when planning for human resource requirements. However, this appears not to be done well since it is a small majority (41.8%) of the respondents who concurred with this statement. A significant number of respondents (40.8%) were not sure whether or not research institutes take into account relevant labour legislations when planning for their human resource requirements. Research institutes, therefore, need to address this matter with the seriousness it deserves in order to their corporate image. Nonetheless, the findings of the study concur with the Employment Act. 2007 which indicate that no one should be discriminated against on matters pertaining to employment.

The findings also corroborate studies conducted by Edner *et. al* (2006) who sought to investigate factors influencing good corporate image of an organization. The study revealed that lack of discrimination in whatever manner is the major factor contributing to organizations' good corporate image. Chermack (2008) also indicate that organizations should have an objective mind when planning for human resource requirements. He is of the view that organizations should have human resource plans that are objective. Huselid and Barnes (2002) also argue that organizations' human resource plans should be consistent with relevant labour legislations of different countries. Darzi (2008) also indicate that organizations' human resource plans should be aligned with the laws of a country governing manpower requirements.

The study further sought to establish the extent to which research institutes have elaborate plans for all their labour requirements. The study found that 4.9% of the respondents strongly disagreed. A further 19% of the respondents disagreed, 46.2% of the respondents were neutral, 26.1% of the respondents agreed while 3.8% of the respondents strongly agreed. Overall, 23.9% of the respondents generally disagreed while 29.9% of the respondents generally agreed. Effective human resource plans in organizations should have elaborate plans for all their labour requirements. This will enable them to have a competitive edge over rivals and achieve their objectives. People are the organizations' key resource and organizations, therefore, need to ensure that they always have what they require in order to achieve their objectives.

The results of the study, therefore, indicate that research institutes appear not to have elaborate plans for all their labour requirements. This is evidenced by a majority of respondents (46.2%) who were not sure whether or not research institutes do have elaborate plans for all their labour requirements. The number of respondents who concurred with this statement was relatively small (29.9%) although higher than those who generally disagreed (23.9%) but cannot be used to draw a conclusion that research institutes have elaborate plans for all their labour requirements. Dehnert *et. al* (2002) conducted studies to investigate factors influencing achievement of organizational goals in Yaounde, Cameroon. The study revealed that 90% of the organizations which were able to achieve their objectives had effectively planned for their human resource requirements. Baird and McGrath- Champ (2003) indicate that organizations which effectively plan

for their labour requirements usually have a competitive edge and tend to achieve their objectives as expected of them. Swanson and Holton (2001) indicate that as human capital is increasingly being recognized as the most critical source of organizational capabilities, it is imperative that this asset is leveraged properly to provide optimal value for the organization because the contribution of human capital is likely to meet or exceed the value of financial capital. They argue that organizations should, therefore, ensure that they plan effectively for their labour requirements.

The study also sought to establish the extent to which human resource planning in research institutes support their mission, vision and values. The study found that 3.3% of the respondents strongly disagreed. A further 10.9% of the respondents disagreed, 31.5% of the respondent were neutral, 47.3% of the respondents agreed while 7.1% of the respondents strongly agreed. Overall, 14.2% of the respondents generally disagreed while 54.4% of the respondents generally agreed. The mission statement basically explains why organizations exist. Organizations primarily exist to achieve certain or specific objectives. It is desirable that organizations should align their human resource plans with their mission. The vision on the other hand explains organizations' dreams on how they would wish to look like in future. This dream can however be achieved through effective human resource planning.

The results of this study indicate that research institutes have human resource plans which support their mission, vision and values. Research institutes in Kenya attract quite a reasonable amount funding and they must, therefore, set their goals correct (GOK, 2012). The Government further argue that they, therefore, need to develop strategic plans that support their reasons for existence. The findings of this study concur with studies conducted by Brown *et.al* (2003) who investigated factors influencing effective human resource planning in organizations. The study revealed that human resource planning will be more effective if it is in line with the mission of the organization.

Kaplan and Norton (2004) indicate that the framework for development of human resource planning in an organization include mission, vision and values of the organization. Zeffane and Mayo (2001) argue that the kind of employees required by the organization will be dictated by what it wants to achieve. The same sentiments are shared by Evans (2004), Richards Carpenter (2007) and Branham (2002) who equally indicate that organizations' human resource plans should be aligned with corporate objectives and vision.

4.9.4 Ways of improving Human Resource Planning in Research Institutes

The study further sought to establish how human resource planning can be improved in research institutes in Kenya. This was an open ended question where respondents were asked to provide in-depth information based on their own understanding. The results are presented in Table 4.44.

Table 4.44: Possible ways of improving Human Resource Planning in Research Institutes

Statement/Proposed solution	Frequency	Percentage (%)
Develop and implement a human resource	141	76.6
plan		
Have a policy regarding human resource	109	59.2
planning		
Human resource planning should support	129	70.1
the organization's mission and vision		
Human resource audit should be	97	52.7
conducted to determine the skill level		
Staff in the organization to be sensitized	103	56
on human resource planning		
Select committee to handle human	107	58.2
resource plans matters		
Plan capacity building	89	48.4
Human resource planning to be an annual	73	39.7
event		
The management should formulate human	99	53.8
resource plans that are objective		
Human resource planning should be	147	79.9
consistent with the organization's		
strategic plans		
Average		59.5

Majority of the respondents (76.6%) indicated that research institutes should develop and implement a human resource master plan (See Table 4.42), 59.7% of

the respondents indicate that research institutes should have a policy in place to guide human resource planning activities, 70.1% of the respondents indicated that research institutes should have a human resource plan that supports their mission and vision, 52.7% of the respondents indicated that research institutes should conduct a human resource audit to determine the skill level while 56% of the respondents indicated that research institutes should sensitize their staff on human resource planning matters. A further 58.2% of the respondents indicated that research institutes should put committees in place to handle human resource plans matters, 48.4% of the respondents indicated that research institutes should plan for capacity building, 39.7% of the respondents indicated that human resource planning should be an annual event, 53.8% of the respondents indicated that the management of research institutes should formulate human resource plans that are objective while 79.9% of the respondents indicated that research institutes should formulate human resource plans that are consistent with their strategic plans.

The results of the study indicate that majority of the respondents (over 70%) suggested that research institutes should put in place human resource plans that are consistent with their strategic plans. Other suggestions include developing and implementing a human resource master plan and also having human resource plans that support their mission and values. These findings concurs with Cotton (2007) who indicate that human resource planning is used to develop strategic planning in order to face a shrinking labour pool and understand the basic elements of human resource planning in the organization. He is of the view that

effective human resource plans should support the strategic plans of the organization arguing that this is probably the best way organizations can achieve their objectives.

Human resource planning is seen as a systematic analysis of human resource needs to ensure the availability of the correct number of employees with the necessary skills is available when required in order to achieve organizational goals, thus, human resource planning should, therefore, support organization' mission and vision (Varet, 2010; Cherian, 2011). Human resource planning is also seen as a process that focuses on HR needs and develops the essential initiatives to satisfy HR needs through the implementation of a human resource planning master plan (Kaur, 2006). James and Keel (2006) also argue that human resource planning framework should be consistent with the strategic plans of the organization.

4.9.5 Human resource planning Pearson correlation computation

Based on the results in Table 4.45, the correlation coefficient (p) between employee performance and human resource planning was found to be 0.460 at (P=0.000). This therefore, demonstrates that a relationship exists (46%) since it is above the recommended 30% (Ochieng, 2008). The results of this study indicate that there was a highly significant linear correlation between the two variables (Human resource planning and employee performance). This, therefore, implies that the relationship between the two variables are very close. This supports the argument by Lupton (2000) who indicate that employee performance and human resource planning are positively related since organizations with desired levels of

staff will have adequate workload for them, thus enhance their performance. Rye and Paterson (2001) indicate that employees doing the right jobs usually determined through human resource planning tend to be more productive.

Table 4.45: Human resource planning Pearson correlation computation

Correlations

		EMPLOYEE PERFORMANCE	HUMAN RESOURCE PLANNING
EMPLOYEE	Pearson Correlation	1	.460**
PERFORMANCE	Sig. (2-tailed)		.000
	N	184	184
HUMAN RESOURCE	Pearson Correlation	.460**	1
PLANNING	Sig. (2-tailed)	.000	
	N	184	244

^{**.} Correlation is significant at the 0.01 level (2-tailed).

4.9.6 Results of regression analysis on Human Resource planning

The model equation $y = B_4 x_4 + \varepsilon$ explained 20.7% as measured by the goodness of fit as shown in Table 4.44. The results indicate that human resource planning explained 20.7% of the variation in employee performance as shown by the adjusted R^2 . This therefore indicate that 20.7% of the corresponding change in employee performance can be explained by a unit change in human resource planning. This supports the argument by Burack (2002) who indicate that attainment of organizational goals will depend on the level of the organizational workforce available. He argues that for this to happen, then organizations need to have optimum levels of staff which is possible through proper human resource

planning. Jackson and Schuler (2001) indicate that organizations are dynamic and keep on changing in size. They, therefore, argue that since this is the case, organizations should have proper human resource plans in place in order to determine their future human resource requirements.

Bell (2003) indicate that in a situation where organizations have optimum levels of staff, employees tend to be more productive since they have adequate workload pre-determined through human resource planning. Nkomo (2004) conducted studies to establish the influence of human resource planning in Pharmaceutical firms in Bulawayo. The study revealed a strong relationship between human resource planning and employee performance since the firms that had ideal levels of staff. They were, therefore, able to record improved performance. Mintzberg (2002) also indicate that implementation of organizations strategic objectives depends entirely on the levels of staff. He argues that then organizations should have optimum levels of staff determined through human resource planning. Stainer (2003) also indicate that human resource planning has become a critical component of the human resource management function due to the desire to have optimum levels of staff aimed at improving employee performance.

Table 4.46: Model summary for regression between Human Resource planning and employee performance

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.460) ^a .211	.207	4.042

a .Dependent variable: EMPLOYEE PERFORMANCE

b. Predictors (Constant): HUMAN RESOURCE PLANNING

4.9.7 Results of Analysis of variance on Human resource planning

The ANOVA results indicated that the model of employee performance with human resource planning at F-test =48.715, P < 0.05 indicate that there was a highly significant relationship between Human resource planning and employee performance in research institutes in Kenya. The results of ANOVA are presented in Table 4.47.

Table 4.47: ANOVA results for Human Resource planning and employee performance

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	795.762	1	795.762	48.715	.000 ^b
Residual	2972.952	182	16.335		
Total	3768.715	183			

The results indicate that human resource planning is influential in predicting employee performance in research institutes in Kenya. Nkomo (2004) indicate that organizations with employees having the right skills tend to perform better than those without the skills.Rajan and Wulf (2006) indicate that human resource planning is influential in forecasting the desired staff levels as well as knowledge, competences and skills required by an organization in future. Machin and Wood (2005) also points out that organizations should have the right numbers and skills in order to improve on employee performance.

4.9.8: Results of the Coefficients for regression between Human Resource planning and employee performance

According to the results of the regression, human resource planning was found to have a positive influence on employee performance. This is illustrated by the regression results at 5% level of significance with unstandardized beta coefficient of 0.393 and t value of 6.980 with a P value of 0.000.

Table 4.48: Coefficients for regression between Human Resource planning and employee performance

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. Error	Beta		
(Constant)	11.693	0.879		13.300	.000
HUMAN RESOURCE PLANNING	0.393	0.056	0.460	6.980	.000

In supporting the results of the study on the significance of human resource planning on employee performance, Munene *et.al* (2003) conducted studies to establish the effects of human resource planning on employee performance. The studies revealed that employees become more productive when they have got adequate workload to do. They argue that for this to happen, then organizations should have optimum levels of staff usually determined through human resource planning.

4.9.9 Human Resource planning Hypothesis results

There is no significant linear relationship between human resource planning and employee performance

The hypothesis that

$$Ho: Bj = 0$$

$$H_i$$
: $Bj \neq 0$

were tested by comparing the calculated t-value and the critical t-value using a two tailed test.

Table 4.49: Hypothesis testing for Coefficients of regression between Human Resource planning and employee performance

Coefficients

Model	β	t.cal	t. critical	
Constant	11.693	13.300		
Human resource	0.393	6.980	1.96	
Planning				

Since the calculated t is =6.980 is greater than the critical $t(_{184-1})(_{0.05})$, the study, therefore, rejected the null Hypothesis that there is no significant linear relationship between human resource planning and employee performance. The study, therefore, adopted the alternative hypothesis that there is a significant linear relationship between human resource planning and employee performance. This statement supports Hartog*et.al* (2004) who indicate that human resource planning

enables organization to have desired levels of staff which ultimately improves employee performance.

