

**INFLUENCE OF HUMAN CAPITAL MANAGEMENT PRACTICES ON EMPLOYEE
ENGAGEMENT IN PUBLIC UNIVERSITIES IN WESTERN KENYA**

BY

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DECLARATION

I declare that this project is my original work and to the best of my knowledge has not been presented to any other University or any institution of higher learning for the award of any degree.

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Declaration by the Supervisor

This project has been presented for examination with my approval as the University supervisor.

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DEDICATION

I dedicate this project to the entire Shihafu's family in memory of my late grandparents, whom I believe are observing this accomplishment from beyond. Specifically, to Ms. Antonina Shihafu. You have been a guardian angel to me, more than a mother and aunt. You laid my foundation and all a long you have been watering and cultivating my destiny. Thank you for believing in me with your unwavering faith and love which has always led me to higher grounds.

ABSTRACT.

Turnover in public universities in Kenya has become a high profile issue due to the changes and challenges that face the entire education system. Despite the economic contribution of 6.7% Gross Domestic Product by public universities in Kenya, the 2013 Public Universities Inspection Committee of Kenya reported that these institutions were experiencing high turnover rates of 33% compared to other sectors in the economy resulting to poor employee engagement. Moreover, the 2013 World Economic Forum reported that globally, the economy was experiencing talent scarcity hindering economic growth and development. With regard to this, studies have been conducted around the concept of human capital management practices though majority of them attempted to link human capital management practices to performance. Moreover, most of them were conducted in foreign countries hence their results could not be generalized to Kenyan context. The few done in Kenya focused on other sectors and not public universities. Further they did not address career growth and development, internal communication, performance appraisal and recognition; and employee health and safety practices. The purpose of this study was to determine the influence of human capital management practices on employee engagement in public universities in western Kenya; a region with relatively many newly created public universities. Specific objectives were to determine the influence of career growth and development, internal communication, performance appraisal and recognition; and employee health and safety practices on employee engagement. The study anchored on human capital theory and expectancy theory. Correlational design was used targeting 5,747 permanent employees. Cluster, proportionate and simple random sampling were used to pick 373 respondents out of which 290 (77.7%) responded. Primary data was collected using self-administered structured questionnaires while secondary data was collected by reviewing human resource audit reports and performance contract reports. 37 respondents (10% of the sample) were involved in the pilot test and the results showed Cronbach's Alpha coefficient between 0.708 and 0.859. Validity was ensured through expert review. Descriptive statistics represented extent of the practices while regression analysis evaluated potential relationships and the findings were presented in tables. The findings revealed 17.8% variation in employee engagement in public universities in western Kenya was accounted for by the combined influence of human capital management practices ($R^2 = 0.718$, $p=0.000$). Further, it was revealed that the four practices of human capital management under study had a positive influence on employee engagement in public universities in western Kenya. (Career growth and development $\beta=0.161$, $p=.000$; Internal communication, $\beta=0.339$, $p=.00$; Performance appraisal and recognition $\beta=0.219$, $p=.001$; and employee health and safety $\beta=0.209$, $p=.000$). The study concluded that there could be other factors contributing to engagement of employees in public universities in western Kenya other than the ones investigated hence need for further study to establish such factors. The results could be of use to policy makers in public universities and other sectors of the economy besides providing new knowledge on the influence of human capital management practices on employee engagement in public universities in western Kenya.

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LIST OF ABBREVIATIONS AND ACRONYMS

GOK	Government of Kenya
GPHA	Ghana Ports and Harbor Authority
HCM	Human Capital Management
HCT	Human Capital Theory
IT	Information Technology
JOOUST	Jaramogi Oginga Odinga University of Science and Technology
MMUST	Masinde Muliro University of Science and Technology
MSU	Maseno University
NSSF	National Security Fund
NSTL	National Science and Technology Library
OCB	Organizational Citizen Behavior
OJT	On- the Job Training
OSH	Occupational Health and Safety
SHMS	Safety and Health Management Systems
SPSS	Statistical Package for Social Sciences
USA	United States of America
WHO	World Health Organization

OPERATIONAL DEFINITION OF TERMS

Human Capital- Refers to the stock of productive skills and technical knowledge embodied in labor

Human capital management - Refers to the process of upgrading the existing skills of an employee and extracting the best out of him or her.

Employee engagement - The degree to which employees are ascribed as aligned and committed to their organizations; such that they feel valued, and experience organizational citizenship.

Career growth and development – Is a series of formal activities designed and managed by public universities to influence the career progression of one or more employees in line with their terms of service.

Employee retention- The maintenance of employment status of employees by university management for a considerable long period of time

Employee turnover – The intentions of employees to leave public universities to other organizations for whatever reason.

Performance appraisal and recognition – The formal system used by public universities to periodically evaluate its employee performance and consequently appreciating good performers

Internal communication - The exchange of information both formal and informal between management and employees within public universities in Kenya.

Employee health & safety - Relates to health, safety and welfare issues in the workplace

CHAPTER ONE

INTRODUCTION

This chapter presented the background to the study, statement of the problem, research objectives, research hypothesis, scope of the study, justification of the study, and conceptual framework of the study.

1.1 Background to the study

The concept of human capital management is getting wider attention globally with increasing globalization and the saturation of the job market due to the recent downturn in the various economies of the world. According to the 2015 Global Human Capital Trend report, heightened corporate transparency, greater workforce mobility, and severe skills shortages; had led to emergence of organizational culture, employee engagement, and retention as top issues for business leaders. Moreover, World Economic Forum 2013 also reported that the global economy had entered an era of talent scarcity, and if left unaddressed, would hinder economic growth and development worldwide. It is therefore imperative for organizations through the employment process, not only to attract quality employees to the organization but also ensure that they are engaged fully to the organization. More importantly managers need to devise human capital management practices which can help to retain the skilled and talented employees in service for quite a longer period in order to benefit from the investment already made in them.

According to Saint (1992), universities in Africa continue to achieve significant accomplishments, including the ability to maintain or increase their staff complements. Amonoo-Neizer, (1998) argued that attracting and retaining competent staff was the biggest problem in African Universities. The brain drain syndrome has affected African universities in terms of migration of well and highly trained professionals from the continent. As a result, many African universities have been left with young, inexperienced and insufficiently trained staff. According to Olusola (2007) from the International Organization for Migration, Africa has been losing 20,000 professionals each year since 1990. This continuous outflow of skilled labor contributes to a widening gap in science and technology between Africa and other continents. Since independence, Kenya's higher education has been progressing steadily leading d to the rapid growth in the number of public universities in the country. Western Kenya is one of the

major regions with relatively many newly created public universities in the recently 10 years. These universities if well managed, have the potential for driving socio-economic development in the region and consequently increasing Kenya's Gross Domestic Product. The Human Development Report (2013), indicated that Kenya's Human Development Index (HDI) value for 2012 was 0.519, representing an increase of 22% from 0.424 in 1980. Thus, the role of public universities in provision and development of manpower required for the social- economic and technological advancement in Kenya is crucial. Universities are known to be repositories of the most specialized and skilled manpower. They serve as storehouses of knowledge for nurturing the manpower needs of the nation.

The expansion and diversification of higher education in Kenya especially in Western region has strained available resources. Notwithstanding, employee turnover has become a pertinent challenge in these institutions. According to 2013 Public Universities Inspection Committee of Kenya report, public universities were experiencing high turnover rates of 33% compared to other sectors in the economy. Such challenges were essentially linked to infrastructural support, remuneration packages, leadership styles and cultures within the institutions (Abduljlil, Yazam and Ahmid, 2011). According to Waswa et al, 2008, highly skilled and qualified employees had secured better jobs abroad, others poached by organizations that provided them with better remunerations and other benefits.

Studies have been conducted on the subject of human capital management practices. Such studies include those by Mwema and Gachunga (2014), Mollel, Mulongo and Razia. (2017), Nadeem et al (2013), Wanjala, (2015), Womoh et al. (2013), Makhamura and Simiyu (2016), Ihaenacho and Ebitu (2016), Munjuri, K'Obonyo, and Ogutu (2015), and Nzuve et al., (2012). Unlike this study, all the above studies were contextualized on human capital management practices; and employee or organizational performance and not employee engagement.

Other studies like Odhong et al., (2014), Nzuve et al., (2012), Bontis and Serenko (2007); and Ariga and Brunello (2009) have also reported on the subject of career growth and development. However, none of them addressed employee engagement specifically. More studies have been conducted on the subject of internal communication and employee performance in various

organizations. For instance, Nzuve and Bundi (2012), Mishra et al., (2014); Hayes (2002) and Asamu (2014). None of these studies addressed internal communication and employee engagement in public universities, in western Kenya.

Other studies for example, Nadeem et al (2013, Mwema and Gachunga (2014), Mollel. Mulongo and Razia (2017) and Wanjala, (2015) reported on performance appraisals and recognition practices. Their studies however were more inclined towards employee and organizational performance and not employee engagement. Moreover, they were not conducted in public universities in western Kenya. More research has also been conducted on the subject of employee health and safety. For instance, Womoh et al. (2013), Makhamara and Simiyu (2016), Ihaenacho and; Ebitu (2016). These studies however did not address the issue of employee health and safety in relation to employee engagement in public universities in Kenya.

1.2 Statement of the problem

The 2013 Human Development Report indicated that Kenya's Human Development Index (HDI) value for 2012 was 0.519, representing an increase of 22% from 0.424 in 1980. This indicated that the role of public universities in provision and development of manpower required for the social- economic and technological advancement in Kenya is crucial. Despite such social-economic importance of public universities Kenya, employee turnover has remained one of the most critical issues facing these institutions. A report by Public Universities Inspection Committee of Kenya 2013 indicated that public universities were experiencing high turnover rates of 33% compared to other sectors in the economy. This challenge was essentially linked to infrastructural support, remuneration packages, leadership styles and cultures within the universities. The massive shift of highly qualified and skilled university employees to other sectors in the economy and abroad consequently possess a threat to quality of services provided by these institutions. Studies have been conducted around the concept of human capital management practices, although most of them were carried out in foreign countries. The few ones conducted in Kenya attempted to link human capital management practices and employee or organizational performance and not employee engagement. Moreover, they were conducted in totally different industries from the present study. Prior studies majorly focused on different aspects of human capital management practices such as leadership, knowledge accessibility,

workforce optimization, recruitment and selection, collegial and flexible workplace practices, rewards and accountability, and organizational learning capacity practices. None of the studies embraced career growth and development, internal communication, performance appraisal and recognition; and employee health and safety practices. Therefore, there is no empirical evidence on the influence of human capital management practices on employee engagement in public universities in western Kenya. Knowledge is hence lacking.

1.3 Research objectives

The overall objective of the study was to establish the influence of human capital management practices on employee engagement in public universities in western Kenya. The study specifically intended to achieve the following objectives:

1. To establish the influence of career growth and development practices on employee engagement in public universities in western Kenya.
2. To determine influence of internal communication practices on employee engagement in public universities in western Kenya.
3. To ascertain the influence of performance appraisal and recognition practices on employee engagement in public universities in western Kenya.
4. To determine influence of employee health and safety practices on employee engagement in public universities in western Kenya.

1.4 Research hypothesis

The following research hypotheses were designed to aid in establishing the influence of human capital management practices on employee engagement in public universities in western Kenya:

- H₁. Career growth and development practices have significance influence on employee engagement in public universities in western Kenya.
- H₀. Internal communication practices do not have significance influence on employee engagement in public universities in western Kenya.
- H₂. Performance appraisal and recognition practices have significance influence on employee engagement in public universities in western Kenya.
- H₀. Employee health and safety practices do not have significance influence on employee engagement in public universities in western Kenya.

1.5 Scope of the study

The study was a cross sectional, conducted in six accredited public universities in western Kenya. Kenya has twenty-two (22) Public Universities as per the commission of university education report, 2017 (Appendix 3). Public universities in Western region of Kenya are Jaramogi Oginga Odinga University of Science and Technology, Masinde Muliro University of Science and Technology, Kibabii University, Kisii University, Rongo University, and Maseno University. This study was driven by the report of the Public Universities Inspection Committee of Kenya, 2013 which indicated that public universities in Kenya were experiencing high turnover rates of 33% compared to other sectors of the economy. Western Kenya is one of the regions with relatively many newly created public universities, whose growth if well managed, could successfully drive socio-economic development and increase Gross Domestic Product in the country.