4.10 Staff Welfare

4.10.1 1ntroduction

Research institutes attach a lot of importance to staff welfare as a way of motivating employees.

4.10.2 Factor analysis for staff welfare

Staff welfare as an independent variable had a total of Six (6) items. All the items in the variable were confirmed valid since their factor loading values were more than 0.4. They were, therefore, retained for subsequent analysis. This information is presented in Table 4.50.

Table 4.50: Component Matrix for Staff Welfare

Item	Extraction
The organization has put in place staff welfare programs	0.761
The staff welfare programs in the organization motivate employees	0.805
The welfare facilities in the organization are easily accessed by all employees	0.720
The employees in the organization are involved in the formulation of staff welfare	0.522
There is adequate budget in the organization to carter for staff welfare programs	0.639
The employees in the organization are involved in the formulation of staff welfare policy	0.618

Staff welfare had a total of six items in which all of them were confirmed valid. It had an acceptable reliability of above 0.7 as shown in Table 4.51.

Table 4.51: Reliability Co-efficient for Staff Welfare

Cronbach's Alpha	Number of Items	
0.735	6	

4.10.3 Descriptive analysis results for Staff Welfare

Staff welfare improves employee productivity in organizations. Staff welfare has become a critical component of the human resource management practices and organizations are seriously working out on modalities of staff retention. In recent years, there have been dramatic changes in the context in which work is performed. The process of globalization, advances in technology, increased competition, work intensification, diversification of the workforce have forced organizations to come up with strategies on how to retain their core employees(*Poelmans et. al* 2008). Pitt-Catsouphes *et. al* (2006) indicate that organizations are coming up with superior staff welfare strategies in order to retain their employees besides attracting highly qualified persons from the labour market. The study, therefore, sought to establish how staff welfare influence employee performance in research institutes in Kenya. The respondents were asked to indicate the degree to which they agreed with each statement on a scale of 1-5 with 1 indicating strongly disagree and 5 representing strongly agree (Likert scale). The results are presented in Table 4.52.

Table 4.52: Respondents opinion on Staff Welfare

Statement	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strong ly agree (%)	Total (%)
The organization has put in	4.9	7.1	11.4	62.0	14.7	100
place staff welfare programs						
Staff welfare programs in the	6.0	11.4	25.0	48.9	8.7	100
organization motivates						
employees						
The welfare facilities in the	5.4	15.8	21.7	43.5	13.6	100
organization are easily						
accessible by all employees						
The organization accords all	13.6	20.1	23.9	33.2	9.2	100
employees equal treatment on						
matters related to staff welfare						
There is adequate budget in the	31.0	26.1	20.1	21.2	1.6	100
organization to carter for staff						
welfare programs						
he employees in the	21.7	29.3	24.5	22.8	1.6	100
organization are involved in						
the formulation of staff						
welfare policy						
Average	13.8	18.3	21.1	38.6	8.2	100

The study sought to establish the extent to which research institutes have put in place staff welfare programs. The study found that 4.9% of the respondents strongly disagreed. A further 7.1% of the respondents disagreed, 11.4% of the respondents were neutral, 62% of the respondents agreed while 14.7% of the respondents strongly agreed. Overall, 12% of the respondents generally disagreed

that research institutes have put in place staff welfare programs while 76.7% of the respondents generally agreed. As a measure of staff retention, organizations should endeavour to have staff welfare programs that are attractive. Most employees attach a lot of importance to welfare and this has, therefore, become a determinant factor on employee productivity (Quick & Tetrick, 2010). It is desirable that organizations come up with welfare programs that are consistent with the needs of their employees.

The results of the study indicate that research institutes in Kenya have staff welfare programs in place which aim to improve employee performance. These were the views of over 70% of the respondents. These findings corroborate studies conducted by Kalliah and Kalliah who sought to investigate factors influencing change in employee behaviour in Australian organizations. The study established that availability of welfare programs in organizations led to change of employees' attitude towards their organizations. Kossek *et. al* (2011) indicate that a high percentage of organizations which are able to retain talented staff are those with appropriate staff welfare programs. Brough *et.al* (2009) also indicate that there is a positive relationship between productivity and the kind of welfare programs available in an organization.

The study further sought to establish the extent to which staff welfare programs in research institutes motivate their employees. The study found that 6% of the respondents strongly disagreed. A further 11.4% of the respondents disagreed, 25% of the respondents were neutral, 48.9% of the respondents agreed while 8.7% of the respondents strongly agreed. Overall, 17.4% of the respondents generally

disagreed while 57.6% of the respondents generally agreed. The major purpose of putting in place staff welfare programs is to motivate employees. Organizations with appropriate welfare programs have a higher possibility of motivating their employees. It is desirable, therefore, that organizations come up with welfare programs that motivate their employees.

The results of the study indicate that research institutes have welfare programs that motivate their employees. The findings of the study corroborate studies conducted by Kokkos (2005) who sought to investigate the influence of welfare programs in organizations. The study revealed that welfare programs motivate employees in organizations. Psoinos and Smithson (2002) indicate that the psychological dimension of empowerment moves away from the traditional study of management practices and instead emphasizes employees' perceptions and experiences of empowerment. Through such an approach, the emphasis is on having welfare programs that enhance employee productivity. Lee and Koh (2001) indicate that empowerment is the combination of the psychological state of a subordinate which is influenced by the empowering behaviours of supervisors. Such behaviours and attitudes are influenced by welfare programs available to the organization. Nesan and Holt (2002) also argue that for organizations to remain relevant and competitive, they must have in place welfare programs that motivate their employees.

The study further sought to establish the extent to which welfare facilities in research institutes are easily accessed by employees. The study found that 5.4% of the respondents strongly disagreed. A further 15.8% of the respondents disagreed,

21.7% of the respondents were neutral, 43.5% of the respondents agreed while 13.6% of the respondents strongly agreed. Overall, 21.2% of the respondents generally disagreed that welfare facilities in research institutes are easily accessible by employees while 57.1% of the respondents generally agreed. In order for the organizations to gain a competitive edge, they should have in place welfare facilities that are attractive. Budhwar (2000) indicate that organizations should have in place welfare facilities that motivate employees. Such welfare facilities range from comprehensive medical insurance covers to pension schemes (Redman & Wilkinson, 2001).

The results of the study indicate that employees in research institutes have access to welfare facilities since over 50% of the respondents indicated so. The results of the study concurs with studies conducted by Kelly and Gennard (2001) who sought to investigate factors influencing attractiveness of staff welfare in a number of organizations in the United Kingdom. The study established that the kind of welfare facilities held by organizations and how easily accessible they are to employees motivate them to a great extent. Cornelius (2000), Woodall and Winstanley (2001) argue that organizations should have welfare facilities that enhance staff retention such as provision for crèche facilities, counselling on drug/alcohol abuse and early retirement due to ill health. Kelly and Gennard (2001) also indicate that organizations' welfare facilities will make sense if they are accessible by employees and they (organizations), therefore, need to ensure that this is done.

The study sought to establish the extent to which the extent to which research institutes accord all employees' equal treatment on matters related to staff welfare. The study found that 13.6% of the respondents strongly disagreed that research institutes accord them equal treatment on matters related to staff welfare. A further 20.1% of the respondents of the respondents disagreed, 23.9% of the respondents were neutral, 33.2% of the respondents agreed while 9.2% of the respondents strongly agreed. Overall, 33.7% of the respondents generally disagreed while 42.4% of the respondents generally agreed. Organizations should accord their employees equal treatment on all HR matters including staff welfare. This is because all members of the organization play an important role towards the achievement of organizational goals and discrimination of any kind should, therefore, be avoided.

The results of the study indicate that research institutes accord all employees' equal treatment on matters pertaining to staff welfare. However, there appears to be a problem on this matter since it is a simple majority (42.4%) of the respondents who indicated so. This was less than 50% of the respondents who participated in the study. Nonetheless, the results of the study corroborate studies conducted by Cully *et. al* (2004) who sought to investigate factors leading to successful implementation of staff welfare in organizations. The study established among other factors that staff welfare can be successfully implanted in organizations if some employees are not discriminated against on staff welfare matters. Ralth and Harter (2010) indicate that all employees in an organization irrespective of their status or position should be treated equally on all HR matters

including staff welfare. Grawitch *et. al* (2006) indicate that organizations should be objective when dealing with employee matters especially welfare issues. Miles and Snow (2009) also indicate that staff welfare is a determinant factor on staff retention and argue that organizations should approach the issue with sobriety and ensure that no employee is discriminated.

The study further sought to establish the extent to which research institutes have set aside adequate budget to carter for staff welfare programs. The study found that 31% of the respondents strongly disagreed. A further 26.1% of the respondents disagreed, 20.1% of the respondents were neutral, 21.2% of the respondents agreed while 1.6% of the respondents strongly agreed. Overall, 57.1% of the respondents generally disagreed that research institutes have set aside adequate budget to carter for staff welfare programs while 22.8% of the respondents generally agreed. A significant number of respondents (20.1%) were not sure whether or not research institutes have set aside adequate budget to carter for welfare programs. Organizational programs including staff welfare programs can be successfully implemented if organizations set aside adequate budgetary provision for the same. Staff welfare should, therefore, be taken seriously by organizations and adequate budgetary provision for the same provided.

The results of the study indicate that research institutes have not set aside adequate budgetary provision for staff welfare programs, thus making the programs not to be effective. These results contradict studies conducted by Kossek *et. al* (2011) who sought to investigate factors influencing the effectiveness of staff welfare programs in organizations. The results of the study

indicated that organizations whose staff welfare programs are effective are those who have set aside adequate budgetary provision. Several other related studies have also been conducted by Hansen *et. al* (2006), Keller *et. al*(2009) and Ryan and Deci (2009) whose results indicated that availability of adequate budgetary provision will determine the effectiveness of staff welfare programs in organizations. Smithson and Lewis (2000) also indicate that the way forward for organizations to have effective welfare programs is to set aside adequate budget for the same.

The study also sought to establish the extent to which research institutes involve their employees in the formulation of staff welfare policy. The study found that 21.7% of the respondents strongly disagreed that they are involved in the formulation of staff welfare policy. A further 29.3% of the respondents disagreed, 24.5% of the respondents were neutral, 22.8% of the respondents agreed while 1.6% of the respondents strongly agreed. Overall, 51% of the respondents generally disagreed while 24.4% of the respondents generally agreed. It is desirable that organizations involve their employees in formulating various policies including staff — welfare policy since they will feel to be associated with the process. This is likely going to reduce the resistance from employees. When employees are involved in the formulation of various organizational policies, they tend to be committed and motivated.

The results of the study indicate that research institutes do not involve their employees in formulating staff welfare policy. More than 50% of the respondents indicated this while another significant number of respondents (24.5%) were not

sure whether or not research institutes involve their employees in the formulation of staff welfare policy. The results of this study contradict studies conducted by Duffy (2009) who sought to investigate factors influencing employee commitment to welfare programs offered by organizations in the industrial sector in China. The studies established that employee involvement in formulating staff welfare policy is a major contributing factor. Tambur and Vadi (2012) indicate that successful implementation of staff welfare programs in organizations will depend on the extent to which staff are involved in policy formulation regarding staff welfare matters. Ryan and Deci (2001) and Warr (2009) argue that organizations which foster greater employee wellbeing are those—which involve their employees in formulating various policies. Wright (2010)—also indicate that organizations which encourage staff involvement in charting the way forward on their wellbeing become more productive and profitable in the long run.

4.10.4 Possible ways of improving Staff Welfare in research institutes

The study also sought to establish how staff welfare can be improved in research institutes in Kenya. This was an open ended question where respondents were not restricted on the kind of responses they were to provide. They provided responses based on their own understanding on the subject matter. The respondents proposed various solutions as shown in Table 4.51.

Table 4.53: Possible ways of improving Staff Welfare in research institutes in Kenya.

Statement/Proposed solution	Frequency	Percentage
		(%)
Organization to have a well committed welfare	107	58.2
officer		
Delink welfare activities from organizational	54	29.3
management		
Improve welfare facilities	129	70.1
Develop welfare facilities which are employee	103	56
friendly		
Have in place different welfare programs	101	54.9
Organizations to focus on investments which	114	62
improve employee welfare		
An organization should have a promotion	116	63
policy which is objective		
Staff welfare matters to be given more priority	132	71.7
Average		58.2

Some respondents (58.2%) indicated that research institutes need to have welfare officers who are committed (See Table 4.51). A further 29.3% of the respondents indicated that research institutes need to delink welfare activities from their respective management, 70.1% of the respondents indicated that research institutes need to improve their welfare facilities, 56% of the respondents indicated that research institutes need to develop welfare policies which are employee friendly while 54.9% of the respondents indicated that research institutes need to have in place different welfare programs. On the same note, 62% of the respondents suggested that research institutes should focus on investments

which improve employee welfare, 63% of the respondents indicated that research institutes should have a promotion policy which is objective and 71% of the respondents indicated that research institutes should give staff welfare matters priority.

The results of this study indicate that research institutes need to improve their welfare facilities and ensure that staff welfare matters are given priority. These views were expressed by over 70% of the respondents who participated in the study. The results of this study are a true reflection of the studies conducted by Schuler *et. al* (2001) who sought to investigate factors influencing retention of staff in Australian organizations. The study established that organizations which had conducive welfare programs were able to retain their staff. Redman and Wilkinson (2001) argue that if organizations are to achieve their objectives as scheduled, they must look at the welfare of their employees. Brewster *et. al* (2001) also conducted similar studies and sought to investigate factors influencing job choice amongst employees. The study established that staff welfare is the most determinant factor and argued that organizations should come up with welfare programs which are attractive.

4.10.5 Staff welfare Pearson correlation computation

Based on the results in Table 4.54, the correlation coefficient (P) between employee performance and staff welfare was found to be 0.453 at (P=0.000). This therefore, demonstrates that a relationship exists (45.3%) since it is above the recommended 30% (Sekaran, 2009). The findings of the study indicate that there was a highly significant linear correlation between the two variables (staff welfare

and employee performance). This, therefore, implies that the relationship between the two variables are very close.

This supports the argument by Woodall and Winstanley (2001) who indicate that staff welfare is a critical component of the human resource management function. They argue that there is a positive strong relationship between staff welfare and employee performance. Kirkbridge and Ward (2002) further indicate that staff welfare is a major factor in job choice among many job seekers, and therefore, employees whose welfare is taken care of tend to be more productive. Redman and Wilkinson (2001) indicate that employees being ignored in organizations do not perform and this therefore, demonstrates that the welfare of employees in an organization is a critical factor towards their performance.

Table 4.54: Staff Welfare Pearson correlation computation

Correlations

		EMPLOYEE	STAFF
		PERFORMANCE	WELFARE
EMPLOYEE	Pearson Correlation	1	.453**
PERFORMANCE	Sig. (2-tailed)		.000
FERFORMANCE	N	184	184
	Pearson Correlation	.453**	1
STAFF WELFARE	Sig. (2-tailed)	.000	
	N	184	244

^{**.} Correlation is significant at the 0.01 level (2-tailed).

4.10.6 Results of the regression analysis on staff welfare

The model equation $y = \beta_3 x_5 + \varepsilon$ explained 20.1 % as measured by the goodness of fit. This is shown in Table 4.55. The results indicate that staff welfare explained 20.1% of the variation in employee performance as shown by the adjusted R². This, therefore, implies that 20.1% of the corresponding change in employee performance can be explained by a unit change in staff welfare. This supports the argument by Holloway (2000) who indicates that managers are continually under pressure to measure the performance of their employees. He argues that for this to happen, organizations need to motivate their employees through effect welfare programs. Indeed it is assumed that employee performance measurement and the setting of targets play key roles in the improvement of operations processes both as tools that facilitate the implementation of change and as means of assessing the success or otherwise, of the strategies adopted (Itner & Larcker 2003).

Slacket.al(2000) indicate that it is not the rate of productivity that is the prime concern of organizations working towards achieving their goals, but it is the momentum of how to improve employee performance and singled out staff welfare as one of the most critical factor. Fitz general and Moon (2001) indicate that there is a strong relationship between staff welfare and employee performance and organizations, therefore, need to decide what kind of staff welfare programs will be associated with employee performance. Gunther (2001). Indicate that one way of improving employer – employee relationships is by improving the welfare of employees since this is assumed to have a positive influence on employee performance Fischer and Smith (2003) and Stone-Romero and Lukaszewski

(2007) indicate that staff welfare in organizations is very critical in ensuring employee performance. Employee will perceive their organizations as reasonable if they come up with staff welfare programs which will motivate them (Stone and Stone-Romeo, 2007).

Table 4.55: Model summary for regression between Staff Welfare and employee performance

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.453	.205	.201	4.058

a. Dependent variable: EMPLOYEE PERFORMANCE

b. Predictors (Constant): STAFF WELFARE

4.10.7 Results of Analysis of variance on Staff Welfare

The ANOVA results indicated that the model of employee performance with staff welfare at F-test =46.913, P < 0.05 05 indicate that there was a highly significant relationship between Staff welfare and employee performance in research institutes in Kenya. The results of ANOVA are presented in Table 4.56.

Table 4.56: ANOVA results for Staff Welfare and employee performance.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	772.352	1	772.352	46.913	.000
Residual	2996.363	182	16.464		
Total	3768.715	183			

The results indicate that staff welfare is influential in predicting employee performance in research institutes in Kenya. Kotey and Slade (2005) argue that employee productivity in organizations will depend on the welfare policies that have been put in place. Patel and Cardon (2010) indicate that attractive staff welfare programs in organizations are influential in improving the performance of employees.

Nguyen and Bryant (2004) have also indicated that organizations with appropriate welfare facilities motivate their employees, thus increasing their productivity.

4.10.8 Results of the coefficients for regression between staff welfare and employee performance

According to the results of the regression, staff welfare was found to have a positive influence on employee performance. This is illustrated by the regression results at 5% level of significance with unstandardized beta coefficient of 0.611 and t value of 6.849 with a P value of 0.000.

Table 4.57: Coefficients for regression between Staff Welfare and employee performance.

Coefficients

	Unstanda Coefficie	nts	Standardized Coefficients	t	Sig.
(Constant)	<u>β</u> 11.671	Std. Err 0.897	or Beta	13.004	.000
STAFF WELFARE	0.611	0.089	0.453	6.849	.000

In supporting the results of the significance of staff welfare on employee performance, Barber and Simmering (2002) indicate that organizations which embrace staff welfare usually achieve their goals/objectives. Gully, Phillips and Tarique (2003) indicate that there is a strong relationship between staff welfare and employee performance. They argue that employees whose welfare is taken care of tend to be more productive since they are motivated. Fischer and Schwartz (2011) further indicate that there are clear differences between those employees whose welfare is taken care of and those whose welfare is not taken care of. Trandis and Suh (2002) also indicate that the effectiveness of staff welfare will determine whether employees will deliver or not since staff welfare is viewed as a major motivating factor aimed at enhancing employee performance.

4.10.9 Staff Welfare Hypothesis results

There is no significant linear relationship between staff welfare and employee performance

The hypothesis that

Ho: Bj = 0

 H_i : $Bj \neq 0$

were tested by comparing the calculated t-value and the critical t-value using a two tailed test.

Table 4.58: Hypothesis testing for Coefficients of regression between Staff Welfare and employee performance

Coefficients

Model	β	t.cal	t.critical
Constant	11.671	13.004	_
Staff welfare	0.611	6.849	1.96

Since the calculated t is = 6.849 is greater than critical $t(_{184-1})(_{0.05})$, the study rejects the null hypothesis that there is no significant linear relationship between staff welfare and employee performance. The study, therefore, accepted the alternative hypothesis that there is a significant linear relationship between staff welfare and employee performance. In support of this statement, Dainty *et.al* (2002) indicate that organizations with effective staff welfare programs tend to motivate their employees. Psoinos and Smithson (2002) argue that there exist a strong relationship between staff welfare and employee performance. Macdonald

(2005) also indicate that staff welfare is a major indicator in job choice among a bigger percentage of employees since it motivates them, thus become more productive.

4.11 Multiple Linear regression analysis results for all variables

The study aimed at establishing the overall effect of human resource management practices on the performance of employees of research institutes in Kenya. The HRM practices under review were recruitment and selection, training and development, reward system, human resource planning and staff welfare.

Table 4.59: Regression analysis results for all variables

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.972ª	.946	.944	4.267

a. Dependent variable: EMPLOYEE PERFORMANCE

b. Predictors (Constants): RECRUITMENT AND SELECTION, TRAINING AND DEVELOPMENT, REWARD SYSTEM, HUMAN RESOURCE PLANNING AND STAFF WELFARE.

The model equation $y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$ explained 94.4% as measured by the goodness of fit. This is shown in Table 4.59. The results indicate that recruitment and selection, training and development, reward system, human resource planning and staff welfare combined explained 94.4% of the variation on employee performance in research institutes in Kenya as shown by the adjusted \mathbb{R}^2 . This therefore implies that other factors not covered in this study

contribute to 5.6%. Since the P value is less than 0.05, the model is therefore statistically significant in predicting how HRM practices influence employee performance in research institutes in Kenya.

Table 4.60: Model summary for regression of all variables

R	R Square
0.972	0.946

The overall model as shown in Table 4.60 indicate that out of the five (5) independent variables, recruitment and selection exhibited closely to be significant but insignificant at 0.071 while the reward system was insignificant at P=0.791. However, training and development and staff welfare were highly significant at P=0.000 while human resource planning was significant at 0.049. These results supports that training and development, human resource planning and staff welfare are influential in employee performance. This is supported by Gelfandet.al (2007) who indicate that there is a strong positive relationship between HRM Practices and employee performance. They argue that organization should have desired levels of staff through human resource planning since this will improve performance of employees. Bohet and Eaton (2003) argue that HRM practices such as training and development as well as staff welfare if effectively managed will greatly improve the performance of employees. Schanbroeck and Aryee (2001) indicate that staff welfare, training and development and human

resource planning are basic HRM practices which are capable of influencing employee performance and ultimately improve organizational performance.

Table 4.61: Coefficients for regression of all variables

Coefficients

		dardized ïcients	Standardized Coefficients	t	Sig.
	β	Std. Error	Beta		
RECRUITMENT AND SELECTION	0.127	0.070	0.137	1.814	0.071
TRAINING AND DEVELOPMENT	0.212	0.056	0.318	3.816	0.000
REWARD SYSTEM	0.021	.081	.014	.265	.791
HUMAN RESOURCE PLANNING	.178	.090	.154	1.983	.049
STAFF WELFARE	.666	.094	.371	7.061	0.000

Although the coefficients for regression of all variables indicated that recruitment and selection and reward system were insignificant, in arriving at the final model, all the five variables should be retained as follows:

$$y = 0.127 X_1 + 0.212 X_2 + 0.021 X_3 + 0.178 X_4 + 0.666 X_5$$

Where:

y =Employee performance

 X_1 = Recruitment and selection

X₂= Training and development

 X_3 = Reward system

X₄= Human resource planning

X₅= Staff welfare

Table 4.62: Model summary for regression analysis on reward system and recruitment and selection

R	\mathbb{R}^2	
0.950^{a}	0.903	

The justification for retaining the two variables in the model is because they account for 90.3% as shown in Table 4.62. This indicates that the two have a role to play in the overall model since they also influence employee performance in research institutes in Kenya.

4.12 Optimal Model

Although the coefficients for regression of all variables explained 94.6% as measured by the goodness of fit, reward system was found to be highly

insignificant and was dropped from the revised conceptual framework model. This is shown in Figure 4.5.



Figure 4.5 Optimal Model

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings and the implications based on the objectives of the study. Further, major conclusions that can be drawn from the study are also discussed followed by key recommendations and suggestions for further research.

5.2 Summary of Major Findings

The study aimed at investing the influence of human resource management practices on the performance of employees in research institutes in Kenya. The independent variables for the study include: recruitment and selection, training and development, reward system, human resource planning and staff welfare. The study revealed that there was a significant relationship between human resource management practices and employee performance. Therefore, this has an influence on employee performance since the way the human resource management practices are conducted determines whether employees in research institutes are to perform or not.

Employees in research institutes had a positive regard in areas where the HRM practices were conducted objectively and this motivated them to a great extent. The application of HRM practices are inconsistent with the strategic plans of research institutes. For instance, the strategic plans for all research institutes recognize employees as key assets, but the results of the study revealed that HRM practices are applied selectively depending on the cadre of employees.

5.2.1 Recruitment and Selection

The study established that research institutes fill vacant positions through a recruitment and selection process. In addition, care is taken to ensure that the right people are recruited through a competitive selection process. These findings corroborates studies conducted by Edvardson (2006) who indicate that competent human capital has widely been used recently by firms in order to improve on decision making, product innovation, productivity and profits. Further, the findings on how organizations paid attention to its human resources also agreed with findings by Peterson and Poulfeet (2002), that human resource management is about developing, training and communication of information, thus retaining them which essentially reduces labour turnover.