1.6 Justification of the study

The results of the study could be helpful to policy makers in institutions of higher learning as it gives insights into the various human capital management practices considered as drivers for employee engagement. The recommendations of the study could be helpful to human resource managers in other sectors in increasing their investment in attracting, maintaining and retaining the best talents in their organizations thus winning employee engagement. Human Resource practitioners could also gain an understanding of how critical the development of human capital is to their organizations, and therefore recommend strategies to fast track the development of human capital as a source of competitive advantage for organizational citizenship. This study also intended to fill the gap in the body of knowledge in the practice of human capital management with regard to employee engagement in public Universities in western Kenya.

1.7 Conceptual framework

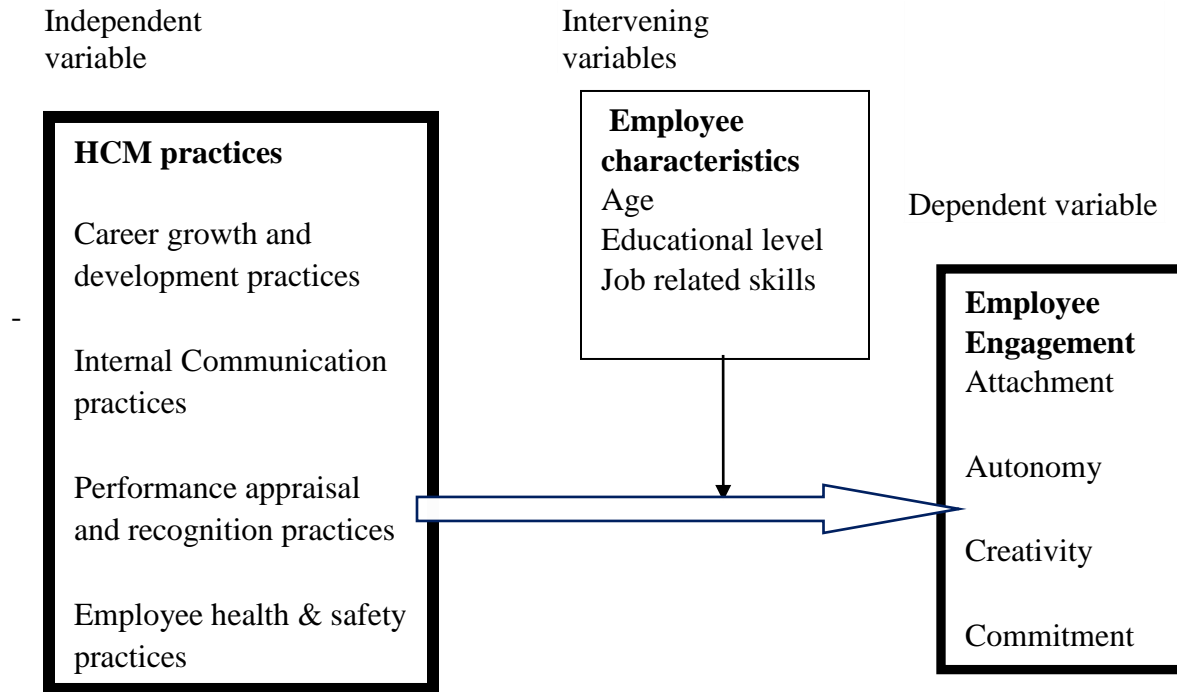


Fig 1.1: Conceptual framework of influence of human capital management practices on employee engagement

Source: Adapted from West and Dawson (2012); and Graeme and Higgins (2007)

According to Young (2009), conceptual framework is a diagrammatical representation showing the relationship between dependent variable and independent variables. In this study, the conceptual framework above indicated that human capital management practices (career growth & development practices, internal communication practices, performance appraisal and recognition practices; and employee health & safety practices) were expected to influence the level of employee engagement indicated by attachment, involvement, creativeness and commitment. Further, employee characteristics with regard to age, level of education and job related skills intervened in the relationship between human capital management practices and employee engagement.

CHAPTER TWO

LITERATURE REVIEW

This chapter reviewed relevant literature both theoretically and empirically related to the key variables in the study. The review began by examining the theoretical literature, followed by a review of empirical studies.

2.1 Theoretical review

The study was anchored on human capital theory and expectancy theory.

2.1.1 Expectancy theory

The expectancy theory was proposed by Victor Vroom in 1964. The theory states that the intensity of a tendency to perform in a particular manner is dependent on the intensity of an expectation that the performance will be followed by a definite outcome and on the appeal of the outcome to the individual. This theory holds the view employees tend to quit employment if their expectations are not met by employer. Failure for an organization to realize employee's expectation leads to low commitment, low morale and eventually employees will leave the job. Employers need to treat employees well, provide better salary, allowances among others, (Vroom, 1964).

According to turnover and retentions frameworks developed from this theory, decision to stay or leave an organization by employees can be explained by examining relationships between structural, psychological, and environmental variables. Structural variables include, work environment, autonomy, communication, distributive justice and workload. Psychological variables include job satisfaction and organizational commitment and the environmental variables include availability of job opportunities. (Johnsrud and Rosser, (2002); Zhou and Volkwein,(2004); Daly and Dee, (2006).

Basing on the idea of expectancy theory, the study was made aware of the fact that employees join organizations with expectations, and if these expectations are met they remain loyal to the organization. Therefore, this theory guided the study in investigating the extent of human capital management practices in relation to employee engagement in public universities in Kenya.

2.1.2 Human capital theory (HCT)

Human Capital theory was first proposed by Schultz in 1961 and extensively developed by Becker in 1964. The two researchers' viewed human capital in different yet close points of views. Schultz analyzed the utilization of instruction as a type of venture whereas Becker viewed human capital development as the rate of come back to put resources into training.

Human capital theory is associated with the resource-oriented perspective of the organization, as described by Barney (1991). According to this view, organizational performance is a function of how well managers build their organizations around resources that are valuable, rare, and cannot be imitated or substituted by its rivals in the market. Every organization therefore tries to find rare resources that are impossible to imitate, copy or replaced. There are arguments that imply the organizations' stock of knowledge is its ultimate resource for instance the resource that ensures or maintains competitive advantage. Therefore, human resources in any organization are equivalent to human capital, because they carry the knowledge that is difficult to replace or imitate (Manolescu, 2003).

According to this theory, it is the key competences, skills, knowledge and abilities of the workforce that contributes to organizational performance. Human resource managers in public universities should therefore recognize and nurture their human resources since they possess competences, skills and knowledge that is valuable, rare and non- substitutable. Moreover, this theory helped to shed light on human capital management practices which could be adopted by the university management so as to achieving employee engagement and gain competitive advantage.

2.2 The concept of Human Capital Management (HCM)

The concept of human capital was first developed in 1961 by Theodore Schultz and later improved by Becker in 1964. According to Schultz all human abilities were regarded as either innate or acquired. He further stated that attributes which were valued and could be augmented by appropriate investment were human capital. Based on the analyses on a large quantity of case studies, he illustrated that human resources were one of the foremost resources while investment in education and training as the main component of human resource investment. Becker on the

other hand recognized the significance of human capital as a dedicated research subject. He thought that investment in human capital came from all investments to improve human resource, and monetary income and consumption. He further pointed out that organizations could manage and invest in human resource in order to further grow such human capital, recognizing higher potential of employee contribution. Such investment would result in higher employee productivity and organizational performance.

Human capital is defined differently by different researchers. According to Odhong et al., (2014), human capital was characterized as the consolidated insight, abilities and aptitude that give the association its particular character. Afiouni, (2013) defines human capital (HC) as a method for clarifying the benefits of putting resources into instruction on a national scale. Bontis et al., (2002), also argued that human capital is formed by aptitudes, competences, experiences and skills of internal members of the organizations. Lepak and Snell (1999), on the other hand define human capital from an organizational perspective, as the result of an organizational deliberate investment through the selective hiring of employees with high general skills or formal education plus an organizational investment in training of more specific skills through in-house training activities.

The concept of human capital management has been viewed from different perspectives by different researchers. The first viewpoint was based on the individual aspects. Schultz recognized human capital as something akin to property, against the concept of labor force in the classical perspective, and conceptualized the productive capacity of human beings in now vastly larger than all other forms of wealth taken together. Most of researchers accepted his thought of viewing the capacity of human as being knowledge and skills embedded in an individual (Beach, 2009). Similar to his thought, other researchers also showed that human capital could be closely linked to knowledge, skills, education, and abilities. For instance, Gavaran et al., (2011) thought that human capital concentrated on two primary parts which were people and association. He additionally brought up that human capital had four key traits which were; adaptability and flexibility, improvement of individual capabilities, the advancement of hierarchical skills and individual employability. Each of these qualities creates and increases the value of individual and association results.

The second viewpoint was on human capital itself and the accumulation process of it. This perspective stressed on knowledge and skills obtained throughout educational activities such as compulsory education, post-secondary education, and vocational education. However, this perspective neglected that human being would acquire knowledge and skills through their own experiences (Gavaran et al. 2011).

The third viewpoint was linked to the production-oriented perspective of human capital. Rosen (1999) states the human capital is an investment that people make in themselves to increase their productivity. Frank and Bemanke et al. (2007), human capital is an amalgam of factors such as education, experience, training, intelligence, energy, work habits, trustworthiness, and initiative that affect the value of a worker's marginal product. Considering the production-oriented perspective, human capital is the stock of skills and knowledge embodied in the ability to perform labor so as to produce economic value (Sheffin, 2003).

Kenya is moving towards a learning economy where interests in intangible resources are viewed as crucial components to esteem creation in and productivity. Human capital mirrors the total aggregate attitudes, experiences, learning and innovativeness of individuals; standing out as the spine of the intangible resources and as a crucial asset considered as a fundamental component in organizational development. In light of this, university policy makers and human resource managers ought to be much keener on their human resources as their most essential resource in recuperation of economic stability and attaining growth. Therefore, they must invest their time, money, and energy on human capital management practices that can help win their employees' engagement.

2.3 The concept of employee engagement

Employee engagement emanated from the work of Kahn in 1990 and refers to the positive psychological conditions that lead employees to invest themselves actively in their role and organization. Kahn recognized employee engagement as a vital element in determining the extent of organizational effectiveness, innovation and competitiveness as it involved creating prospects for employees to attach with their managers, colleagues and organizations. Baumruk

(2004) contended that every organization wanted to gain competitive advantage and the best tool for achieving it was employee engagement.

Many researches have tried to identify factors leading to employee engagement and developed models to draw implications for managers. Their diagnosis aimed at determining the drivers of employee engagement level. According to West and Dawson (2012), employee engagement refers to a psychological state (involvement, commitment, attachment, mood), a performance construct (either effort or observable behavior, including pro-social and organizational citizenship behavior), a disposition (positive effect), or some combination of these. Robinson et al. (2004) defined employee engagement as a positive attitude held by the employee towards the organization and its value. According to Robinson and his counterparts, engaged employees were aware of business context, and works with colleagues to improve performance within the job for the benefit of the organization. Engaged employees usually had a strong emotional bond towards their organization which usually results in higher productivity levels and good performance.

LePine, Erez, & Johnson (2002) argued that engaged employees took additional responsibility, invested more effort in their jobs, shared information with other employees and remained with the organization than employees who were less engaged. Bloom and Michael (2002) indicated that although the primary focus of engagement efforts had mostly been on team-building programs and nonfinancial rewards, egalitarian pay structures had been found to be related to employee cooperation, involvement, satisfaction and commitment; all of which had been used as proxies for employee engagement.

Although the concept of employee engagement shares aspects with other work-related disciplines such as job satisfaction, job involvement and organizational commitment, a growing number of researchers have shown engaged employees value, enjoy and have pride in their work and are more willing to help each other and the organization succeed. Thus, the organization must work to develop and nurture engagement, which requires a two-way relationship between employer and employee. Engagement is consistently shown as something given by the employees who can benefit the organization through commitment and dedication, advocacy, discretionary effort, using talents to the fullest and being supportive of the organization's goals

and values. Engaged employees feel a sense of attachment towards their organization, investing themselves not only in their role, but in the organization as a whole.

2.4 Empirical literature

This section discusses in detail the literature on human capital management practices which include career growth and development practices, internal communication practices, performance appraisal and recognition practices; and employee health and safety practices on employee engagement.

2.4.1 Influence of career growth and development practices on employee engagement

Ariga and Brunello (2009) conducted a study on Thai employees to investigate the relationship between education and employer- provided training, both on-the-job and off-the-job. Using a unique dataset, the researchers found a negative and statistically significant relationship between educational attainment and on-the-job training (OJT) and a positive and statistically significant relationship between education and off the-job training.