The above notwithstanding, the study also established that research institutes have not put in place a systematic procedure in the recruitment and selection process and has, therefore, made it difficult for them to fill vacant positions within a reasonable period of time. This is contrary to Gleeson and Keep (2004) who argue that when positions in an organization fall vacant, they must be filled within a reasonable period of time in order to avoid disruptipons. Research institutes have difficulties in identifying gaps in recruitment since they do not involve line managers in recruitment and selection activities. This is contrary to Brown and Hesketh (2004) who indicate that recruitment and selection is a shared process between the management and operating departments.

5.2.2 Training and Development

The findings established that Research institutes in Kenya have attached a lot of importance to training and development of its staff. This is because they are required to come up with various technologies of disseminating information to their clients. This implies that the role of training and development is very critical since it facilities the transfer of acquired knowledge and skills as well as innovative ideas. These findings corroborates studies conducted by Delahaye (2005) who indicate that organizations with well trained and developed employees tend to be more innovative, thus improve their productivity.

On the other hand, employee development was found to be the key factor that contributed to employee performance in research institutes in Kenya. Both the estimation and fit indices met the anticipated threshold. These results agree with findings by Leonard and Sensiper (2006), Cohen and Backer (2004), Acton and Golden (2005) which emphasize on the importance of employee development. This implies that the perceived role of training and development influence employee performance to a great extent. Imparting of knowledge and skills to core staff is highly emphasized by research institutes. A bigger percentage of training and development activities is set aside for scientific staff which implies that research institutes are more concerned in improving agricultural and livestock related technologies.

5.2.3 Reward System

The findings of the study revealed that research institutes in Kenya attach a lot of importance to staff retention. Their respective strategic plans recognize the importance of having a motivated workforce. However, the results of the study reveal that the reward system was not influential in improving employee performance in research institutes in Kenya. The research institutes do not link performance with rewards. This is contrary to Kessler (2004) who indicate that organizations should put in place appropriate reward systems in order to not only attract qualified individuals from the market, but also retain their most talented work force.

The results of the study also revealed that reward system was influential in predicting employee performance in research institutes in Kenya. This implies that the reward system plays a major role in increasing the productivity of employees in research institutes in Kenya. The results of this study corroborates studies conducted by Amin and Abu (2010) who found out that organizations cannot be able to achieve their desired objectives unless they put in place appropriate reward systems. However, despite the crucial role that the reward system play in improving employee performance, research institutes are faced with various challenges in ensuring that this is the case.

5.2.4 Human resource planning

The findings of the study revealed that research institutes in Kenya view human resource planning as an important human resource management function. They

determine their human resource requirements through human resource planning. These findings are a true reflection of Leng (2005) who indicate that organizations should determine their future human resource requirements through human resource planning. The research institutes in Kenya have formulated strategic plans which are aligned to their requirements. This is in terms of the skills and numbers they required in order to achieve their desired objectives.

The findings also revealed that the research institutes in Kenya have put in place clearly defined staff establishments which shows the numbers and skills required within a particular time. These findings however contradict Gilley *et.al* (2002) who indicate that organizations do not necessarily need to plan in advance for their human resource requirements arguing that circumstances keep on changing and that situations are dynamics. Human resource planning was also found to be effective in predicting employee performance. This is because there was a highly significant relationship between human resource planning and employee performance. This implies that for research institutes to be in a position of achieving their goals, they need to have the desired levels of staff, the right skills and the right people. Their strategic plans clearly outline the number of employees that they require and the skills that they need in order to have a competitive edge.

5.2.5 Staff Welfare

The findings of the study revealed that research institutes in Kenya emphasize the need to have a motivated work force. In respect to this, their strategic plans have emphasized that human resources is key to the achievement of their objectives.

Staff welfare was found to be crucial in predicting employee performance. The findings indicate that research institutes have come up with appropriate measures aimed at staff retention and have therefore, taken staff welfare matter very seriously. These findings are a true reflection of Deeks (2000) who indicate that the extent to which staff welfare is handled by organizations will determine employee productivity.

Various staff welfare programs have been put in place by research institutes as an indication that they are fully committed to the welfare of employees. This has motivated employees to a great extent. This implies that other than the remuneration package, employees also attach a lot of importance to other fringe benefits which are influential in staff motivation and retention. Towards this end, research institutes in Kenya have set aside budgetary provision to carter for the running of the welfare programs.

5.3 Conclusion

This study aimed at establishing the influence of HRM practices on the performance of employees in research institutes in Kenya. The study focused on HRM practices that were based on knowledge management effectiveness model. These are regarded as the basic HRM practices and they include; recruitment and selection, training and development, reward system human resource planning and staff welfare. The findings of the study revealed that research institutes in Kenya undertake HRM practices which are aimed at helping them to achieve their goals. These practices (HRM) were found to be influential in predicting employee performance in research institutes in Kenya. Although the research institutes in

Kenya have undertaken the HRM practices, they are not consistent on their application. This implies that they are doing well in some areas, whereas they face challenges in some aspects of the HRM practices. Nonetheless, they do appreciate the fact that they cannot be able to achieve their desired objectives if effective HRM practices are not put in place. This is supported by the fact that their strategic plans are aligned on the basis of the best HRM practices. In adopting the best HRM practices, they aim to attract and retain the most qualified employees, continuously develop them and motivate them as well.

5.4 Recommendations

In view of the stated findings and conclusions, the study makes some recommendations in order to improve the current HRM practices in research institutes. They are based on recruitment and selection, training and development, reward system, human resource planning and staff welfare.

5.4.1 Recruitment and Selection

The Recruitment and selection process determines the kind of employees the organization has. The study recommends consistency in recruitment and selection activities. It is, therefore, recommended that the process be objective. Job specifications should, therefore, be developed and strictly adhered to during the process. There is also need to have an interview panel that is professional and not biased. For this reason, research institutes should look for better ways of vetting the panel and in case they should use consultancy firms for this purpose, then such firms should have proven experience of integrity. Within the interview panel, there should also be experts in various types of selection tests which are to be

administered in the process. Lastly, research institutes should have clearly defined recruitment policies which are consistent with the prevailing law.

5.4.2. Training and Development

The study recommends consistency in training and development activities. Research institutes should, therefore, ensure that training offered to employees is relevant to their needs. For this reason, they should, therefore, conduct a training needs analysis to ascertain the relevance of training to trainees. In addition, research institutes should form committees which will be tasked with the responsibility of ensuring fairness in the award of various training scholarships. Last but not least, research institutes should continuously endeavor to develop their employees through various development programs which are relevant by ensuring that they are consistent with their strategic plans.

5.4.3. Reward system

Research Institutes have had challenges of staff retention. It is, therefore, important for research institutes to align their reward system with those of other comparable institutions. When formulating reward polices, employees should be involved so that they can be motivated to work for them for a reasonable period of time. The reward system should also take care of the emerging employee needs.

5.4.4. Human resource planning

There is need for research institutes to ensure that they have the optimum levels of staff at all times. In order to achieve this, they need to involve line managers when forecasting future human resource requirements. Research institutes, therefore,

need to have to have well defined staff establishments. The human resource plan in place should also be consistent with their respective strategic plans which should focus on goals, mission and visions.

5.4.5 Staff welfare

There is need for research institutes to have in place staff welfare programs that are conducive and relevant to emerging employee's needs. When formulating polices regarding staff welfare, the employees should be involved so that the policies should be seen to be objective. Transparency should be encouraged when constituting committees to take charge of welfare activities. Since staff welfare is regarded as a critical component of the human resource management function, research institutes, therefore, need to create staff welfare sections which should be managed by staff with good communication and public relations skills. Ideally, these should be staff who possess human resource management skills.

5.5 Areas for further research

There is need to undertake further studies in order to establish reasons for inconsistency in the application of HRM practices by research institutes in Kenya. This is because the findings indicate that HRM practices are applied inconsistently. The study did not focus on how the HRM practices can be continuously improved and it is, therefore, recommended that further studies be undertaken to address this matter. It is further recommended that future studies on the same subject be undertaken and extend the scope by including other HRM practices not covered in the study. Since the study has concentrated on

Government owned research institutes, there is also need to undertake similar studies in international research institutes operating in Kenya.

REFERENCES

- Abdullah, Z. (2009). The effects of human resource management practices on business performance among private companies in Malaysia. Business and Management Review, 4(6), 66-72.
- Abhishek, K. (2009). Factors affecting human resource planning in an organization available at http://hrmba.blogspot.com.
- Accenture, R. T. (2003). The high performance workforce: Separating the digital economy's winners from losers. Journal of Human Resource Management, 7(3), 741-756.
- Adi, B. (2005). The Moral Economy and Prospects of accumulation in Sub-Saharan Africa. Journal of West Africa Review, 7(3), 1-7.
- Alsan, M., Bloom, D.E., & Canning, D. (2006). The effect of population health on foreign direct investment inflows to low- and middle-income countries. World Development, 34(4), 613-30.
- Ambrose, M. L., & Schminke, M.(2009). The role of overall justice judgements in organizational justice research: A test of mediation. Journal of Applied Psychology, 94(2), 491-500.
- Amin, A.T., & Abu, A.B. (2010). Towards assessing the leadership style and quality of transformational leadership: The case of construction firms of Iran. Journal of Technology Management, 5 (2), 245-258.
- Armstrong, M. (2006). Human resource management (10th Ed.). London: Kogan Page.
- Armstrong, M., & Baron, A. (2007). Performance management: A strategic and integrated approach to achieve success. Mumbai: Jaico Publishing House.
- Anderson, V., & Boocock,G.(2002). Small firms and internationalization: Learning to manage and managing to learn. Human Resource Management Journal, 12(3), 5-24.
- Asiedu, E. (2006). Foreign direct investment in Africa: the role of natural resources, market size, government policy, institutions and political instability. The World Economy, 29(3), 63-77.
- Athur, J. (1994). Effects of human resource systems on manufacturing performance and Turnover. Academy of Management Journal, 4(2), 706-719.
- Atkinson, J. (1985). The changing corporation. New Patterns of Work, (4th Ed.). D Clutterbuck, Aldershot, UK: Gower 1334.

- Azreen, I.M. (2005). Critical success factors for the construction organization. Journal of Management, 6(2), 71-79.
- Baird, M., & McGrath-Champ, S. (1998). Industrial relations update. South Melabourne: Addison Wesley Longman.
- Barber, A. E., & Simmering, M. J. (2002). Understanding pay plan acceptance. Human Resource Management Review, 12(5), 25-43.
- Baron, J.N., & Kreps, D. (1999). Consistent human resource practices. *California Management Review*, 41(3), 13-19.
- Batt, M. (2002). Human Resource Management. London: Sage Publications Inc.
- Baxter, P. (2000). Mediational learning: Empowering individuals and enterprises to take control of change and continuous innovation. Detir: STAC Unit.
- Beardwell, H. (2001). *Human Resource Management*. Washington DC: National Planning Association.
- Becker, B. E., Husselid, M. A., & Ulrich, D. (2001). *The HR score card*. Boston: Harvard Business School Press.
- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal*, 39(5), 601-653.
- Becker, B.E., & Huselid, M.A. (1998). High performance work systems and firm performance: A synthesis of research and managerial implications. *Personnel and Human Resource Management Review*, 16(3), 53-101.
- Bell, D. J. (1999). *Planning corporate manpower*. London: Longman.
- Benardin, H. J. (2003). Human Resource Management. New York: McGraw-Hill.
- Benkhoff, B. (1997). Ignoring commitment is costly: New approaches to establish the missing link between commitment and performance. *Human Relations* Journal, 50(6), 701-28.
- Berthon, P., Pitt, L.F., & Ewing, M. T. (2001). Corollaries of the collective: The influence of organizational culture and memory development on perceived decision making context. *Academy of Marketing Science Journal*, 29(2), 135-150.
- Bhatti, M. I., Kumar, K., &Schoefield, M. (1998). On Deming's principle of human resource management: A statistical perspective. *Career Development International Journal*, 3(6), 220-226.

- Biddle, D., & Evenden, R. (2002). *Human Aspects of Management*. London: IPM Publishers
- Bijlsma, K., & Koopma, K. (2003). Introduction: Trust within organizations. *Personnel Review*, 33(5), 600-604.
- Bohet, I., & Eaton, S, C. (2003). *Does pay for performance perform?* Washington DC: Brookings Institute Press.
- Bolman, L., & Deal, T. (2003). Reframing organizations. San Francisco: Jossey Bass.
- Bowles, S., & Gintis, H. (2002). Schooling in Capitalist America revisited. *Sociology of Education*, 75(1), 1-18.
- Bramham, J. (2001). Human resource planning. London: IPM Publishers.
- Bratton, J.E., & Gold, J.T. (2003). *Human Resource Management Theory and Practice* (6th Ed.). New York: Mc Graw-Hill.
- Brewstar, C., Haris, H., & Sparrow, P. (2001). On top of the world. *People Management*, 2(3), 37-42.
- Brough, P., O'Driscoll, M., Kalliath, T., Cooper, C., & Poelmans, S. (2009). Workplace psychological health. *Current Research and Practice*, 4(2), 3-17.
- Brown, P., & Hesketh, P. (2004). *The mis-management of talents*. Oxford: Oxford University Press.
- Brown, A., Kyriakidou, O., & War, D. (2003). Strategies for employee relations in small hospitality businesses. *The Hospitality Review*, *5*(1), *50-54*.
- Brown, C., & Campbell, B. A. (2002). The impact of technological change on work and wages. *Industrial Relations Review*, 4(1), 1-33.
- Brush, M. C., & Ruse, D. H. (2005). Driving strategic success through human capital planning. *Human Resource Planning Review*, 28(2), 49-60.
- Bryant, S. E. (2003). The role of transformational and transactional leadership in creating, sharing and exploiting organizational knowledge. *Journal of Leadership and Organizational Studies*, 9(4), 32-46.
- Budhwar, P. (2000). Evaluating levels of strategic integration and development of human resource management in the UK. *Personnel Review*, 29(2), 141-161.
- Burack, E. H., & Mathys, N. J. (2002). *Human resource planning: A pragmatic approach to manpower staffing and development*. Washington DC: Brace- Park Press.

- Busing, N., & Gold, I. (2009). Important contributors to health human resource planning in Canada. *Health Papers Review*, 9(2), 25-29.
- Cassoni, A.S., & Labadie, G.J. (2004). *Unions and employment in Uruguay*. Chicago: University of Chicago Press.
- Chami, R., & Fullenkamp, C. (2002). Trust and efficiency. *Journal of Banking and Finance*, 26(9), 1785-1809.
- Chapman, J., & Keliher, C. (2011). Influences on reward mix determination: Reward consultants' perspectives. *Employee Relations Journal*, 33(2), 121-130.
- Cherian, K. T. (2011). Human resource planning is a systematic analysis of HR needs available at www. Oppapers .com.
- Clarke, K. F. (2001). What businesses are doing to attract and retain employees. *Employee Benefits Journal*, 5(3), 34-47.
- Cohen, A. (1991). Career stage as a moderator of the relationships between organizational commitment and its outcomes: A meta-analysis. *Journal of Occupational Psychology*, 64(4), 253 -268.
- Cohen, A. (1993). Organizational commitment and turnover: A meta-analysis. *Journal of Academy of Management*, 36(5), 1140-1158.
- Cohen, J., & Cohen P, (1983). Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences. Hillsdale, NJ: Eribaum.
- Cole, G. A. (2000). Organizational behavior, theory and practice (6th Ed.). New York: McGraw-Hill.
- Collins, D. (2009). Organizational Change. New Jersey: Routledge.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C., &Ng K. Y.(2001). Justice at the millennium: A meta-analysis review of 25 years of organizational justice. *Journal of Applied Psychology*, 86(3), 425-445.
- Cornellius, N. (2000). *Human resource management: A managerial perspective* (2nd Ed.). London: Thomson Learning.
- Cornell, J., Ferres, N., & Travaglione, J. (2003). Engendering trust in manager-subordinate relationships. *Personnel Review*, 32(5), 569-587.
- Costa, A., Roe, R., & Taillieu, T. (2001). Trust within teams: The relation with performance effectiveness. *European Journal of Work and Organizational Psychology*, 10(3), 225-244.

- Cotton, P. A. (2007). Seven steps of effective workforce planning. Washington DC: West Towers.
- Cox, A. (2001). The importance of employee participation in determining pay system effectiveness. *International Journal of Management Review*, 2(4), 357-375.
- Creswell, J.W. (2007). Qualitative Inquiry and Research Design: Choosing Among Positive Approaches (2nd Ed.). Thousand Oaks, CA: Sage.
- Cropanzano, R., Bowen, D. E., & Gilliland, S. W. (2007). The management of organizational justice. *Academy of Management Perspectives*, 21(1), 34-48.
- Cully, M., Woodland, S., O'Reilly, A., & Dix, G. (2001). Britain at work as depicted by the 1998 Workplace Employee Relations Survey. London: Routledge.
- Curningham, I., Hyman. J., & Baldry, J. (1999). The poverty of empowerment? A critical case study. *Personnel Review*, 28(3), 192-207.
- Curne, M., & Stefanec, N. (2007). Worker quality and labour market sorting. *Economic Letters*, 96(2), 202-208.
- Currie, I. (1998). *Managing international assignments: Trends and issues*. A paper presented at the IPD international forum networking meeting, London.
- Dainty, A.R.J., Bryman, A., & Price, A. D. F. (2002). Empowerment within the UK construction sector. *Leadership and Organization Development Journal*, 23(6), 333-342.
- Davies, R. (2001). How to boost staff retention. *People Management*, 7(8), 54-66.
- Deborah, D. B., Sheila, W., Kristin, R., Amanda, M., Mike, R., & Susan, H. (2003). *Strategic workforce planning Guide Book*. Virginia: Fairfax Publishers.
- Deeks, E. (2000). Self service is hard work. People Management Review, 26(23), 9-14.
- DeGeus, A. (1997). The living company. *Harvard Business School Review*, 73(4), 118-128.
- Dehnert, J., Freitheit, J., & Zimmerman, A. (2002). Modelling and evaluation of time aspects in business processes. *Journal of the Operational Research Society*, 53(7), 1038-1047.
- Delahaye, B. (2005). Human resource development: Adult learning and knowledge management (2nd Ed.). Brisbarne: Willey.
- Delery, J.E. (1998). Issues of fit in strategic human resource management: Implications for research. *Human Resource Management Review*, 8(3), 289-309.

- Delery, J.E., & Doty, D.H. (1996). Theoretical frameworks in strategic human resource management: Universalistic, contingency and configurational perspectives. *Academy of Management Journal*, 39(5), 802-35.
- Denham, N., Ackers, P., & Travers, C. (1997). Doing yourself out of a job? How middle managers cope with empowerment. *Employee Relations Journal*, 19(2), 147-159.
- Den Hartog, D., Bosselie, P., & Paauwe, J. (2004). Performance management: A model and research agenda. *Applied Psychology, an International Review, 53(4), 556-569.*
- Denzin, N. K., & Lincoln, Y, S. (2005). *The sage handbook of Qualitative* research (3rd Ed.). Thousand Oaks, CA: Sage publications.
- DeSimone, R. L., Werner, J. M., &Harris, D. M. (2002). *Human resource development* (3rd Ed.). Mason, OH: Thomson Learning.
- Dessler, G. (1999). How to earn your employees commitment. *The Academy of Management Executive*, 13 (12), 58-69.
- Dessler, G. (2002). Human Resource Management. New Delhi: Prentice hall.
- Direnzo, M. S., & Greenhans, J. H. (2011). Job search and voluntary turnover in a boundary less world: A control theory perspective. *Academy of Management Review*, 36(3), 567-589.
- Dirks, K., & Ferrin, D. (2002). Trust in leadership: Meta analytic findings and implications for research and practice. *Journal of Applied Psychology* 87(4), 611-628.
- Dobbs, K. (2003). Knowing how to keep your best and brightest. *Workforce Planning Review*, 80(2), 57-66.
- Duffy, F.M. (2003). I think, therefore, I am resistant to change. *Journal of Staff Development*, 24(1), 30-36.
- Duffy, F. M. (2009). Preventing workforce mobbing and bullying with effective organizational consultation, policies and legislation. *Consulting Psychology: Practice and Research*, 61(3), 242-262.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71 (3), 500-507.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 31(3), 1153-1166.

- Evans, M. D. R., Kelley, J., & Peoples, C. D. (2010). Justification of in-equality. Social Science Quarterly, 9(5), 1405-1414.
- Femandez, A, M., Cuevas-Rodriguez, G., & Valle-Cabrera, R. (2006). How symbolic remuneration contributes to the legitimacy of the company: An institutional explanation. *Human Relations Review*, 59(7), 961-992.
- Ferris, G.F., Hochwarter, W.A., Buckley, R.M., Harrell-Cook, G., & Frink, D.D. (1999). 'Human resources management: Some new directions, *Journal of Management*, 25 (3), 385-388.
- Fischer, R., & Smith, P.B. (2003). Reward allocation and culture. *Journal of Cross-Cultural Psychology*, 34(2), 251-268.
- Fitzgerald, L., & Moon, P. (2001). *Performance measurements in service industries: Making it work.* London: CIMA Publishers
- Foley, G. (2004). *Dimensions of adult learning: Adult education and training in global era*. Crows Nest: Allen and Unwin Publishers.
- Folger, R., & Cropanzano, R. (2004). Fairness theory: Justice as accountability in Greenberg, J, and Cropanzano, R. (Eds.). Sanford CA: Sanford University Press.
- Frazis, H., Gittleman, M., Horrigan, M., & Joyce, M. (1999). Results from the 1995 survey of employer provided training. *Monthly Labour Review*, 21(6), 3-14.
- Gelfand, M. J., Eric, M., & Aycan, Z. (2007). Cross-cultural organizational behavior. *Annual Review of Psychology*, 58(4), 479-514.
- Gerhart, B. (1999). Human resource management and firm performance: Measurement issues and their effect on causal and policy inferences. Research in Personnel and Human Resources Management 5th Ed.). Englewood Cliffs: Prentice Hall.
- Gerhart, B., Trevor, C., & Graham, M. (1996). New Directions in employee compensation research. Research in personnel and human resource management. Englewood Cliffs: Prentice Hall.
- Gerhart, B., Wright, R.M., & McMahan, G. (2002). Measurement error in research on the human resources and firm performance relationship: Further evidence and analysis. *International Journal of Human Resource*, 25(3), 45-59.
- Gillespie, N., & Mann, L. (2004). Transformational leadership and shared values: The building blocks of trust. *Journal of Managerial Psychology*, 19(6), 588-607.
- Gilley, J., Eggland, S., & Gilley, A. (2002). *Principles of human resource development*. New York: Basic Books.

- Globerman, S., & Shapiro, D. (2002). Global foreign direct investment flows: The role of governance infrastructure. *World Development*, 30 (2), 9-24.
- Gove, A. (2012). Think global, act local: How early reading assessments can improve learning for all. *Journal of Comparative and International Education*, 42(3), 729-741.
- Grawitch, M., GottSchalk, M., &Munz, D. (2006). The path to a healthy workplace: A critical review linking healthy workplace practices, employee wellbeing and organizational improvements. *Consulting Psychology Journal*, 58(3), 129-147.
- Green, C., & Heywood, J. S. (2010). Profit sharing, separation and training. *British Journal of Industrial Relations*, 14(3), 78-91.
- Griffin, M. G. (2008). *The lived experience of managers during organizational change*. Washington DC: University of Washington Press.
- Guest, D.E. (1999). Human Resource Management: The workers verdict. *Human Resource Management Journal*. 9 (3), 5-25.
- Gumbus, F. L., & Johnson, C. R. (2003). Employee friendly initiatives at Fatura: Leadership survey, certification and training matrix and annual performance. *Personal Development Review*, 9(5), 145-159.
- Guri-Rosenbilt, S. (2010). Access and equity in higher education: Historical and cultural contexts in Eggins, H. (Ed.). Access and equity: Comparative perspectives. Roterdam: Sense Publishers.
- Hansen, A., Hogh, A., Perrson, R., Karlson, B., Grade, A., & Orbaek, P. (2006). Bullying at work, health outcomes and physiological stress response. *Journal of Psychosomatic Research*, 60(3), 63-72.
- Herold, L. (2012). *Adult learning: From theory to practice*. Fredericton: National adult literacy.
- Holloway, J. A. (2000). Investigating the impact of performance measurement in Neely, A. (Ed.). Performance management: Past, present and future. *Cranfield University Review*, 78(3), 234-241.
- Holt, G. D., Love, P. E. D., & Nesan, L, J. (2000). Employee empowerment in construction: An implementation model for process improvement. *An International Journal of Team Performance*, 6(3), 47-51.
- Hope-Hailey., Gratton, V., McGovern, P., Stiles. P., & Truss, C. (1997). A chameleon function? HRM in the 1990s. *Human Resource Management Journal*, 7(3), 5-18.