Ravi et al., (2013) also did a study on human capital investments and employee performance in IT services industry to examine whether human capital investment directed towards employee training was effective in improving employee performance. Using a dynamic panel model, the study identified a significant positive impact of training on employee performance. A unit increase in training is linked to a 2.14 per cent increase in an employee performance. The study also found that general training which an employee can utilize outside the focal firms improved employee performance.

Nzuve et al., (2012) conducted a study to determine the extent to which Kenya National Security Fund (NSSF) had adopted the HCM practices. The study used the case study design that was based on a target population of 98 management staff in the human resource and administration department. Both content and quantitative analysis were used to analyze data. The researcher found that NSSF had implemented HCM practices like enhancing the organization's capacity through staff training and development and setting of clear performance standards, but to a negligible extent.

Munjuri, K'Obonyo and Ogotu (2015), conducted a study to establish whether the influence of human capital on the performance of insurance firms and commercial banks in Kenya was being moderated by employee empowerment. Their study adopted a descriptive cross-sectional survey design and a census survey was carried out on Human Resources Managers. Descriptive statistics were computed for organizational data and the findings revealed that employee empowerment did not moderate the influence of human capital on firm performance, but rather had a mediating effect. The study recommended that organizations to be keen on increasing the level of employee empowerment because contributions by engaged employees were believed to have a significant impact on business productivity, revenue and the organization's overall effectiveness. Empowerment largely depends on the knowledge and skills that employees possess because this influences the quality of decisions that they make. Upon building a high human capital base, such highly skilled workers should be empowered to make the decisions that they can handle.

Bontis and Serenko (2007), investigated on the moderating role of human capital management practices on employee capabilities of Knowledge Management in North American financial service institutions. The main purpose of their investigation was to suggest and empirically test a model that explained employee capabilities from the knowledge-based perspective. Their findings provided support for the proposed model and showed that employee capabilities depended on his or her training and development as well as job satisfaction levels. Job satisfaction in turn is affected by training and development, pay satisfaction, supervisor satisfaction, and job insecurity.

Odhong et al., (2014) carried out a case study on effect of human capital management drivers on organizational performance in investment and mortgage banks in Kenya. The specific objectives of the study were to determine the effect of leadership practices, identify the effect of employee engagement, establish the effect of knowledge accessibility, investigate the effect of workforce optimization and determine the effect of learning capacity on organizational performance. The study concluded that it is possible to use human capital management drivers to benchmark organizational capabilities, identify human capital management strengths and weakness, and link

improvements in specific human capital management practices with improvements in organizational performance and obtain sustainable competitive edge.

Kwenin (2013) conducted a study to explore the link between work environment, career development opportunities and employee retention in Vodafone Ghana Limited. The study used 142 employees, representing 10% of the target population of 1,420. The findings indicated that work environment and career development opportunities had positive relationship with employee retention and thus affect employees' decision to stay in Vodafone Ghana Limited. The implication of the study was that; the management of Vodafone Ghana Limited should provide advancement opportunities to increase employees' career growth to help retain employees. The study also recommended that thriving and friendly environment should be provided at the workplace to make employees more satisfied to remain in Vodafone.

Majority of the prior studies focused on other different variables other than employee engagement. For instance, Ravi et al., (2013) investigated on human capital investments and employee performance. Bontis and Serenko (2007) on the other hand investigated the moderating role of human capital management practices on employee capabilities. Locally, Odhong et al., (2014) investigated on effect of human capital management drivers on organizational performance; Munjuri, K'Obonyo, and Ogutu, (2015) investigated on the influence of human capital on performance of insurance firms and moderated by employee empowerment while Nzuve et al., (2012) determined the extent to which Kenya National Security Fund (NSSF) had adopted the HCM practices. Whereas Munjuri, K'Obonyo, and Ogutu, (2015) study employed employee empowerment as a moderator on the influence of human capital on firms' performance, Bontis and Serenko (2007) on the other hand adopted human capital management practices to moderate employee capabilities. Even though the two studies were conducted under similar industrial set ups, financial institutions, they differ contextually. For instance, Munjuri, K'Obonyo and Ogutu (2015) study was conducted in insurance and commercial banks in Kenya while Bontis and Serenko (2007) study was conducted in North American financial service institutions. While Odhong et al., (2014) and Nzuve et al., (2012) adopted case study designs, Munjuri, K'Obonyo, and Ogutu, M. (2015) adopted a descriptive cross-sectional survey as well as and a census survey.

From the reviewed literature, none of the studies addressed the influence of career growth and development on employee engagement. Majority of the studies focused on determining performance of employees and organizations by incorporating moderating variables in the relationships. Moreover, these studies were conducted in different context far much away from Kenya, thus the results cannot be generalized to Kenyan context. Unlike the present study, prior studies conducted in Kenya, were done under different industry set up such as investment and mortgage banks, insurance firms, commercial banks and IT services industry. There was no evidence of any known study conducted in public universities in western Kenya addressing the influence of career growth and development on employee engagement. Knowledge was therefore lacking on influence career growth and development on employee engagement in public universities in western Kenya.

2.4.2 Influence of internal communication practices on employee engagement

Nzuve and Bundi, (2012) conducted a study to determine the relationship between human capital management practices and performance of Commercial Banks in Kenya. The researchers used a cross sectional survey design as well as a correlation research. The study concluded that the most human capital management practices were in recruitment excellence, collegial and flexible workplace and rewards and accountability. The least used practice was communication integrity. The study further concluded that with the exception of communication integrity, other human capital management practices had a positive influence on turnover growth hence human capital management practices generally have a positive influence on performance as measured by both turnover growth and return on assets.

Another study was conducted by Munjuri, and K'Obonyo (2015) to establish whether the influence of human capital on the performance of insurance firms and commercial banks in Kenya, moderated by social capital. The study adopted a descriptive cross-sectional survey design and a census survey and targeted human resources managers as key respondents. Hypothesis was tested using regression analysis and descriptive statistics computed. The findings revealed that social capital did not moderate the influence of human capital on firm performance, but had a mediating effect. The study concluded that Organizations can enhance their

performance by building their human capital base through rigorous selection procedures and matching the right people with the right jobs. Work experience should be considered alongside academic qualifications during selection. Firms should strengthen their social networks and linkages so as to maximize on resources that may be obtained through such networks. Employees with the relevant knowledge, skills and competencies should be encouraged to obtain and share information through the established social networks to achieve greater synergy in increasing competitiveness.

Asamu (2014) also carried out a study to examine the relationship between communication and employee performance in selected organizations in Lagos State, Nigeria. The study revealed that effective communication creates mutual understanding between management and workers. The study recommended regular communication between managers and employees with direct communication on issues of importance. It also suggested that organizations should work on removing the barriers to communication and create efficient and transparent communication mediums to improve employees' performance.

A study by Hayes (2002) on internal communication in organizations and employee engagement in university of Las Nevada Vegas as conducted. Data was collected through a self-administered questionnaire. The sample was drawn from undergraduate and graduate level university students. The results indicated that organizations could utilize internal communication to improve employee engagement.

Mishra et al., (2014), in their study on the expanded role of internal communication in driving employee engagement, conducted in United States of America (USA). They did an exploratory study where six Public Relations Executives of organizations were interviewed over the telephone to explore the growing role that internal communication plays in employee engagement. The finding was that all the PR Executives interviewed mentioned employee engagement as an important goal of internal communication.

Whereas studies by Hayes (2002), Munjuri and K'Obonyo (2015) and Nzuve and Bundi (2012) used self-administered questionnaires to collect data, Mishra et al., (2014) on the other hand

opted for telephone interviewing. Furthermore, both Munjuri and K'Obonyo (2015); and Nzuve and Bundi (2012) conducted their studies in commercial banks in Kenya, but differed on methodology and results. For instance, Nzuve and Bundi (2012) employed a cross sectional survey design as well as a correlation research contrary to Munjuri and K'Obonyo (2015) who adopted a descriptive cross-sectional survey design and a census survey. Moreover, Mishra et al., (2014); Hayes (2002) and Asamu (2014); were in consensus that that effective communication in organizations creates mutual understanding between management and workers, thus improving performance. Nzuve and Bundi (2012) had a contrary opinion that communication was the least used human capital management practices on performance of Commercial Banks in Kenya. Despite the fact that the study by Hayes (2002) was conducted in a similar setup as the present study (university setup), the results could not be generalized to Kenyan context since it was conducted in a foreign country (university of Las Nevada Vegas). The present study also shifts focus from Hayes, (2002) study on methodology as he targeted university students while this study targeted university employees.

From the foregoing literature review, it is imperative to note that there were limited studies addressing internal communication as a practice of human capital management. The few available studies were conducted in foreign nations and in different industries thus the results could not be generalized to public universities in Kenya. The ones conducted in Kenya contrasted in methodology and industry focus; besides giving contradicting results. There is no evidence of any study which had addressed the influence of internal communication on employee engagement in public universities in western Kenya. Thus, there was lack of knowledge in this area.

2.4.3 Influence of performance appraisal and recognition practices on employee engagement

Mwema and Gachunga (2014) conducted a case study on effects of performance appraisal on employee productivity in the World Health Organization (WHO) offices based in Kenya in East Africa (Kenya, Somalia and Sudan). They used descriptive design; and targeted a sample of 105 employees. Regression analysis was adopted to establish the effects of performance appraisal on employee productivity. From their findings, the study concluded that organizations should

appraise their employees often through utilized targets, accomplishments, organization goals, time management and efficiency for performance measure purposes as it would lead to increase in employee's productivity. The study concluded that organizations should establish and adopt performance appraisal systems to aid in providing opportunities to the management in identifying staff training needs, help employees meet performance targets, offer poor performers a chance to improve, help employees on time management through planning and setting of deadlines, enable managers to make informed decisions about promotions and assignments based on applicable facts, improve employee's synergies.

Mollel, Mulongo and Razia (2017), conducted a study to investigate the influence of performance appraisal management practices on employee productivity in Muheza District in Tanzania. A sample of 339 employees from different department in Muheza District was randomly selected. Their study employed both closed ended and open ended instruments. Questionnaire evaluation was employed for collection of primary data from the respondents while interview guides were administered to officials from Public Service Management in Dares Salaam, Dodoma and from the Regional Administrative Secretary's Office. Validity was ensured through expert judgment and reliability ranged between 0.682 and 0.955 Cronbach's Alpha implying all items in the questionnaire were reliable. Descriptive statistics represented mean scores while Pearson Product moment correlation coefficient evaluated potential relationships between the independent and dependent variables. The findings of their study highlighted the fact that performance appraisal tools such as recognition and feedback are vital to employee's performance and indeed influenced employee productivity in the organization. However, training and development and promotion did not have a significant effect on employee productivity. Their study recommended that to improve employee productivity, training and promotion should focus on increasing employees' commitment and should be based on performance. Furthermore, raising employee satisfaction through recognition should be used as a tool for maintaining competent employees and screening out less effective.

Nadeem et al (2013) carried out a study on impact of performance appraisal on employee's performance and also analyzed that motivation affects the relationship of performance appraisal and employee's performance. Two hypotheses were analyzed using sampling techniques; a

sample of 150 employees was selected using simple random sampling among the banks of Dera Ghazi Khan in Pakistan. Results revealed that there was positive relationship between performance appraisal and employee's performance. Motivation as a moderator positively affected the relationship between performance appraisal and employee's performance. Divisional banks can use appraisal system as a strategic approach by integrate it with business policies and HR practices and can improve the performance standers of its employees.

Wanjala (2015) carried out a research to determine the influence of performance appraisal on employee performance in 10 commercial banks in Trans-Nzoia County, Kenya. The study adopted descriptive survey research design and a total of 178 research subjects were drawn from the target population using the stratified and the simple random sampling technique. 120 respondents' questionnaires were completed and returned. This represents 67 percent response rate. Data analysis was done through descriptive statistics, specifically use of frequencies and percentages. Data was presented in frequency tables and Chi Square method was used for testing the hypothesis. The findings show that: there is a significant relationship between performance appraisal and worker's performance.

From the foregoing literature review it is worth noting that majority of the studies; Mwema and Gachunga (2014), Wanjala, (2015); and Mollel, Mulongo and Razia (2017) attempted to link performance appraisals and employee performance or productivity; except Nadeem et al (2013), who introduced motivation as a moderator between performance appraisal and employee performance. Moreover, most of these studies were conducted in foreign countries. For instance, Mwema and Gachunga, (2014); Mollel, Mulongo and Razia (2017) and Nadeem et al (2013). The only study conducted in Kenya was that of Wanjala, (2015). However, Wanjala, (2015) study differs from the present study in that it was carried out in commercial banks and not public universities. Furthermore, Mwema and Gachunga, (2014) study was conducted in World Health Organization, an industry far much different from Wanjala (2015); Nadeem et al, (2013) and Mollel, Mulongo and Razia (2017) studies, which were conducted in commercial banks. Never the less, all the reviewed studies adopted descriptive research design and had similar results in that they revealed that there was a positive relationship between performance appraisal and employee's performance.