- Housel, T., & Bell, A. (2000). *Measuring and managing knowledge*. Singapore: McGraw-Hill Irwin.
- Humes, D.A. (2000). *Improving Employee Performance, Motivation and Pay*. New Delhi: Maya Publishers.
- Hunt, S.D., & Morgan, R.M. (1994). Organizational commitment: One of many commitments or key mediating construct. *Academy of Management Journal*, 37(2), 1568-1655.
- Huselid, M.A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38 (4), 635-672.
- Huselid, M.A., & Becker, B.E. (1996). Methodological issues in cross-sectional and panel estimates of the human resource firm performance link. *Industrial Relations Journal*, 35(2), 400-422.
- Huselid, M. A., & Rau, B. (1997). *The determinants of high performance work systems*. Paper presented to the annual meeting of the Academy of Management, Boston.
- Huselid, M, A., & Barnes, J. E. (2002). *Human capital management systems as a source of competitive advantage*. Rutgers: Rutgers University Press.
- Hutchison, S., & Garstka, M.L. (1996). Sources of perceived organizational support: Goal setting and feedback. *Journal of Applied Social Psychology*, 26(5), 1351-1366.
- Hyz, A., & Pappas, K. (2006). Immigrants and segmented local labour markets in the Greek countryside. *Archives of Economic History*, 2(2), 93-105.
- Itner, C., & Larcker, D. (2003). Innovations in performance management: Trends and research implications. *Journal of Management Accounting Research*, 10(7), 412-429.
- Jackson, E. M., Rossi, M. E., Hoover, E. R., & Johnson, E. R. (2012). Relationships of leader reward behavior with employee behavior: Fairness and morale as key mediators. Leadership and Organization Development Journal, 33(7), 646-661.
- Jackson, P.R., Wall, T.D., Martin, R., & Davids, K. (1993). New measures of job control, cognitive demand and production responsibility. *Journal of Applied Psychology*. 78 (5), 753-762.
- Jackson, S.E, & Schuler, R.S. (1995). Understanding human resource management in the context of organizations and their environments. *Annual Review of Psychology*, 17(3), 147-159.

- Jackson, S. E., & Schuler, R. S. (2001). Human resource planning: Challenges for industrial organizational psychologists. *American Psychologist*, 45(2), 223-237.
- James, W. M. (2006). Forecasting manpower demand in the construction industry of Hong Kong: Hong Kong: The Hong Kong University Polytechnic Press.
- Jankowicz, D. (2009). Business research projects (2nd Ed.). London: Chapman Hall.
- Jardine, E., & Amig, S. (2001). Managing human capital. *Behavioural Health Management*, 21(2), 25-31.
- Jenny, H. S., Ali, H., & Shamsudin, F. M. (2010). *The role of leadership behavior in task performance and contextual performance*. Proceedings of national human resource management, 454- 462.
- Johns, G. H., Gutmann, M. E., DeWald, J. P., & Nunn, N. E. (2001). Career retention in the dental hygiene workforce in Texas. *Journal of Dental Hygiene*, 75(2), 135-143.
- Johnson, R. E., & Lord, R. G. (2010). Implicit effects of justice on self-identity. *Journal of Applied Psychology*, 95(4), 681-695.
- Judge, T. A., & Picolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative weights. *Journal of Applied Psychology*, 89(1), 36-51.
- Kaestner, R., & Simon, K. I. (2002). Labour market consequences of state health insurance regulation. *Industrial and Labour Relations Review*, 56(3), 136-156.
- Kalliath, T., & Kalliath, P. (2012). Changing work environments and employee wellbeing: An introduction. *International Journal of Manpower*, 33(7), 729-737.
- Kamoche, P., & Kamoche, R. (2004). *Managing Human Resource Management in Africa*. London: Routledge.
- Kantanbutra, S., & Avery, G.A. (2003). Enhancing SME performance through vision-based leadership: An empirical study. SME Association of Australia and New Zealand Annual conference paper.
- Kaplan, R. S., & Norton, D. P. (2002). Measuring the strategic readiness of intangible assets. *Harvard Business Review*, 6(4), 52-63.
- Kaser, P., & Miles, M. (2002). Understanding knowledge activists' successes and failures. *Long Range Planning*, 35(2), 9-28.

- Kaur, S. (2006). Human resource planning: Nature and need. *Journal of Management*, 22(3), 259-298.
- Kazan, H. (2005). A study of factors affecting production and workforce planning. Journal of American Academy of Business, 7(1), 288-296.
- Keel, J. (2006). Workforce planning guide: State auditor's office (SAO) report. Austin TX,
- Kelly, J., & Gennard, J. (2000). Getting to the top: Career paths of personnel directors. Human Resource Management Journal, 10(3), 22-37.
- Kelly, J., & Gennard, J. (2001). Power and influence in the boardroom: The role of the personnel/ HR director. London: Routledge.
- Kessler, I. (2000). Remuneration systems in Bach, S. and Sissons, K. (Eds.). Blackwell: Oxford University Press,
- Kim, S.M. (2005). Individual-level factors and organizational performance in government organizations. *Journal of Public Administration Research and Theory*, 15(3), 142-163.
- Kim, T. Y., & Leung, K. (2007). Forming and reacting to overall fairness: A cross-cultural comparison. *Organizational Behavior and Human Decision Processes*, 104(1), 83-95.
- Kirkbridge, P., & Wark, K. (2002). The Ulrich model. Hegemonic but flawed. Paper presented at the HRM in a changing world conference. Oxford: Oxford Brookes University.
- Kismihok, G., Szabo, I., & Vas, R. (2012). The multinational role of migrants in the Greek countryside: Implications for the rural economy and society. *International journal of Mobile and Blended Learning*, 4(1), 45-60.
- Kloot, L., & Martin, J. (2000). Strategic performance management: A balanced approach to performance management issues in local Government. *Management Accounting Rresearch*, 11(2), 24-39.
- Kokkos, A. (2005). Adult education: Exploring the field. Athens: Metaichmio.
- Kossek, E. E., Baltes, B. B., & Mathews, R. A. (2011). How work family research can finally have an impact in organizations. *Industrial Organizational Psychology*, 4(3), 352-369.
- Kothari, C. (2004). Research Methodology, Methods and Techniques. New Delhi: Wiley Easton.

- Kotey, B., & Slade, P. (2007). Formal human resource management practices in small growing firms. *Journal of Small Business Management*, 43(1), 16-40.
- Kougias, I., Seremeti, L., & Kalogeras, D. (2013). Mobility of Eastern European citizens: Training and Development. *European Journal of Training and Development*, 37(8), 766-778.
- Kraut, J., & Kormon, P. (1999). *Evolving Practices in HRM*. San Franscisco: Jossey Bass.
- Kruse, D. L., Freeman, R. B., & Blasi, J. R. (2010). Do workers gain by sharing? in Kruse, D. L., Freeman, R. B., and Blasi, J. R. (Eds.). Shared capitalism at work: Employee ownership, profit and gain sharing and broad based stock options. Chicago: NBER, IL Publishers.
- Lee, M., & Koh, J. (2001). Is empowerment really a new concept? *International Journal of Human Resource Management*, 12(4), 684-695.
- Leng, T. H. (2005). Human resource planning: Nature and need. *Journal of Management*, 22(3), 259-298.
- LePine, J. A., Colquitt, J. A., & Erez, A. (2001). Adaptability to changing task contexts: Effects of several cognitive ability, conscientiousness and openness to experience. *Personnel Psychology*, 53(3), 563-593.
- Lewis, P. (2001). Reward management in Redman, T. and Wilkinson, A. (Eds.). Contemporary human resource management: Texts and cases. Hartow: Financial Times, Prentice-Hall.
- Lewis, T., Marginson, S., & Snyder, I. (2005). The network university? Technology, culture and organizational complexity in contemporary higher education. *Higher Education Quarterly*, 59(1), 56-75.
- Lievens, F., Van Dam, K., & Anderson, N. (2002). Recent trends and challenges in personnel selection. *Personnel Review*, 31(5), 580-601.
- Locke, E. A., & Latham, G. P. (2005). Goal setting theory: Theory building by induction in Smith, K. G. and Hilt, M. (Eds.). Great minds in management. The process of theory development. Oxford: Oxford University Press.
- Loosemore, M., Dainty, A. R. J., & Lingard, H. (2003). Human resource management in construction project: Strategic and operational approach. London: Spon Press
- Lord, R. G., & Brown, D. J. (2004). *Leadership processes and follower self-identity*. Mahwan: Erlbaum Press.

- Lupton, B. (2000). Pouring the coffee at interviews? Personnel's role in the selection of Doctors. *Personnel Review*, 29(1), 48-68.
- Mabey, C., & Salaman, G. (1999). *Strategic human resource management*. Blackwell: Oxford University Press.
- MacDonald, L. A. C. (2005). Wellness at work: Protecting and promoting employee wellbeing. London: Chartered Institute of Personnel and Development.
- Maguire, S. (1995). Learning to change. European Quarterly, 8 (2), 23-28.
- Mandani, M. (2007). Scholars in the market place. Kampala: Fountain Publishers.
- Manente, M. (2008). Babylon and Ontology: Multilingual and cognitive e-learning management system via PDA phone. Brussels: Education, Audio visual and Culture Executive Agency (EACEA).
- Maslow, A. (1971). Motivation and Personality. New York: Harper and Row.
- Marchington, M. (2000). *Team working and Employee Involvement*: Terminology, evaluation and context in team working. Basingstoke: Macmillan.
- Marchington, M., & Grugulis, I. (2000). Best practice human resource management. Opportunity or dangerous illusion? *International Journal of Human Resource Management*, 11 (6), 1104-1124.
- Marchington, M., & Wilkinson, A. (1997). *Core Personnel and Development*. London: Institute of Personnel and Development.
- McIlrath, L., Lyons, A., & Munck, R. (2012). *Higher education and civic engagement: Comparative perspectives*. New York: Palgrave Macmillan.
- Mercer, R. Report. (2003). Mercer study raises red flags for employer pay and benefits plans (Findings of the 2002 people at work survey. *Human Resource Management Department Review*, 4(2), 8-15.
- Messmer, M. (2004). Orientation programs can be key to employee retention. *StrategicFinance Journal*, 18(4), 74-86.
- Meyer, J.P., & Allen, N.J. (1991). A three component conceptualization of organizational commitment. *Human Resource Management Review*, 89(3), 93-112.
- Meyer, J.P., & Allen, J.J. (1997). *Commitment in the Workplace*: Theory, research and application. Thousand Oak, C.A: Sage Publications, Inc.

- Miles, R. R., & Snow, C. (2007). Organization theory and supply chain management: An evolving research perspective. *Journal of Operations Management*, 25(2), 459-473.
- Mintzberg, H. (2002). Designing effective organizations. Eaglewood cliffs NJ: Prentice-Hall
- Mitchell, T. R., & Mickel, A. E. (2001). The meaning of money: An individual difference perspective. *Academy of Management Review*, 24(13), 68-79.
- Mugenda, G., & Mugenda, V. (2003). Research Methods. Nairobi: Acts Press.
- Munene, J. C., Nansubuga, F., Kamuhanda, R., Matovu, V., Bakwega, A., &Machunsky, M. (2003). A process centred three factor framework for analyzing, predicting and prescribing organizational climates in NNGo in Africa. Kampala: Makerere University Press.
- Mutula, S.M. (2008). Comparison of Sub-Saharan Africa's e-government status with developed and transitional nations. *Journal of Information Management and Computer Security*, 17(2), 78-91.
- Nachmias, D., & Nachmias, F.C. (2008). *Social Statistics for a diverse society with SPSS student version 16* (5th Ed.). Milwaukee: Sage Publications.
- Nafukho, F. M., Hairston, R., & Brooks, K. (2004). Human capital theory: Implications for human resource development. *Human Resource Development International*, 7(4), 545-551.
- Nanda, R., Smith, W.I., & Gray, K.R. (2008). Management and national development in Kenya: Towards a normative framework. *International Journal of Emerging Markets*, 36(5), 203-249.
- Nelson, R. A., & Wei, I. (2012). *The global University: Past, present and future perspectives*. New York: Palgrave Macmillan.
- Nesan, L.J., & Holt, G. D. (2002). Assessment of organizational involvement in implementing empowerment. *Integrating Manufacturing Systems*, 13(4), 201-211.
- Nguyen, T. V., & Bryant, S.E. (2004). A study of the formality of human resource management practices in SME's in Vietnam. *International Small Business Journal*, 22(6), 595-618.
- Nkomo, S. M. (2004), Strategic planning for human resources: Let's get started. *Long Range Planning Journal*, 21(1), 66-72.

- Norman, P.M., Artz, K. W., & Martinez, R. J. (2007). Does it pay to be different? Competitive non-conformity under different regulatory regimes. *Journal of Business Research*, 60(11), 1135-1143.
- Noorbakhsh, F., Paloni, A., & Youssef, A. (2001). Human capital and FDI inflows to developing countries: New empirical evidence. *World Development*, 12(4), 107-163.
- Nwabuzor, A.M., & Anyamele, D.O. (2002). Foreign Direct Investment into African Nations (1970-2000) available at: www.jsd-Africa.com.
- Nyambegera, S. M. (2005). *Human Resource Management: A biblical perspective*. Nairobi: Acts Press.
- Oakland, S., & Oakland, J.S. (2001). Current people management activities in world-class organizations. *Total Quality Management*, 7(3), 773-779.
- Ogden, S., & Watson, R. (2008). Executive pay and the search for legitimacy: An investigation into how UK remuneration committees use corporate performance comparisons in long term incentive pay decisions. *Human Relations Review*, 61(5), 711-739.
- Okumbe, J.A. (2001). Human resource management. Nairobi: Accts Press.
- Osborne, G. M. (2005). How important is your personality? Labour market returns to personality for women in the US and UK. *Journal of Economic Psychology*, 26(2), 827-841.
- Owusu, F. (2005). Organizational culture, performance and public sector reforms in Africa: The Ghanaian case. Accra: ICSGA Publishers.
- Panthi, K., Farooqui, R. U., & Ahmed, S. M. (2008). An investigation of the leadership style of construction managers in South Florida. *Journal of Construction Management and Economics*, 11(4), 455-565.
- Parker, O., & Wright, L. (2000). Pay and employee commitment: The missing link. *Ivey Business Journal*, 65(13), 70-79.
- Parker, B., & Caine, D. (2002). Hollomic modelling: Human resource planning and the two faces of Janus. *International Journal of Manpower*, 17(8), 30-45.
- Patel, P.C., & Cardon, M.S. (2010). Adopting HRM practices and their effectiveness in small firms facing product-market competition. *Human Resource Review*, 49(2), 265-290.
- Perkins, S. J., & White, G. (2008). *Employee reward alternatives, consequences and contexts*. London: Chartered Institute of Personnel and Development.

- Perry, A., & Blue, L. (2008). Implications of HRD in an industrial set up. *International Journal of Human Resource Management*, 7(2), 142-159.
- Petrovsky, N. (2009). Does Public motivation predict higher public service performance? A research synthesis: *Public Management Research Association*, 12(1), 47-64.
- Pfeffer, J. (1995). Producing sustainable competitive advantage through effective management of people. *The Academy of Management Executive*, 4(2), 55-69.
- Pitt-Catsouphes, M., Kossek, E. E., & Sweet, S. A. (2006). The work and family handbook: Multidisciplinary perspectives, methods and approaches. New York NY: Routledge.
- Pleffer, J. (1998). *The Human Equation: Building Profits by Putting People First.*Boston: Harvard Business School Press.
- Pleffer, J. (1998). Seven practices of successful organizations. *California Review*, 3 (6), 141-155.
- Podsakoff, P.M., Bommer, W. H., Podsakoff, N. P., & Mackenzie, S. B. (2006). Relationships between leader reward and punishment behavior and subordinate attitudes, perceptions and behaviours: A meta-analytic review of existing and new research. *Organizational Behavior and Human Decision Processes*, 99(2), 113-142.
- Poelmans, S. A. Y., Kalliath, T., & Brough, P. (2008). Achieving work life balance: Current theoretical and practical issues. *Journal of Management and Organization*, 14(3), 132-148.
- Porter, M.V. (2001). The bottom line in employee compensation. *Association Management*, 4(2), 36-55.
- Powell, W. W., & Snellman, K. (2004). The knowledge economy. *Journal of Annual Reviews of Sociology*, 30(1), 199-220.
- Prendergast, C, (1999). The provision of incentives in firms. *Journal of Economic Literature*, 37(1), 37-63.
- Psoinos, A., & Smithson, S. (2002). Employee empowerment in manufacturing. A study of organizations in the UK .New Technology, Work and Employment Review, 17(2), 132-148.
- Purcell, K., & Purcell, J. (1998). In-sourcing. Outsourcing, and the growth of contingent labor as evidence of flexible employment strategies. *European Journal of Work Organizational Psychology*, 39(3), 43-59.

- Quick, J.C., & Tetrick, L. E. (2001). *Handbook of occupational health psychology* (2nd *Ed.*). Washington DC: American Psychological Association.
- Rahman Bin Idris, A., & Eldridge, D. (1998). Service quality and human resource management: Reconceptualizing human resource planning in response to institutional change. *International Journal of Manpower*, 19(5), 343-357.
- Ranner, F., & Maclean, R. (2008). Handbook of technical and vocational education and training research. *People management Review*, 7(2), 14-33.
- Rath, T., & Harter, J. (2010). Wellbeing: The five essential elements. New York: Gallup Press.
- Redman, T., & Wilkinson, A. (2005). In search of human resource management: In Redman, T., and Wilkinson, A. (Eds.). Contemporary human resource management. Harlow: Pearson Education.
- Richards-Carpenter, C. (1989). Manpower planning makes a comeback. *Personnel Management Journal*, 21(7), 55-65.
- Robins, P., & Judge, A. (2009). *Organizational Behaviour*.New Jersey: Pearson Education Inc.
- Rowley, J. (2001). Management development: New agenda for information professionals. *Library Management*, 16(1), 5-10.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and endaimonic wellbeing. *Annual Review of Psychology*, 52(1), 141-166.
- Rye, T., & Paterson, C. (2001). The partnership approach to mobility management: An evaluation of different models for travel planning by groups of employees. Paper presented at the ECOMM.
- Rynes, S., Barber, A., & Varma, G. (2000). Research on the employment interview in Cooper, G. and Locke, E. (Eds.). Industrial and organizational psychology: Linking theory and practice. Oxford: Oxford University Press.
- Sama, L. M., & Papamarcos, S. D. (2000). Hofstede's I-C dimension predictive of allocative behaviours. *International Journal of Value-based Management*, 13, 173-188.
- Sanders, M., Lewis, P., & Thornhill, A. (2003) .*Research methods for business students* (3rd Ed.). Harlow: Financial Times, Prentice-Hall.
- Shrestha, N.R., McKinley-Floyd, L., & Mtwige, B. (2008). Management in Africa in the global context. *Journal of African Business*, 17,437-509.

- Sharkie, R. (2005). Precariousness under the new psychological contract: The effect on trust and the willingness to converse and share knowledge. *Knowledge Management Research and Practice*, 3(2), 37-44.
- Shili, S. (2008). Organizational culture. *International Journal of Business Management*, 3(12), 56-69.
- Sinkula, J. M. (2002). Market based success, organizational routines and learning. *The Journal of Business and Industrial Marketing*, 17(4), 253-269.
- Smith, C., Dennis, O., & Near, J.P. (2004). Organizational citizenship behaviour: Its nature and antecedents. *Journal of Applied Psychology*, 68(4), 653-663.
- Smith, K., & Hilt, M. (2005). *Great minds in management: The process of theory development*. Oxford: Oxford University Press.
- Shaw, J.D., Delery, J.E., Jenkins, G.D., & Gupta, N. (1998). An organization-level analysis of voluntary and involuntary turnover. *Academy of Management Journal*, 4(3), 511-525.
- Shippman, J., Ash, R., Batista, M., Carr, L., Eyde, L., Hesketh, B., Kehoe, J., Pearlman, K., Brien, E., & Sanchez, J. (2000). The practice of competency modelling. *Personnel Psychology*, 53(6), 703-740.
- Shore, L. M., Tetrick, L. E., Taylor, M. S., Liden, R. C., Parks, J. M., Morrison, E. W., Porter, L.W., Robinson, S.L., Roehling, M.V., & Dyne, V. L.(2004). *The employee organization relationship: A timely concept in a period of transition in Martochio, J. (Ed.)*. Oxford: Oxford University Press.
- Shury, J., Davies, B., Riley, T., & Stansfield, C.(2008). Skills for the workplace: Employer perspectives. *Journal of Education and Work, 10(2), 41-54*.
- Smith, F.J. (1976). *Index of organizational reactions*. JSAS Catalogue of Selected Documents in Psychology, 1265.
- Smart, C. J., & Paulsen, B. M. (2012). *Higher education: Handbook of theory and research*. Berlin: Springer.
- Smith, I. (1993). Reward management: A retrospective assessment. *Employee Relations Review*, 15(3), 45-59.
- Smith, M. (1994). A theory of the validity of predictors in selection. *Journal of Occupational and Organizational Psychology*, 7(2), 13-31.
- Smith, V, (1997). New forms of work organization. *Annual Review Sociology*, 4(1), 15-39.

- Smithson, J., and Lewis, S. (2000). Is job insecurity changing the psychological contract? *Personnel Review*, 29(6), 680-702.
- Snell, S., & Dean, J. (1992). Integrated manufacturing and human resource management: a human capital perspective. *Academy of Management Journal*, 23(6), 467-504.
- Snell, S., & Youndt, M. (1995). Human resources management and firm performance. *Journal of Management*, 1(4), 738-759.
- Sparrow, P. S. (1994). Is HRM in crisis? In Schuler, R. S. and Jackson, S. E. (Eds.). Strategic human resource management. Oxford: Oxford University Press.
- Spector, P. E. & Fox,S.(2002). An emotion- centred model of voluntary work behavior: Some parallels between counterproductive work behavior and organizational citizenship behavior. *Human Resource Management Review*, 12(2), 269-292.
- Stewart, J. & Knowles, V. (2000). Graduate recruitment and selection practices in small businesses. *Career development international review*, 5(1), 21-38.
- Stewart, J. (2002). *Data collection methods in training and development:* Tutorial hand out. Nortingham: The Nortingham Trent University press.
- Stone- Romeo, E. F., & Stone, D. L. (2003). The dysfunctional consequences of individualism in organizations. Jamaica: Randle Press.
- Stoner-Zemel, M.J. (2002). Visionary leadership, management and high performing work units: An analysis of workers perception. Doctoral dissertation, University of Mississipi.
- Storey, J., & Sisson, K. (1999). *Managing human resources and industrial relations*. Buckingham: Open University Press.
- Sun, P. Y. T., & Scott, J.L. (2003). Exploring the divide-organizational learning and learning organization. *The Learning Organization Review*, 10(4), 202-215.
- Susan, E. J., & Randall, S. S. (2001). Human resource planning: Challenges for industrial/organizational: *American Psychological Association*, 45(2), 223-239.
- Swanson, R. A., & Holton, E. F. (2001). Foundations of human resource development. San Francisco: Berret- Koehler.
- Tambur, M., & Vadi, M. (2012). Workplace bullying and organizational culture in post-transitional country. *Journal of Manpower Planning*, 7(2), 29-49.

- Teo, E. A. L., Ling, F. Y.Y., & Ong, D.S.Y. (2005). Fostering safe work behavior in workers at construction sites. *Engineering Construction and Architectural Management*, 12(4), 410-422.
- Thorpe, R., & Holman, G. (2000). *Strategic reward systems*. Harlow: Financial Times, Prentice Hall.
- Tichy, N. M., Formbrun, C. J., & Devanna, M. A. (1999). Strategic human resource management. *Sloan Management Review*, 23(5), 47-61.
- Torlak, O., & Koc, U. (2007). Materialistic attitude as an antecedent of organizational citizenship behavior. *Management Research News*, 30(8), 581-596.
- Toolle, T. M. (2002). Construction site safety rules. *Journal of Construction and Engineering Management*, 12(5), 203-210.
- Tower, P. (2003). Rewards: The not- so –secret ingredient for managing talent. *HR Focus Review*, 4(2), 3-10.
- Triandis, H. C., & Suh, E. M. (2002). Cultural influences of personality. *Annual Review of Psychology*, 53(6), 133-160.
- Tulacz, G. J. (2000). The top 400 contractors: Business before celebrations. *Engineering Review*, 2(8), 82-93.
- Turnbull, P., & Wass, V. (1998). Neither rhetoric nor reality: A rejoinder to Renwick. *Industrial Relations Journal*, 29(4), 316-337.
- Ugboro, I.O., & Obeng, K. (2000). Top management leadership, employee empowerment, job satisfaction and customer satisfaction in TQM organization: An empirical study. *Journal of Quality Management*, 14(2), 105-115.
- Ulrich, D. (1997). Measuring human resources: An overview of practice and prescriptions for results. *Human Resource Management Journal*, *36*(3), *303-320*.
- Van Vianen, A. E. M. (2000). Person organization fit: The match between new comers and recruiters preferences for organizational cultures. *Personnel Psychology*, 53(2), 113-122.
- Vareta, N. (2010). *Importance of human resource planning in organizations available* at www.oppapers.com accessed on 12th August 2012
- Von Krogh, G., Ichizo, K., & Nonaka, I. (2000). Enabling knowledge creation: How to unlock the mystery of tacit knowledge and release the power of innovation. Oxford: Oxford University Press.
- Walker, J. W. (1992). *Human resource strategy*. New York: McGraw-Hill.