Majority of the previous studies conducted focused on performance appraisal and employee performance or productivity in organizations. Furthermore, these studies were conducted in foreign countries. The studies done in Kenya are few, but still their results could not be generalized to public universities because they were conducted in different industries. Apparently, there was no known study focusing on influence of performance appraisal and recognition on employee's engagement in public universities in Kenya, hence, a knowledge gap.

2.4.4 Influence of employee health and safety practices on employee engagement

Agbola (2012) conducted a study on impact of health and safety management on employee safety at the Ghana ports and harbor authority. The purpose of this study was to examine the Safety and Health Management Systems (SHMS) implemented by the GPHA, assess the effectiveness of these measures in reducing accidents and death; and evaluate impact of accidents and work-related illnesses on then employee safety at work and performance. The results revealed that an organization fraught with poor health and safety management practices, poor training in safety know-how, lack of information on dangerous chemicals and hazardous materials, lack of monitoring and enforcement of safety rules, unavailability of essential safety equipment, with adverse effects on employees and the organizational performance. He further recommended that, GPHA must increase education and create awareness of the importance of health and safety; ensure collection and storage of data for effective monitoring and evaluation of safety performance.

Womoh et al. (2013) examined the impact of health and safety policies on employee's performance in the Ghana's timber industry and adopted a case study design. Interviews and questionnaires were used to collect the data and statistical tools such as Pearson correlation adopted to assess the relationship between investment in health and safety and employees' performance. The data collected with these instruments as well as the calculated $r = 0.42$ showed that health and safety measures put up by the company positively correlates with employees' performance despite that the correlation is weak. There was also inverse relationship between reducing the number of accidents and injuries through health and safety promotions and employee's performance. From the findings, it was concluded that organizations need to pay

much attention to their health and safety measures since apart from the fact that in other jurisdictions it is backed by law and is mandatory, it is classified as an existence need for which other motivational factors meant to improve employees' performance revolves.

Makhamara and Simiyu (2016) conducted a case study of Kapa Oil Refineries Limited in Nairobi County to establish the influence of occupational health and safety on organizational performance in manufacturing sector in Kenya. A sample of 100 respondents was drawn from 2000 targeted employees stratified sampling. Primary data was collected using questionnaires while secondary data was collected through existing literature. A correlation analysis revealed a weak positive relationship between health and safety training and performance of Kapa Oil Refineries Limited. Regression analysis also indicated that 52.7 % of the variation of organization performance was explained by health and safety training. The study recommended that the management of Kapa Oil Refineries Limited should continually train its employees on health and safety issues.

Ihaenacho and Ebitu (2016) investigated on the effects of industrial safety and health on employees' job performance in selected companies. A survey research design was adopted and a sample size of 100 staff was randomly selected for the study. The study revolved around industrial safety/health strategies and productivity, together with relationships among employees, customers and management and how it affected turnover. The Pearson Moment correlation coefficient was used for the hypotheses tests. The result of the tests revealed that there is strategies and employee job performance. It recommended that employers should ensure adequate industrial safety/health strategies management in order to protect the lives of its employees at work place thereby reducing employee turnover and promoting staff performance.

Ria et al. (2012) investigated on the influence of occupational safety and health on performance with job satisfaction as intervening variables. A quantitative approach that focused on research hypothesis testing to produce generalizable conclusions by means of path analysis was employed. Their results indicated that OSH had a significant effect on job satisfaction with a significance value of CR 0.009. Coefficient sign with the positive standard value of 0.351 indicates that as OSH increase, then job satisfaction would also increase; Secondly, job

satisfaction had a significant intervening effect on employees' performance as it's had a significance value of CR 0.000. Sign of coefficient that had a positive standard value of 0.430 showed that an increase in job satisfaction would also increase employee's performance; and thirdly, OSH also had a significant effect on performance with a significance value of CR 0.004. Coefficient sign with the positive standard value of 0.343 indicates that as OSH increase, and then employees' performance would increase. In overall, these results shown that all the hypotheses could be accepted.

Most of the studies reviewed above were relating occupational safety and health to employee/organizational performance; with an exception of Ria et al. (2012) whose study calibrated job satisfaction as intervening variable in the relationship. Moreover, the studies were conducted in different countries and in different industries. For instance, Womoh et al. (2013) study was conducted in the Ghana's timber industry; Ria et al. (2012), in Gresik; while Agbola (2012), in Ghana ports and harbor authority. Even though Makhamara and Simiyu (2016) study was done in Kenya, it differs from the present study industry wise. It was conducted in Kapa Oil Refineries Limited in Nairobi County whereas the present study will be conducted in public universities in western Kenya. In addition, Ihaenacho and Ebitu (2016) and Ria et al. (2012) used survey design to test hypothesis as well as questionnaires to collect data; Womoh et al. (2013) and Makhamara and Simiyu (2016) on the other hand adopted case studies.

Unlike the present study, most of the previous studies revolved around industrial safety or health strategies and employee or organizational performance; together with relationships among employees, customers and management and how it affects turnover, assessed the effectiveness of these measures in reducing accidents and death; and evaluate impact of accidents and work-related illnesses on then employee safety at work and performance. Moreover, the studies were conducted in foreign countries and concentrated in production industry, manufacturing industry, ports authority industry. There was no evidence of a study conducted on employee health and safety practices employee's engagement public universities in Western Kenya. Knowledge was therefore lacking on influence of employee health and safety on employee's engagement in public universities in western Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter specifically presented methodological components which were be used to identify, collect and analyze data. It addressed the research design, area of study, target population, sample size, sampling techniques, data collection, and verification of reliability and validity of instruments; and data analysis and interpretation.

3.1 Research design

A correlational cross sectional research design was adopted to determine the influence of human capital management practices on employee engagement at the time of the study. Graeme and Moutinho (2008) justify the use of correlation research in determining whether a relationship exists between or among variables.

3.2 Area of study

The study was conducted in six accredited public universities in western Kenya as per the Commission of University Education Report, 2017. (Appendix 3). Western Kenya in this study was ascribed by the former Nyanza and Western provinces. The six public universities under study were situated in counties of Bungoma, Kakamega, Kisumu, Siaya, Migori and Nyamira. They included: Kibabii University, Masinde Muliro University of Science and Technology, Maseno University, Jaramogi Oginga Odinga University of Science and Technology, Rongo University and Kisii University respectively.

Western Kenya region is 12,646 Km² and boards Lake Victoria from the East, Western Province to the North, Rift Valley Province to the East and Republic of Tanzania to the South and Uganda to the West; and is located between latitudes 0⁰ 15'N and 1⁰45'S, longitudes 35⁰15'E and 34'E (GOK, 2012). The area is characterized by bimodal rainfall pattern sufficient for agricultural production with peaks experienced in months of April and May; October and November. The temperatures vary within the counties depending on altitude and proximity to the Lake Victoria. The annual minimum temperatures vary from 17° to 18°C and maximum temperatures vary between 27° C and 34.8°C. (Appendix 4).

3.3 Total population

According to Mugenda and Mugenda (2008), population refers to the entire group of individuals, events or subjects having common observable characteristics. A total of 5,747 permanent employees from six accredited public universities in western Kenya constituted the study population (Table 3.1)

Table 3.1: Population distribution

Public University	Population
JOOUST	1,232
MMUST	783
Kibabii University	452
Kisii University	1,225
Rongo University	550
Maseno University	1,305
TOTAL	5,747

Source: Office of Human Resource of respective universities under the study (2018)

3.4 Sample size

Sample size was determined by adoption of the Yamane (1967) formula defined as:

$ns = N / \{1 + N(e)^2\}$. The formula has 0.05 confidence level and precision of 0.05.

Where;

ns - Sample Size

N - Population Size

e - Precision level (at 0.95 confidence interval, e = 0.05)

Therefore:

$$n = 5,747 / [1 + 5,747(0.05)^2]$$

$$= 5,747 / [1 + 5,747 \times 0.0025]$$

$$= 5,747 / 14.37$$

$$= 5,747 / 15.37$$

$$= 373$$

Table 3.2: Sample distribution

Public University	Population	Sample
JOOUST	1,232	80
MMUST	783	50
Kibabii University	452	39
Kisii University	1,225	79
Rongo University	550	41
Maseno University	1,305	84
TOTAL	5,747	373

Source: Office of Human Resource of respective universities under the study (2018)

3.5 Sampling techniques

Cluster sampling was used, with each university forming a cluster. Proportionate sampling was employed to determine a sample size from each university whereas simple random sampling was used to get to individual respondents in each university under study.

3.6 Data type, source and collection methods

Both primary and secondary data were utilized to collect data. Primary data was collected from respondents using self-administered structured questionnaires while secondary data was collected by reviewing documents in the custody of the universities such as human resource audit reports, performance contract reports and other documentaries

3.7 Instrument reliability

According to Kothari (2004), reliability is the extent to which the study instruments produce consistent results under similar circumstances. Reliability of the questionnaires was determined through a pilot study where 37 respondents were involved. (10% of the sample size). These respondents did not take part in the final study neither was the pilot data included in the final study. The pilot study was necessary because the researcher needed to get familiarized with the area of the study, instrument administration procedures and identifying items that required adjustments as well as correcting inconsistencies. Thus, reliability estimates were measured using Cronbach's Alpha (α) coefficient.

Table 3.3: Internal consistency of scale

Constructs	No. of Items	Cronbach's Alpha
1. Career growth and development practices	9	0.708
2. Internal Communication practices	7	0.772
3. Performance appraisal and recognition practices	8	0.859
4. Employee health and safety practices	8	0.774
5. Employee engagement	7	0.831

Source: Field Survey, 2018

As indicated in table 3.3, reliability test for all the items ranged between Cronbach's Alpha Coefficient 0.708 and 0.859. Since all the items had Alpha coefficient ($\alpha > 0.7$), the scale was therefore considered to be reliable. Kumar (2005) suggests that an Alpha of 0.7 or above is considered reliable. Sekaran (2003) also affirms that reliabilities of 0.7 range is considered acceptable and over 0.8 is good.

3.8 Instrument validation

According to Orodho (2005), validity is the accuracy and meaningfulness of inference which are based on the research results. Expert opinion from the researcher's supervisor was sought regarding data collection tools as a way of establishing validity.

3.9 Data analysis and presentation

Descriptive and inferential statistics were used to analyse data. Means, percentages, standard deviation and frequencies were used to establish extent of human capital management practices and employee engagement levels while regression analysis was used to establish the relationship. Results were presented in tables.

3.10 Model specification

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Source: Adapted from Fairchild and MacKinnon (2009)

Where:

Y = Employee engagement

X₁ = Career growth and development practices

X₂ = Internal Communication practices

X₃ = Performance appraisal and recognition practices

X₄ = Employee health & safety practices

β₀ = Y intercept in the equation

β₁ = measure of influence of career growth and development practices on employee engagement.

β₂ = measure of influence of internal communication practices on employee engagement.

β₃ = measure of influence of performance appraisal and recognition practices on employee engagement.

β₄ = measure of influence of employee health & safety practices on employee engagement.

ε = error term

Hypothesis was supported by this model since the effect of the interaction between human capital management practices and employee engagement (XZ) was statistically significant.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter covers results and discussions. The main objective was to establish human capital management practices influencing employee engagement in public universities in western Kenya. This chapter presents the analysis, findings and discussion. The findings were presented in percentages and frequency distributions, mean and standard deviations.

4.1 Response Rate

The study targeted 373 employees employed on permanent and pensionable terms in the six public universities in Western Kenya. Out of which 37 respondents took part in the pilot study and were not involved in the actual study. From the study, 290 respondents out of the 336 respondents who participated in the study filled and returned the questionnaires making a response rate of 86.3%. 21 questionnaires (6.25%) were marked as invalid and 25 questionnaires (7.4%) were not returned. According to Mugenda and Mugenda (2003) a 50% response rate is adequate, 60% good and above 70% rated very good. This also concurs with Kothari (2004) assertion that a response rate of 50% is adequate, while a response rate greater than 70% is very good. This implies that based on these assertions; the response rate in this case of 86.3% is very good. This reasonable response rate was achieved after the researcher made personal calls and physical visits to remind the respondent to fill-in and return the questionnaires.

Table 4.1: Response Rate

Response Category	Frequency	Percentage
Actual Response	290	86.3
Non-response	25	7.4
Invalid response	21	6.25
Total	336	100

Source: Field Survey, 2018

4.2 Socio-Demographic Characteristics of Respondents

The socio- demographic information considered in the study was respondents' gender, length of service with the institution, level of education and the age bracket. This information was gathered using the questionnaires and the findings are discussed below.

4.2.1 Age of Respondents

The respondents were asked to indicate their age bracket and this was important for the study in order to establish the influence of respondents' age on employee engagement. The results are presented in table 4.2.

Table 4.2: Age of respondents

Age cluster	Frequency	Percent	Cumulative Percent
21-30	42	14.5	14.5
31-40	88	30.3	44.8
41-50	128	44.1	89.0
51-60	32	11.0	100.0
Total	290	100.0	

Source: Field Survey, 2018

The results demonstrated that 128 respondents (44.1%) were in the 41 -50 years' age cluster; followed by 88 respondents (30.3%) in the 31 – 40 years' cluster. 42 respondents (14.5%) fell under 21 – 30 years cluster and the least number of respondents (32) were in cluster of 51 – 60 years, representing 11%. The results indicate that majority of the respondents (74.4%) fell within the category of ages 31 -50; therefore, they still have many years to retirement thus they need to work in institutions that would ensure that their interest is taken care off. All ages were represented in the study.

4.2.2 Gender Distribution

The respondents were asked to indicate their gender in order to ensure that the results obtained captures the views of both gender. The results in table 4.3 revealed that most of the respondents were male (52.1%) whereas female formed 47.9%. The respondents were made up of more male than female. The findings indicate that the male and female difference was not significant and therefore this implies that the study was not influenced by gender imbalance.

Table 4.3: Gender of the Participants

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	151	52.1	52.1	52.1
Female	139	47.9	47.9	100.0
Total	290	100.0	100.0	

Source: Field Survey, 2018

4.2.3 Level of Educational of respondents.

The respondents were requested to indicate the highest level of education attained. This was important in order for the respondent to indicate the human capital management practices influencing their engagement in public universities. The findings of the study revealed that most (36.6%) of the respondents have University degrees as their highest level of education attained; followed by 30% of respondents who are diploma holders. 20% of the respondents have attained post graduate degrees and 13.4 % are certificate holders. The results indicate that majority of the respondents were degree/diploma level holders although other respondents had attained different level of education and therefore the influence of various factors on their engagement varies.

Table 4.4: Respondents' Academic Qualifications

Education level	Frequency	Percent	Valid Percent	Cumulative Percent
Certificate	39	13.4	13.4	13.4
Diploma	87	30.0	30.0	43.4
Degree	106	36.6	36.6	80.0
Post graduate	58	20.0	20.0	100.0
Total	290	100.0	100.0	

Source: Field Survey, 2018

4.2.4 Correspondences from universities

The results of the study in table 4.5 below revealed that, of the six public universities studied, Kisii University recorded the highest percentage of correspondence (23.4%) from its sample size of 79 respondents. Followed by Maseno University which recorded 22.1% correspondence out of a sample of 84 and Jaramogi Oginga Odinga University of Science and Technology recording 16.9%. Masinde Muliro University of Science & Technology had 42 respondents out of a sample size of 50, recording 14.5 %. Last but not least is Kibabii University which recorded 12.4% of its sample size. Rongo University recorded the least percentage of correspondence 10.7% of its ample size of 41 respondents.

Table 4.5: Distribution of correspondences from universities

Name of institutions	Sample size.	Frequency	Percent	Valid Percent	Cumulative Percent
Maseno University	84	64	22.1	22.1	22.1
MMUST	50	42	14.5	14.5	36.6
Kibabii University	39	36	12.4	12.4	49.0
JOOUST	80	49	16.9	16.9	65.9
Rongo University	41	31	10.7	10.7	76.6
Kisii University	79	68	23.4	23.4	100.0
Total		290	100.0	100.0	

Source: Field Survey, 2018

4.2.5 Distribution of respondents in various Departments.

The findings of the study in table 4.6 below revealed that majority of the respondents (19.7%) work in academic section, followed by 15.2% of respondents who work in administration. Respondents who work in the library department constituted 14.5%, finance department constituted 11.7% whereas procurement department constituted 10.7%. Student welfare Services, health services and ICT departments constituted 9.3%, 5.5% and 9.0% respectively. The least was Estates and maintenance department with 4.5%.

Table 4.6: Distribution of respondents in various departments

Department	Frequency	Percent	Valid Percent	Cumulative Percent
Administration	44	15.2	15.2	15.2
Finance	34	11.7	11.7	26.9
Procurement	31	10.7	10.7	37.6
Library	42	14.5	14.5	52.1
Student welfare Services (SWS)	27	9.3	9.3	61.4
Health services	16	5.5	5.5	66.9
Academic section	57	19.7	19.7	86.6
ICT	26	9.0	9.0	95.5
Estates & maintenance	13	4.5	4.5	100.0
Total	290	100.0	100.0	

Source: Field Survey, 2018

4.2.6 Length of service

In an effort to determine the respondents work experience, the respondents were requested to indicate the number of years they had worked in their respective Universities. The results were presented in table 4.7.

Table 4.7: Length of service

Years	Frequency	Percent	Valid Percent	Cumulative Percent
Below 5 years	72	24.8	24.8	24.8
6-10 years	106	36.6	36.6	61.4
11-15 years	47	16.2	16.2	77.6
16-20 years	33	11.4	11.4	89.0
21-25 years	23	7.9	7.9	96.9
26-30 years	9	3.1	3.1	100.0
Total	290	100.0	100.0	

Source: Field Survey, 2018

According to the findings, it was revealed that majority of the respondents (36.6%) had worked in their respective universities for at least 6 to10 years. 72 respondents (24.4%) had worked for less than 5 years whereas 16.5% of the respondents had worked for a period of over 20 years. The results indicated that the respondents have worked in the training institutions on different period of time and therefore the results captured the views of respondents who have worked in the training institutions on different period of time.

4.3 Extent of human capital management practices

To engage talented and skilled employees, employers have to go out of their ways and seek for strategies to reduce both voluntary and involuntary separations. Public universities need to understand what keeps their employees loyal and happy to be working with them over the years without falling into the temptation of switching off to other businesses that are not in line with the organizations objectives. It is as a result of this that the study sought to establish from the respondent's views and opinions, the human capital management practices which influenced their engagement in public universities in western Kenya. These are discussed below.

4.3.1 Extent of career growth and development practice on employee engagement in public universities in western Kenya.

The respondents were requested to indicate the extent of career growth and development on their engagement in the respective universities. This was necessary because when employees do not foresee any advancement in their career paths, chances of their disengagement from their work are deemed to be high. The results were as indicated in Table 4.8.

Table 4.8: Mean and standard deviation on the extent of career growth and development practices

Extent of career growth and development practices	N	Mean	Std. Deviation
There are clearly defined career paths and internal promotion norms in this university.	290	2.0724	.79244
Our university has a formal policy of career growth and development plans.	290	2.1310	.89408
The university management recognizes my/our career growth and development needs.	290	1.7276	.68972
We are provided with adequate career growth and development opportunities through training and development	290	1.7414	.76154
Good performers get promoted first.	290	1.5103	.68718
I experience personal growth such as updating my skills and learning different jobs	290	2.8828	1.04900
I am assigned challenging jobs to charge my enthusiasm and develop my skills.	290	3.4966	1.05963
Overall	290	2.5544	0.43211

Source: Field Survey, 2018

From the findings, it was revealed that respondents were fairly dissatisfied with the career growth and development practices in their institutions. This was indicated by an average mean of 2.5544 and standard deviation of 0.43211. The respondents were in disagreement that there were clearly defined career paths and internal promotion norms in their institutions (mean of 2.07 and standard deviation of 0.79). Moreover, they disagreed that they had experienced personal growth such as updating their skills and learning different jobs (M=2.88); and that the university management had formal policies on career growth and development plans (M=2.13). It was also noted that most employees agreed that they were assigned challenging jobs to charge their enthusiasm and develop their skills (M=3.49).

4.3.2 Extent of internal communication practices on employee engagement in public universities in western Kenya.

Respondents were asked to rate their responses in regard to some statements relating to extent of internal communication on their engagement. Table 4.9 shows the mean scores and standard deviation on their ratings. The results indicated that most of the respondents were in agreement that the management clearly communicated organizational goals and objectives to employees (Mean 3.72); they also agreed that there was effective information flow between top management and employees (mean of 3.55) and that adequate flow of information across the organization enabled employees to discharge their duties effectively (mean of 3.24). From the findings, it was revealed that respondents were fairly satisfied with the internal communication practices in their institutions. This was indicated by an average mean of 3.3302 and the relatively high standard deviation of 0.70269 for all the items indicating that variation in the perception of respondents was high.

Table 4.9: Mean and standard deviation on the extent of internal communication practices

Extent of internal communication practices	N	Mean	Std. Deviation
The management clearly communicates organizational goals and objectives employees.	290	3.7207	1.15327
There is effective information flow between top management and us as employees.	290	3.5500	1.07262
Adequate flow of information across the university enables employees to discharge their duties effectively.	290	3.2483	1.02583
There are clear communication channels and guidelines between managers and subordinates.	290	3.4828	1.05950
My boss encourages me to inform him/her when things are going wrong on the job.	290	3.5069	1.20335
I can freely talk to my boss about the way I feel he/she manages our department.	290	2.5207	1.22598
I freely communicate job frustrations to my boss	290	2.8103	1.28145
Overall	290	3.3302	0.70269

Source: Field work, 2018

4.3.3 Extent of performance appraisal and recognition practices on employee engagement in public universities in western Kenya.

From the findings in table 4.10, the mean shows that majority of the respondents disagreed that the management communicated performance standards to employees with a mean rate of 2.57 and a standard deviation of 1.56. Respondents were also in disagreement that performance appraisal systems were aimed at improving their performance and strengthening their skills (mean of 2.13). The feedback received on performance was rated relatively low with a mean of 1.15 and a standard deviation of 0.75. From these findings, it is evident that the respondents were dissatisfied with the performance appraisal and recognition practices in their institutions. This is confirmed by an average mean of 1.9776 implying that the respondents had a negative perception of performance appraisal and recognition practices in their institutions. The standard deviation for all the items was 0.59485 implying that variation in the perception of respondents was minimal.

Table 4.10: Mean and standard deviation on the extent of performance appraisal and recognition practices

Extent of performance appraisal and recognition practices	N	Mean	Std. Deviation
The management clearly communicates performance standards to employees.	290	2.5759	1.15993
Performance appraisal system aims at improving our performance and strengthening our skills.	290	2.1379	1.03983
Performance appraisals are undertaken to identify our developmental needs and to help us attain our career goals.	290	1.8690	.95399
We are appraised at regular intervals.	290	1.6655	1.00613
University management follows a formal procedure when appraising employees.	290	1.7724	.95029
Performance appraisal system is extended to all members of the organization	290	1.8724	1.10407
I receive proper feedback on my performance	290	1.5345	.75824
I feel our performance appraisal system is fair and objective.	290	1.4862	.79454
Overall	290	1.9776	.59485

Source: Field work, 2018

4.3.4 Extent of employee health and safety practices on employee engagement in public universities in western Kenya.

The findings in table 4.11 on the extent of health and safety practices on employee engagement revealed that majority of respondents had a negative perception. This is confirmed by a low average mean of 1.9776 and standard deviation of 0.59485. The respondents disagreed that they received regular trainings on health and safety with low mean score of 1.72 and a standard deviation of 0.86. They also disagreed that they have access to emergency phone numbers with a mean of 1.83 and a standard deviation of 0.99. The relatively low standard deviation in all responses implies a small variance in the perception of the respondents. This concurs with the views of Gupta (2009) who argues that wellness programs promote employee health by providing education on health issues and healthy lifestyles which in turn boosts employee morale and increases job satisfaction.