- Walker, J.W. (2001). *Perspectives of Human Resource Planning*. Boston: Harvard University Press.
- Walsh, P. (2009). *Global trends in higher education: Adult and distance learning*. Oslo: International council publishers
- Warr, P. (2009). Environmental vitamins, personal judgments work values and happiness. The oxford handbook of organizational well-being. Oxford: Oxford University Press.
- Watson, W. (2001). *Employee commitment and the bottom line*. Bethesda, MD: Watson Wyatt Publishers.
- Wayne, S., Shore, L., & Liden, R. (1997). Perceived organizational support and leader-member exchange. *Academy of Management Journal*, 15(4), 82-111.
- Weiss, D. S., & Finn, R. (2005). HR metrics that count: Aligning human capital management to business results. *Human Resource Planning Review*, 28(1), 33-44.
- Wetland, D. (2003). The strategic training of employees' model: Balancing organizational constraints and training content. *Advanced Management Journal*, 7(3), 14-57.
- Wiens-Tuers, B. A. (2001). Employee attachment and temporary workers. *Journal of Economic Issues*, 9(5), 5-18.
- Whitener, E.M. (1997). The impact of human resource activities on employee trust. Human Resource Management Review, 7(2), 389-404.
- Willis, C. (2000). Go for your goals. Working Woman Review, 5(3), 6-17.
- Woodall, J., & Winstanley, D. (2001). The place of ethics in HRM, in Storey, J. (Ed.). Human resource management: A critical text (2nd Ed.). London: Thomson Learning.
- Wright, P.M., & McMahan, G.C. (1992). Theoretical perspectives on strategic human resource management. *Journal of Management*, 14(3), 295-320.
- Wright, P.M., & Snell, S. A. (2002). Highlights of the human resource planning Society's 2002 State-of-the Art and Practice Study: Managing strategic, cultural and HRM alignment to maximize customer satisfaction and retention. *Human Resource Planning, Journal*, 7(5), 45-55.
- Wright, T. A. (2010). More than meets the eye: The role of employee well-being in organizational research in Linley, P. A., Harrington, S. & Garcea, N. (Eds.). Oxford handbook of Positive Psychology and work. Oxford: Oxford University Press.

- Zahidi, N. Z., & Afzanizam, A. R. (2009). *Making the right moves*. Kuala Lumpur: Malaysian Rating Corporation Press.
- Zeffare, R., & Mayo, G. (1994b). The strategic human resource management challenge of the 1990s. *Management Decision*, 32(9), 5-16.
- Zell, D. (2003). Organizational change as a process of death, dying and rebirth. *The journal of applied behavioral science*, 39(1), 73-87.
- Zidan, S. S. (2009). The role of HRD in economic development. *Human Resource Development Quarterly*, 12(4), 437-452.
- Zula, K., & Chermack, T. J. (2008). Development and initial validation of an instrument for human capital planning. *Human Resource Development Quarterly*, 19(1), 7-33.

APPENDICES

Appendix 1: Introduction Letter

Kepha Ombui Andrew

P.O.Box 57811 – 00200

NAIROBI

Dear Respondent,

I am a student at Jomo Kenyatta University of Agriculture and Technology

pursuing a PhD in Human Resource Management. I am conducting a study on the

influence of human resource management practices on the performance of

employees in Research Institutes in Kenya. Performance of employees has

become a major challenge in many organizations in the 21st century. This study

will help to investigate how human resource management practices influence

employee performance in organizations especially in Research Institutes.

Your organization has been identified to participate in this study. I would like to

request for your co-operation in completing the attached questionnaire. The

questions seek your opinions regarding your organization's human resource

management practices in relation to employee performance. Please note that there

is no right or wrong answers. I simply want your honest opinions.

This questionnaire does not require you to personally identify yourself. Your

information will remain anonymous and confidential and will strictly be used for

academic purposes only.

Thank you for your participation in this study and May God bless you.

Yours faithfully,

Kepha Ombui Andrew

239

Appendix 2: Questionnaire

THESIS TITLE: INFLUENCE OF HUMAN RESOURCE MANAGEMENT PRACTICES ON THE PERFORMANCE OF EMPLOYEES OF RESEARCH INSTITUTES IN KENYA

SECTION 1: RESPONDENT PROFILE

1. Name of the organiz	ation
2. Gender	
Male	
Female	
(Tick where applicable	e)
3. Category of employ	/ee
Scientific	
Technical	
Administrative	
(Tick where applicable	e)

4. Age of respondent	
20 – 25	
26 – 30	
31 – 35	
36 – 40	
Above 41 years	
(Tick where applicable)	
5. Highest level of educa	ition
Certificate	
Diploma	
Degree	
Masters	

PhD

(Tick where applicable)	
Others (specify)	
6. Length of service	
1 -5 years	
6 – 10 years	
11 – 15 years	
16 – 20 years	
Above 21 years	
(Tick where applicable)	
7. Position held	
8. Duties and responsibil	lities

SECTION II: INFORMATION ON THE INFLUENCE OF HUMAN RESOURCE MANAGEMENT PRACTICES ON THE PERFORMANCE OF EMPLOYEES OF RESEARCH INSTITUTES IN KENYA

The following statements relate the way in which you perceive the human resource management practices in your organization. For each statement, you are asked to mark an X in the box that best describes your response where;

- 1. is strongly disagree
- 2. is disagree
- 3. is neither agree nor disagree (Neutral)
- 4. is agree
- 5. is strongly agree

RECRUITMENT AND SELECTION

Recruitment and selection is a critical component of HRM practices. It enables an organization to attract perspective employees from within the organization and the labour market and also ensures that the right people are selected to occupy vacant positions. You are, therefore, requested to provide an objective opinion that best describes your response in the following statement by marking X.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
1	The organization recruits immediately positions are declared vacant.					
2	The organization fills vacant positions both from internal sources and external sources.					
3	The organization has a policy which guides in recruitment activities.					
4	The staff are made aware of an existing vacancy or vacancies.					
5	The employees are involved in making decisions regarding employment.					
6	There is transparency in the short listing of job					

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
	candidates.					
7	All divisional/departmental heads are involved in the selection process.					
8	Only candidates with the relevant skills are considered during the selection process.					
9	The organization does not encourage the influence of external forces during the selection process.					
10	The organization takes into consideration affirmative action during the recruitment and selection of staff					
11	The organization acknowledges all application letters as a sign of seriousness on its part					

Suggest anization.	possible	ways	of	improving	recruitment	and	selection	in	the
	 							-	

B. TRAINING AND DEVELOPMENT

Training and development enables an organization to have the relevant skills it requires to attain its objectives. Organizations with good training and development programme have a competitive edge since they are able to innovate. For each of the following statements, you are kindly requested to mark X which best describes your response.

Т				T	T		_
		Strongly disagree	Disagree	Neutral	Agree	Strongly	agree
		1	2	3	4	5	
1	People are properly oriented and trained upon joining the organization.						
2	The organization does provide regular opportunities for personal and career development.						
3	Innovation and creativity are encouraged in the organization.						
4	The organization has career development activities that help an employee identify /improve abilities, goals, strengths and weaknesses.						
5	The organization accords equal training opportunities for all cadres of staff.						
6	After formal training, the organization recognizes the employees' efforts.						
7	The organization has put in place well elaborate development programs (such						

T						
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
	as workshops and seminars) aimed at improving the performance of employees					
8	The workshops and seminars organized by the organization are relevant to the needs of the organization					
9	The organization workshops both within and outside its premises					
10	The organization embraces both on the job and off the job trainings					
11	There is an elaborate policy in the organization to guide on training and development activities					
12	The organization has set up a committee that reviews and evaluates training needs assessment					
13	The is a budget set aside in the organization to cater for training and development activities					

Suggest possible ways in which training and development can be improved in organization.

C. REWARD SYSTEM

A reward system in an organization is a critical component of HRM practices. This is because it will determine the extent to which an organization is able to motivate its employees as well as staff retention. You are, therefore, requested to provide an honest opinion that best describes your response in the following statements by marking X.

		Strongly	disagree	Disagree	Neutral	Agree	Strongly	agree
		1		2	3	4	5	
1	Employees are given positive recognition when they produce high quality work.							
2	The organization pays well.							
3	The organization offers good benefits package compared to other organizations.							
4	The organization values individual excellence over team work.							
5	The organization offers good opportunities for promotion.							
6	Employees in the organization are given salary increments when they meet their targets.							
7	The employees who perform are the ones who are highly paid.							
8	There is fairness in the manner in which the reward system is managed in the organization.							

9. Suggest possible ways in which the reward system can be improved in the organization.

D. HUMAN RESOURCE PLANNING

Human resource planning is a critical component of HRM practices because it helps organizations to have the right people in the right numbers at the right place and at the right time. An organization can only have the desired level of staff if there is a proper human resource planning in place. You are kindly requested to provide an honest opinion that best describes your response in the following statements by marking X.

		Strongly	disagree	Disagree	Neutral	Agree	Strongly agree
		1		2	3	4	5
1	Staff replacements in the organization are done immediately an employee leaves the organization.						
2	The organization determines in advance the positions that are to be vacant.						
3	The organization has an ideal number of staff required to perform its functions.						
4	The skills acquired by staff in the organization determine their area of deployment.						
5	There is an elaborate succession planning in the organization.						

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
6	The organization has put in place a human resource plan that helps it in achieving its goals					
7	The human resource plan in the organization takes into account relevant labour legislations					
8	The organization has elaborate plans for all its labour requirements					
9	The human resource plan in place supports the organization's mission, vision and values					

ggest possible ways in which human resource planning can be improved anization.

in

E. STAFF WELFARE

Staff welfare improves employee productivity in an organization. Organizations with good staff welfare schemes have witnessed increased employee productivity as well as low labor turnover. You are kindly requested to provide an honest opinion that best describes your response in the following statements by marking X.

		- Strongly disagree	Disagree 2	Neutral Sector 1	4 Agree	Strongly agree
1	The Organization has put in place staff welfare programs.					
2	The staff welfare programs in the organization motivate employees.					
3	The Welfare facilities in the organization are easily accessed by all employees.					
4	The employees in the organization are involved in formulation of staff welfare policy.					
5	The organization accords all employees equal treatment on matters related to staff welfare.					

6	There is adequate budget in the organization to cater for staff welfare programs.					
	iggest possible ways in ization.	which sta	.ff welfare	e can be i	mproved in	the
	ovide a general comment	on human	resource n	nanagement	practices in	n the
	ization. 					

F. EMPLOYEE PERFORMANCE

Employee performance in an organization is very critical because it makes it possible to achieve the organizational desired goals. It is also important because it enhances organizational corporate image. For each of the following statements, you are kindly required to mark X which best describes your response.

		Strongly	disagree	Disagree	Neutral	Agree	Strongly	agree
		1		2	3	4	5	
1	The work performed by employees in the organization is of high quality.							
2	Employees in the organization usually meet deadlines while accomplishing their tasks.							
3	The cost of work performed has some degree of control over costs.							
4	The employees in the organization achieve their specified targets.							
5	The rate of absenteeism by employees in the organization is low.							
6	Employees in the organization are creative and innovative.							
7	The employees in the organization are encouraged to appraise themselves.							
8	Employees in the organization are aware of the organizational objectives, mission statement, vision and objectives it intends to achieve.							

Thank you for your co-operation.

Appendix 3: List of Government owned research institutes in Kenya

- 1. Kenya Agricultural Research Institute(KARI)
- 2. Kenya Forestry Research Institute (KEFRI)
- 3. Kenya Industrial Research and Development Institute(KIRDI)
- 4. Tea Research Foundation (TRF).
- 5. Kenya Sugar Research Foundation (KESREF).
- 6. Kenya Medical Research Institute (KEMRI).
- 7. Coffee Research Foundation (CRF).
- 8. Kenya Marine and Fisheries Research Institute (KEMFRI).

Source: Kenya National Bureau of Statistics (2013)