Table 4.11: Mean and standard deviation on the extent of employee health and safety practices

Extent of employee health and safety practices	N	Mean	Std. Deviation
Our university has a written health and safety policy	290	1.9724	.99789
The university management has set goals and objectives in relation to safety at the workplace	290	1.9793	.96635
We receive health and safety training regularly	290	1.7241	.86838
We have occupational health and safety committee that oversees workplace safety.	290	1.7897	.83639
There is a system in place to report and record incidents	290	1.7931	.86769
Our workplace is suitable for disabled workers	290	2.6069	1.09289
I have access to First Aid facilities in our offices	290	2.1172	.99134
I have access to emergency phone numbers	290	1.8379	.99372
Overall	290	1.9776	.59485

Source: Field work, 2018

4.3.5 Extent of employee engagement in public universities in western Kenya.

The respondents were asked to indicate the extent to which they agreed with the statements below in relation to their engagement in public universities in Kenya. The findings were presented in table 4.12. According to the findings, the respondents agreed with a mean of 3.5138 and a standard deviation of 1.02637 that they were proud to tell others that they work with their respective universities. The respondents also agreed with a mean of 3.0931 and a standard deviation of 1.07260 that they would be very happy to spend the rest of their career life working with their respective universities. The respondents further indicated with a mean of 2.9552 and a standard deviation of 1.09168 that they had a great sense of loyalty to their universities. However, the respondents disagreed with the statement that public universities were the best of all possible organizations to work with. This was shown by a mean of 2.2276 and a standard deviation of 0.95754.

Table 4.12: Mean and standard deviation on the extent of employee engagement

	N	Mean	Std. Deviation
I would be very happy to spend the rest of my career life working with this university	290	3.0931	1.07260
I am proud to tell others that I work with this university	290	3.5138	1.02637
For me, this is the best of all possible organizations to work with	290	2.2276	.95754
I feel high sense of belongingness to this University	290	2.4345	.99350
I have a great sense of loyalty to this university	290	2.9552	1.09168
I would recommend this university to any job seeker	290	3.5034	1.05308
Too much in my life would be disrupted if I decided to leave my organization now.	290	2.5241	1.16216
Valid N (listwise)	290		

Source: Field work, 2018

4.4 Influence of human capital management practices on employee engagement.

To achieve the study objectives, employee engagement was regressed against the four indicators of human capital management practices: (Career growth and development practices, internal communication practices, performance appraisal and recognition practices; and employee health and safety practices). The direction and magnitude of the influence of each of these indicators on employee engagement was established through the regression model and the findings presented in table 4.13, 4.14 and 4.15.

Table 4.13: Regression of Human Capital Management practices on Employee Engagement

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.154	.234		4.923	.000
Career growth and development practices	.241	.095	.161	2.549	.001
Internal communication practices	.312	.051	.339	6.116	.000
Performance appraisal and recognition	.202	.059	.219	3.446	.001
Employee health and safety practices	.228	.059	.209	3.846	.000

a. Dependent Variable: employee engagement

(Source: Field work, 2018)

The variable with the strongest unique contribution was Internal communication practices ($\beta=.339$, $p=.000$) followed by performance appraisal ($\beta=.219$, $p=.001$), and employee health and safety practices ($\beta=.209$, $p=.000$), and finally, career growth and development practices ($\beta=.161$, $p=.000$)

Table 4.14: Model Summary^b for human capital management practices

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig.
1	.422 ^a	.178	.169	.59029	.178	20.648	3	286	.000

a. Predictors: (Constant), Health & safety practices, Career growth and development practices, internal communication Practices.

b. Dependent Variable: employee engagement

(Source: Field work, 2018)

Table 4.14 gives the model summary. The adjusted R^2 is the coefficient of determination which shows the variation in dependent variable due to changes in independent variable. The adjusted R^2 was 0.178, $p=.000$ showing that there was 17.8% of the variation in employee engagement which is accounted for by the combined influence of human capital management practices (career growth and development practices, internal communication practices, performance appraisal and recognition practices; and health and safety practices). Thus, the overall percentage change in employee engagement accounted for by human capital management practices was 17.8%. The model is acceptable since the F-statistic is significant ($F(3,286) = 20.648$) thus suggests that the independent variables jointly influence the dependent variable though to a little extent.

The regression model was as follows: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$. By adding up regression coefficients as indicated in table 4.14, the model translated into:

$$Y = 1.154 + 0.241X_1 + 0.312X_2 + 0.202X_3 + 0.228X_4 + \epsilon \dots \dots \dots \text{equation 4.1}$$

$$R^2 = 0.178 (17.8\%)$$

Table 4.15: ANOVA results on model summary for human capital management practices

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	21.583	3	7.194	20.648	.000 ^b
1	Residual	99.654	286	.348		
	Total	121.237	289			

a. Dependent Variable: employee engagement

a. Predictors: (Constant), Health & safety practices, Career growth and development practices, internal communication Practices.

(Source: Field work, 2018)

Table 4.15 reports the summary of ANOVA and F statistic which reveals the value of F (20.648) being significant at 0.05 confidence level. The value of F is not large enough to conclude that the set of independent variables: Career growth and development practices (X_1), internal communication practice (X_2), performance appraisal and recognition practices and health and safety practices (X_3) as a whole were contributing to the variance in employee engagement in public universities in Western Kenya.

4.4.1 Influence of Career growth and development practices on employee engagement in public universities in western Kenya.

The study sought to determine the influence of career growth and development practices on employee engagement in public universities in western Kenya. Employee engagement was regressed against career growth and development. The findings in table 4.13 indicates that career growth and development practices have a unique contribution on employee engagement ($\beta=0.161$, $p=0.001$). This implies that a unit change in career growth and development practices causes 0.161-unit increase in employee engagement. The study hence accepted the alternate hypothesis and maintained that career growth and development practices influence employee engagement in public universities in western Kenya. This implies that career growth and development is a determinant of employee engagement in public universities in Western Kenya.

The findings of the study are in conformity with the findings of Kwenin (2013) who investigated the link between work environment, career development opportunities and employee retention in Vodafone Ghana Limited and found out that career development opportunities had positive relationship with employee retention. Contrary to the current study, majority of the prior studies focused on other independent variables and not employee engagement. For instance, Ravi et al., (2013) investigated on human capital investments and employee performance. Bontis and Serenko (2007) on the other hand investigated the moderating role of human capital management practices on employee capabilities. Odhong et al., (2014) investigated on effect of human capital management drivers on organizational performance; Munjuri, K'Obonyo, and Ogutu, (2015) investigated on the influence of human capital on performance while Nzuve et al., (2012) determined the extent to which Kenya National Security Fund (NSSF) had adopted the HCM practices. This study is therefore unique because it discovers new knowledge on the influence of career growth and development practices on employee engagement in public Universities in Western Kenya.

4.4.2 Influence of Internal communication practices on employee engagement in public universities in western Kenya.

The second objective of the study was to determine the extent of internal communication practices on influence employee engagement in public universities in western Kenya. Employee engagement was thus regressed against internal communication presented in The results in table 4.13 indicated that there was a positive relationship between internal communication and employee engagement. ($\beta=.339$, $p=.00$). This implied that a unit change in internal communication practices causes 0.339 unit increase in employee engagement. Consequently, the study rejected the corresponding null hypothesis and maintained that internal communication practices influence employee engagement in public universities in western Kenya.

These findings compare with the previous studies by Mishra et al., (2014), Hayes (2002) and Asamu (2014) who found a positive relationship between communication and employee performance. However, the findings of the current study was at variance with Nzuve et al. (2012) who found out that other human capital management practices (recruitment excellence, collegial

and flexible workplace and rewards and accountability) had a positive influence on turnover growth exception communication integrity. Contrary to the current study, most past studies reviewed (Munjuri and K'Obonyo 2015; Nzuve and Bundi 2012; and Mishra et al., 2014), focused on other sectors and not public universities. Although Hayes (2002) study was conducted in a university setup similar to the current study, the results could not be generalized to Kenyan context since it was conducted in a foreign country. Consequently, this study is found to be unique in that it has discovered new knowledge on the influence internal communication practices on employee engagement in public universities in western Kenya.

4.4.3 Influence of Performance appraisal and recognition practices on employee engagement in public universities in western Kenya.

The study sought to determine the influence of performance appraisal and recognition practices on employee engagement in public universities in western Kenya. Employee engagement was regressed against performance appraisal and recognition practices. From the findings in table 4.13, it was noted that performance appraisal and recognition practices had a positive and significance contribution on employee engagement ($\beta=0.219$, $p=.001$). This implied that a unit change in performance appraisal and recognition practices causes 0.219 unit change in employee engagement. Consequently, the study accepted and maintained the alternate hypothesis that performance appraisal and recognition practices influence employee engagement in public universities in western Kenya. This implied that the more performance appraisal and recognition practices take place in public universities, the more employees get engaged in their organizations.

Empirically, the findings of the current study are supported by Mollel.E. R., Mulongo L.S., and Razia.M., (2017); Wanjala, (2015) and Mwema and Gachunga (2014); who found out that there was a significant relationship between performance appraisal and worker's performance. However, it is worth noting that majority of the past studies reviewed around the concept of performance appraisal and recognition practices attempted to linked performance appraisals and employee performance or productivity. For instance, Mwema and Gachunga (2014), Wanjala, (2015); and Mollel, Mulongo and Razia (2017). Moreover, most of these studies were conducted

in foreign countries hence the results could not be generalized to Kenyan context. The only study conducted in Kenya was that of Wanjala, (2015), although it differs from the present study in that it was carried out in commercial banks and not public universities. Consequently, the current study is unique from other studies in that it has discovered new knowledge on the influence of performance appraisal and recognition practices on employee engagement in public universities in western Kenya.

4.4.4 Influence of Employee Health and safety practice on employee engagement in public universities in western Kenya.

The study sought to determine the influence of employee health and safety practices on employee engagement in public universities in western Kenya as its fourth objective. Employee engagement was therefore regressed against employee health and safety practices and the findings presented in table 4.13. The results indicated that employee health and safety practices had a significance contribution on employee engagement ($\beta=0.209$, $p=0.000$). The beta value indicates a positive significant relationship between health and safety practices and employee engagement implying that a unit change in employee health and safety practices causes 0.209 unit change in employee engagement. This shows that employee health and safety practices influence employee engagement in public universities in western Kenya. Thus, the study rejected the null hypothesis that health and safety practices do not influence employee engagement in public universities in western Kenya.

The finding on the influence of employee health and safety practices on employee engagement has received some support from other past studies. For instance, Agbola (2012), Womoh et al. (2013), Ria et al. (2012) and Makhamara and Simiyu (2016) whose results revealed positive relationships between health and safety training/ practices and performance. However, most of the empirical studies reviewed in relation to employee health and safety practices focused on occupational safety and health to employee or organizational performance and not employee engagement. Moreover, the studies were conducted in different countries and in different industries. For instance, Womoh et al. (2013) study was conducted in the Ghana's timber industry; Ria et al. (2012), in Gresik; while Agbola (2012), in Ghana ports and harbor authority.

Even though Makhamara and Simiyu (2016) study was done in Kenya, it differs from the present study industry wise. It was conducted in Oil Refineries Limited in Nairobi County whereas the present study was conducted in public universities in western Kenya. Consequently, new knowledge on the influence of employee health and safety practices on employee engagement in public universities in western has been revealed by this study.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter gives a summary of the study findings, conclusions and recommendation for further studies.

5.1 Summary of findings

The first objective of the study sought to determine the influence of career growth and development practices on employee engagement in public universities in western Kenya.

The corresponding hypothesis was that career growth and development practices influence employee engagement in public universities in western Kenya. The findings revealed that career growth and development practices had a positive influence on employee engagement in public universities in western Kenya thus accepting the hypothesis.

The second objective of the study was to determine the extent of internal communication practices on influence employee engagement in public universities in western Kenya. The results indicated that there was a positive relationship between internal communication practices and employee engagement in public universities in western Kenya. Consequently, the study rejected the corresponding null hypothesis that internal communication practices does not influence employee engagement in public universities in western Kenya.

The third objective of the study was to determine the influence of performance appraisal and recognition practices on employee engagement in public universities in western Kenya. The findings revealed that performance appraisal and recognition practices had a positive and significance contribution on employee engagement in public universities in western Kenya. Consequently, the study accepted the corresponding alternate hypothesis that performance appraisal and recognition practices influence employee engagement in public universities in western Kenya.

The fourth and last objective of the study sought to determine the influence of employee health and safety practices on employee engagement in public universities in western Kenya. The results indicated that employee health and safety practices had a positive significance

contribution on employee engagement in public universities in western Kenya. Thus, the study rejected the null hypothesis that health and safety practices do not influence employee engagement in public universities in western Kenya.

5.2 Conclusions

The first objective of the study sought to determine the influence of career growth and development practices on employee engagement in public universities in western Kenya.

With regard to this objective, the study concludes that practices of career growth and development in public universities are a critical antecedent on engagement of employees in those institutions. Moreover, aspects of career growth and development practices such as career paths and promotion norms, career growth and development policy, training and development policy were not well perceived by the respondents; signifying a gap in the practice which the university management should look into.

In respect to the second objective which sought to determine the extent of internal communication practices on influence employee engagement in public universities in western Kenya; the study concludes that internal communication practices had a high influence on employee engagement in public universities in Western Kenya.

Regarding the third objective which sought to determine the influence of performance appraisals and recognition practices on employee engagement, the study concludes that performance appraisal and recognition practices had a positive and significance contribution on employee engagement in public universities in western Kenya. However, the findings indicated that to some extent the management communicated performance standards to employees but never appraised them nor gave feedback on their performance. This left employees with a feeling that the performance appraisal system was neither fair nor objective. Thus the university management should put much emphasize on performance appraisals in order to respond to the employees' recognition needs.

On the fourth objective which sought to determine the influence of employee health and safety practices on employee engagement in public universities in western Kenya, the study concludes

that employee health and safety practices has a positive significance contribution on employee engagement in public universities in western Kenya.

In the light of the foregoing findings regarding influence of human capital management practices on employee engagement in public universities in western Kenya, the study concludes that there must be other factors contributing to the engagement of employees in public universities in western Kenya. Career growth and development practices, internal communication practices, performance appraisal and recognition practices; and health and safety practices have little influence hence need for further studies.

5.3 Recommendations

From the findings, the study recommends need for public universities in Kenya to take more measures in enhancing the human capital management practices as the scores are still very low. Secondly, practices of career growth and deployment; performance appraisal and recognition were major problems in most public universities. There is need for management to take serious measures that will help improve career growth and development of employees since it is the foundation on which the confidence and competence of individual employee is built. This could be done through creating opportunities for promotions and providing opportunity for training and skill development that allows employees to improve their employability internally. Additionally, appraisal systems should be put in place in order to respond to the employees' individual recognition needs.

5.4 Suggestions for further study

The study suggests that future studies should be directed towards investigating on other variables that influence employee engagement in public universities in Kenya since the ones looked into under this study are found to have very little influence.

REFERENCES

- Abduljlil, F. M., Yazam, M., & Ahmid, K.B. (2011). The Mediating Effect of HRM Outcomes (employee retention) on the Relationship between HRM Practices and Organizational Performance. *International Journal of Human Resource Studies*, 2(1), 75-79.
- Afiouni, F. (2013). Human Capital Management: A new name for HRM. *International Journal Learning and Intellectual Capital*, 10(1) 18 – 34.
- Ariga, G., & Brunello, H. (2009). Are education and training always complements; Evidence from Thailand, *Journal of Law and Policy Spring*, vol. 12.
- Armstrong, M.A. (2010). *Handbook of Human Resource Management Practice* (7th ed.). London: Kogan Page Limited.
- Bates, S. (2004), 'Getting engaged', *HR Magazine*, 49(2), 44–51.
- Baumruk, R. (2004). The missing link: the role of employee engagement in business successes, *Journal of Human Resource Management*, vol. 47, pp. 48-52.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage, *Journal of Management*, 17 (1) 99-120.
- Beach, M. J. (2009). A Critique of Human Capital Formation in the U.S. and the Economic Returns to Sub-Baccalaureate Credentials. *Educational Studies: A Journal of the American Educational Studies*, 45(1), 24–38.
- Becker, G. (1994). *Human Capital: A theoretical and empirical analysis with special reference to education*. Chicago: The University of Chicago Press.
- Bloom, M.C., & Michael, J.G. (2002). The relationship among organizational context, pay dispersion and managerial turnover. *Academy of Management Journal*. 45(1), 33-42.
- Bontis, N., Crossan, M. M. & Hulland, J. (2002). Managing an organizational learning system by aligning stocks and flows, *Journal of Management Studies*, 39 (4), 437-469.
- Bontis, N. & Fitzenz, J. (2002). Intellectual capital ROI: A current map to human capital antecedents and consequences. *Journal of Intellectual Capital*, 3(3).
- Frank, R. H., & Bernanke, B. S. (2007). *Principles of Microeconomics* (3rd ed.). New York: McGraw Hill.
- Garavan, T.N., et al. (2011). *Human Capital Accumulation: The Role of Human*

- Resource Development. *Journal of European Industrial Training*, 25(2).
- Graeme, D.H., & Moutinho, L. (2008). *Statistical modeling for management*, London: Sage Publications limited.
- Graeme, C., and Higgins, N.J. (2007). Employee engagement: The secret of highly performing organizations. *Journal of Applied Human Capital Management*, 1(1).
- Grubb, W. N., & Marvin L. (2004). *The Education Gospel: The Economic Power of Schooling*. MA: Harvard University Press.
- Global Human Capital Trend (2015), *Leading in the New world of work*, report by Deloitte Consulting LLP and Bersin Deloitte University Press.
- Gurbuz, S., & Mert, I. S. (2011). Impact of the strategic human resource management on organizational performance: evidence from Turkey. *International Journal of Human Resource Management*, 22(8), 1803-1822.
- Hakanen, J.J., Schaufeli, W., & Ahola, K., (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress. International Journal of Human Resource Management*, 22(3) 224-241.
- Hatch, N.W. and Dyer, J.H. (2004). Human capital and learning as a source of sustainable competitive advantage, *Strategic Management Journal*, (25).
- Jens, M., Unger et al., (2011). Human Capital and entrepreneurial Success: A meta-analytical review, *Journal of Business Venturing* volume 26.
- Kahn, W.A. (1990). To be fully there: psychological presence at work. *Journal of Human Relations*. Vol. 45. No. 4. pp. 321-49.
- Kwenin, D.O. (2013). Relationship between work environment, career growth opportunities and employee retention in Vodafone Ghana Limited. *Global Journal of Business and Management*, Vol.1, pp 1-9.
- Konard, A. M. (2006). Engaging employees through high-involvement work practices, *Ivey Business Journal*, pp.1-6
- Kothari C.R. and Garg G. (2014). *Research Methodology, Methods and Techniques*, (3rd ed.), New Age International Publishers
- Lepak, D.P. and Snell, S.A. (1999). The human resource architecture: toward a theory of human capital allocation and development, *Academy of Management Review*, 24, 31-48.

- LePine, J. A., Erez, A. & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, 87, 52-65.
- Lombardi M., & Laurano M. (2013). *Human Capital Management Trends 2013: It's a Brave New World, Aberdeen Group: A Harte-Hanks Company.*
- MacLeod, D. & Clarke, N. (2009). *The MacLeod Review – Engaging for Success: Enhancing Performance through Employee Engagement.* Department for Business Innovation and Skills. London, Crown.
- Marimuthu, M., Arokiasamy, L., & Ismail, M. (2009). Human capital development and its impact on firm performance: Evidence from developmental economics. *The Journal of International Social Research*, 2(8),
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement *Journal of Applied Psychology*, 93, 498–512.
- Melcrum, C. (2007). *The Practitioner's Guide to: Essential techniques for employee engagement*, Melcrum Publishing Limited.
- Mollel.E. R., Mulongo L.S., & Razia.M., (2017). The influence of performance appraisal practices on employee productivity: A case of Muheza District, Tanzania. *Issues in Business Management and Economics Vol.5 (4)*, pp. 45-59
<https://www.journalissues.org/IBME/> <https://doi.org/10.15739/IBME.17.006>
- Mugenda, O., & Mugenda, A. (2003). *Research methods: Qualitative and quantitative approaches.* Nairobi: Africa Centre for Technology Studies.
- Mugenda, O. M., & Mugenda, A. (2006). *Research Methods: Quantitative and Qualitative Approaches*, Nairobi, African Centre for Technology Studies.
- Mugenda, O. M., & Mugenda, A. (2008). *Research Methods: Quantitative and Qualitative Approaches*, Nairobi, African Centre for Technology Studies.
- Munjuri, M.G., & K'Obonyo P. (2015). *Human Capital, Social Capital, Employee Empowerment, Quality of Decisions and Performance of Commercial Banks and Insurance Firms in Kenya.*, Nairobi: University of Nairobi.
- Munjuri, M. G., K'Obonyo, P., & Ogutu, M. (2015). Human capital, social capital and performance of commercial banks and insurance firms in Kenya. *Prime Journal of Social Science (PJSS)*, 4(5):1045-1057.

- Muresan, M., & Gogu, E. (2010). Universities – Drivers for regional innovation culture and competitiveness. *US-China Education Review*. Vol.7, NO. 2 (Serial No. 63).
- Mwema, N. W., & Gachunga, H. G. (2014). The influence of performance appraisal on employee productivity in organizations: A case study of selected WHO offices in East Africa. *International Journal of Social Sciences and Entrepreneurship*, 1 (11), 324-337.
- Nafula, P. (2005). A survey of human capital practices among the sugar companies' in Kenya, College of Humanities and Social Science, University of Nairobi, digital repository, Nairobi, Kenya.
- Nzuve, S., & Bundi, E. G. (2012). Human capital practices and firm's performance: A survey of commercial banks in Kenya, Social Science Research Network, Nairobi, Kenya.
- Nzuve S., & Musyoka A. (2012). Human Capital Management Practices Adopted by the National Social Security Fund, *Research Journal of Multidisciplinary Social Sciences*, Vol.1, Nairobi, Kenya.
- Oanda, I.O., Chege, F.W., Wesonga, D.N. (2008). Privatization and Private Higher Education in Kenya: Implications for Access, Equity and Knowledge production.
- Odhong', A. E., Were, A., & Omolo, J. (2014). Effect of human capital management drivers on organizational performance in Kenya. A case of investment and mortgages bank ltd. *European Journal of Business Management*, 2 (1), 341-356
- Ongori, H. & Agolla, J.E. (2009). Paradigm shift in managing career plateau in organisation: The best strategy to minimize employee intention to quit. *African Journal of Business Management*, 3(6), 268-271
- Orodho, J.A. (2005). Elements of education and social science research methods. Kanezja Publishers, Nairobi.
- Ray, B. (2006). Why managers are crucial to increasing engagement: Identifying steps managers can take to engage their workforce, *Strategic HR Review*, Vol. 5 Issue: 2, pp.24-27.
- Ravi, B., Nishtha, J., Amit, M., Ram, G., & Alek, G. (2013). Human Capital Investments and Employee Performance: An Analysis of IT Services Industry, *Journal of Management Science*, Vol. 59, No. 3 pp. 641-658.
- Republic of Kenya (2007). Kenya Vision 2030: A Globally Competitive and Prosperous

- Kenya. Nairobi: Ministry of Planning and National Development and National Economic and Social Council.
- Ria, M. Y., et al. (2012) The Influence of Occupational Safety and Health on Performance with Job Satisfaction as Intervening Variables Study on the Production Employees in PT. Mahakarya Rotanindo, Gresik, American Journal of Economics, Special Issue: 136-140.
- Robinson, D., Perryman S., & Hayday, S. (2004). The Drivers of Employee Engagement Report 408, Institute for Employment Studies, UK.
- Robinson D, Hooker H, Hayday S (2007), Engagement: The Continuing Story, Institute for Employment Studies.
- Rodriguez, P. J., & Loomis, R. S. (2007). A New View of Institutions, Human Capital and Market Standardization. Education, Knowledge & Economy, Journal of Economics 1(1), 93–105.
- Schultz, T. W. (1961). Investment in Human Capital. American Economic Review, 51,71
- Seleim, A., Ashour, A., and Bontis, N. (2007). Human capital and organizational performance: A study of Egyptian software companies. Journal of Management Decision. 45(4), 789-801.
- Shaufeli, W.B., & Bakker, A.B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi sample study. Journal of Organizational Behaviour. Vol. No. 25. pp. 293-315
- Shaufeli.W.B., Salanova, M., Gonzalez, R. V. and Bakker, A.B. (2002). The measurement of engagement and burnout: a two sample confirmatory factor analytic approach. Journal of Happiness Studies.3, pp. 71-92.
- Sinclair, A., Robertson-Smith, G., & Hennessy, J. (2008), The Management Agenda, Roffey Park Institute.
- Skaggs, B., & Youndt, M. (2004). Strategic positioning, human capital, and performance in service organizations: a customer interaction approach, Strategic Management Journal, Vol. 25 pp.85-99.
- Sudershan, C., & Daleep, P. (2017) Human Capital Management in Banking Sector- A Conceptual Framework. International Journal of Management.
- Waswa, F., & Katana, G. (2008). Academic staff perspectives on operating beyond

- industrial actions for sustainable quality assurance in Public Universities in Kenya. *International Journal of Environment*, 4(1), 45-58.
- Welch, M. (2011). The evolution of the employee engagement concept: Communication implications. *Corporate communications: An International Journal*, Vol.16. Issue: 4. pp.328-346.
- West, M., & Dawson, J. (2012). Employee engagement and NHS performance. *The King's Fund*, 1-23.
- Wiley, J.W., Kowske, B.J. and Herman, A.E. (2010). Developing and validating a global model of employee engagement. in Albrecht, S.L. (2nd Ed.). *Handbook of Employee Engagement: Perspectives, Issues, Research and Practice*. Edward Elgar. Cheltenham
- Womoh, G., Owusu, E. E., and Addo, M. (2013). Impact of occupational health and safety policies on employees' performance in the Ghana's Timber industry: Evidence from Lower and logs Limited. *International Journal of Education and Research*, 1(2)
- World Economic Forum (2013). *Human Capital Report*, prepared in collaboration with Mercer, Switzerland.
- Yamane, T. (1967). *Statistics, an Introductory Analysis*, 2nd Ed., New York: Harper and Row.
- Youndt, M. A., et al. (2004). Intellectual capital profiles: An examination of investments and returns. *Journal of Management Studies*, 41(2). 335-361.
- Young, N. (2009). *Understanding the Research Process and Methods*. An Introduction to Research Methods. Las Vegas: Act Press

APPENDICES

APPENDIX A: LETTER OF INTRODUCTION

Shihafu Edith Alaka
C/O Department of Business Administration
School of Business and Economics
Maseno University
Date.....

TO WHOM IT MAY CONCERN

Dear Sir/Madam

ACADEMIC RESEARCH

I am a student at Maseno University pursuing Master of Science in Human Resource Management. As part of the requirements of the course, I am carrying out this research entitled, “Influence of human capital management practices on employee engagement in public universities in western Kenya.”

Your organization has been selected to participate in this study. Kindly assist to answer the questions provided in the questionnaire in good faith and be assured that the information you provide will be treated with utmost confidentiality and used only for academic purpose. For any inquiries, you can contact me on 0722498518

Yours Sincerely

Shihafu Edith Alaka
MSC/BE/00131/2016

RESEARCH SUPERVISOR

Dr. Christine Bando
Maseno University

APPENDIX B: EMPLOYEE QUESTIONNAIRE

The purpose of this questionnaire is to aid in obtaining information which is useful in ascertaining the influence of human capital management practices on employee engagement in public universities in western Kenya. Kindly respond by filling in the spaces provided or by ticking appropriately; in good faith and be assured that the information you provide will be treated with utmost confidentiality and used only for academic purpose.

SECTION A: PERSONAL INFORMATION

1. Age:

21-30 years 51-60 years
31-40 years over 60 years
41-50 years

2. Gender:

Male Female

3. Highest academic qualification:

Certificate Diploma Undergraduate Degree Post Graduate degree

4. Name of the institution you work for

5. Department.....

6. Years of service in this university:

Below 5 years 21-25 years
6-10 years 26-30 years
11-15 years Above 30 years

SECTION B: EXTENT OF HUMAN CAPITAL MANAGEMENT PRACTICES

Rate the following statements on a scale of 1-5, where 1= Not at all, 2= Little extent, 3= Moderate extent, 4= Large extent and 5= Very large extent.

To what extent do the following statements apply to your University? Indicate your answer by ticking (✓) appropriately on your answer choice.

B1. Extent of career growth and development Practices.

Extent of career growth and development Practices.		Not at all	Little extent	Moderate extent	Large extent	V. large extent
		1	2	3	4	5
1	There are clearly defined career paths and internal promotion norms in this university.					
2	Our university has a formal policy of career growth and development plans.					
3	The university management recognizes our career growth and development needs.					
4	We are provided with adequate career growth and development opportunities through training and development					
5	Good performers get promoted first.					
6	I experience personal growth such as updating my skills and learning different jobs					
7	My boss encourages me to do my best at work					
8	My work gives me a feeling of accomplishment.					
9	I am assigned challenging jobs to charge my enthusiasm and develop my skills.					

B2. Extent of Internal Communication practices

Extent of Internal Communication practices		Not at all	Little extent	Moderate extent	Large extent	V. large extent
		1	2	3	4	5
1	The management communicates clear organizational goals and objectives to employees.					
2	There is effective information flow between top management and employees.					
3	Adequate flow of information across the university enables employees to discharge their duties effectively.					
4	There are clear communication channels and guidelines between managers and subordinates.					
5	I have adequate opportunity to interact and socialize with other employees on a formal level					
5	My boss encourages me to inform him/her when things are going wrong on the job.					
6	I can freely talk to my boss about the way I feel he/she manages our department.					
7	I freely communicate job frustrations to my boss					

B3. Extent of Performance appraisal and recognition practices

Extent of Performance appraisal and recognition practices		Not at all	Little extent	Moderate extent	Large extent	V. large extent
		1	2	3	4	5
1	The management clearly communicates performance standards to employees.					
2	Performance appraisal system aims at improving our performance and strengthening our skills.					
3	Performance appraisals are undertaken to identify our developmental needs and to help us attain our career goals.					
4	We are appraised at regular intervals.					
5	University management follows a formal procedure when appraising employees.					
6	Performance appraisal system is extended to all members of the organization					
7	I receive proper feedback on my performance					
8	I feel our performance appraisal system is fair and objective.					

B4. Extent of health and safety practices

Extent of health and safety practices		Not at all	Little extent	Moderate extent	Large extent	V. large extent
		1	2	3	4	5
1	Our university has a written health and safety policy					
2	The university management has set goals and objectives in relation to safety at the workplace.					
3	We receive health and safety training regularly					

4	We have occupational health and safety committee that oversees workplace safety.					
5	There is a system in place to report and record incidents					
6	Our workplace is suitable for disabled workers					
7	I have access to first aid facilities in our offices					
8	I have access to emergency phone numbers					

SECTION C: EXTENT OF EMPLOYEE ENGAGEMENT

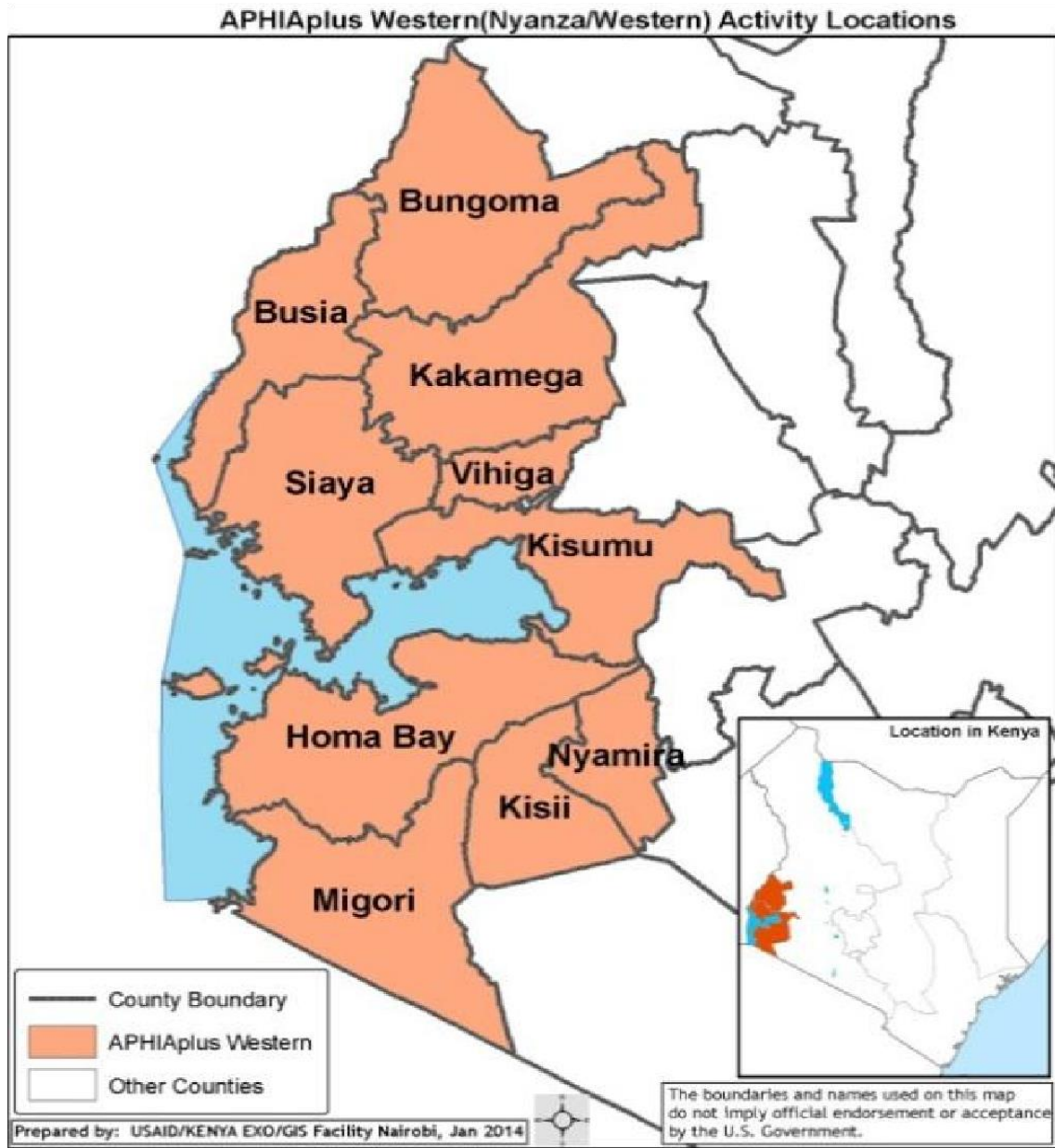
Extent of Employee Engagement		Not at all	Little extent	Moderate extent	Large extent	V. large extent
		1	2	3	4	5
1	I would be very happy to spend the rest of my career life working with this university					
2	I am proud to tell others that I work with this university					
3	For me, this is the best of all possible organizations to work with					
4	I feel high sense of belongingness to this University					
5	I have a great sense of loyalty to this university					
6	Too much in my life would be disrupted if I decided to leave my organization now.					
7	I would recommend this university to any job seeker					

APPENDIX C: LIST OF PUBLIC UNIVERSITIES IN KENYA

S/NO.	University Name	Area	University Status	Yr. Established
1	University of Nairobi	Nairobi	1970	1956
2	Moi University	Eldoret	1984	1984
3	Kenyatta University	Nairobi	1985	1965
4	Egerton University	Njoro	1991	1939
5	Maseno University	Maseno	2001	1955
6	Jomo Kenyatta Univ. of Agricultural Technology	Nairobi	1994	1981
7	Masinde Muliro Univ.of Science and Techn.	Kakamega	2009	2002
8	Dedan Kimathi Univ. of Technology	Nyeri	2012	1972
9	Chuka University	Chuka	2012	2004
10	Technical Univ. of Kenya	Nairobi	2013	1961
11	Technical Univ. of Mombasa	Mombasa	2013	1940
12	Pwani University	Kilifi	2013	2007
13	Kisii University	Kisii	2013	1965
14	University of Eldoret	Eldoret	2013	2008
15	Maasai Mara Univ.	Narok	2013	2008
16	Jaramogi Oginga Odinga university of Science& Tech.	Kisumu	2013	2009
17	Laikipia University	Laikipia	2013	2009
18	South Eastern Kenya Univ.	Kitui	2013	2008
19	Multimedia Univ. of Kenya	Nairobi	2013	2008
20	Univ. of Kabianga	Kericho	2013	2009
21	Karatina University	Karatina	2013	2008
22	Meru University of Science & Techn.	Meru	2013	2008

Source: Commission of Higher Education Report (2017)

APPENDIX D: MAP OF STUDY AREA (WESTERN KENYA)



APPENDIX E: WORK PLAN

Period: 2018

MARCH MAY JUNE JULY AUGUST OCTOBER

ACTIVITY	MARCH	MAY	JUNE	JULY	AUGUST	OCTOBER
Problem Identification	■					
Review of literature	■	■	■	■		
Proposal Writing and Presentation		■	■	■		
Proposal presentation				■		
Data collection and data entry				■	■	
Data Analysis					■	
Presentation of draft					■	
Final draft						■
Submission of project for examination						■

APPENDIX F: BUDGET

ITEM	KSHS
Stationery	8,000
Literature Review and proposal development	12,000
Data collection	15,000
Data analysis	20,000
Secretarial costs	10,000
<u>TOTAL COSTS</u>	<u>65,000</u>