INFLUENCE OF TALENT MANAGEMENT PRACTICES ON KNOWLEDGE RETENTION IN GOVERNMENT MINISTRIES IN KENYA

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Influence of Talent Management Practices on Knowledge Retention in Government Ministries in Kenya

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

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DEDICATION

This thesis is dedicated to my parents, my late dad Joseph Njogu Mungai and my loving mum Hannah Mukami Njogu for instilling in me the value for education and to my husband Paul and sons Linton and Lennox for their sacrifice and prayers.

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My sincere prayer is that God remembers all who have contributed to the success of this study directly or indirectly, and provide for each of their needs according to His riches in glory.

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ABBREVIATIONS AND ACRONYMS

AAPAM   African Association for Public Administration and Management

ASAL   Arid and Semi Arid Lands

CARPS   Capacity Assessment and Rationalization of the Public Service

CEO   Chief Executive Officer

CIPD   Chartered Institute of Personnel Development

CMI   Chartered Management Institute

EAC   East African Community

GoK   Government of Kenya

HR   Human Resource

HRM   Human Resource Management

HRP   Human Resource Planning

KMO   Kaiser-Meyer-Olkin Test

KR   Knowledge Retention

MoEST   Ministry of Education Science and Technology

MoH   Ministry of Health

MoL   Ministry of Lands

MoWS   Ministry of Water and Sanitation

NACOSTI   National Commission for Science, Technology and Innovation

OECD	Organization for Economic Cooperation and Development
PSC	Public Service Commission
PSPMA	Public Sector People Managers Association
RoK	Republic of Kenya
SCAC	State Corporations Advisory Committee
SET	Social Exchange Theory
SHRM	Society for Human Resource Management
SRC	Salaries and Remuneration Commission
TA	Talent Attraction
TD	Talent Development
TM	Talent Management
TMC	Talent Management Commitment
TMo	Talent Mobilization
TR	Talent Retention
WEF	World Economic Forum

DEFINITION OF OPERATIONAL TERMS

Explicit Knowledge   According to Garvey (2013), explicit knowledge is a kind of external knowledge which can be expressed in numbers or words thus has the ability to be captured, shared and transferred.

Government Ministries   A Government Ministry is a governmental organization, headed by a minister or a Cabinet Secretary that is meant to manage a specific sector of public policy and administration where the government has majority control (Constitution of Kenya, 2010).

Talent Management Practices   This study has adapted the definition of talent management as the processes through which organizations attract, select, train, develop, retain, promote, and move (mobilize) employees through the organization by Acar and Yener (2016).

Knowledge Retention   Knowledge retention refers to all the activities that preserve knowledge and allow it to remain in the system once introduced (Newman & Conrad, cited by Blaschke, 2012).

Tacit Knowledge   Sikombe and Phiri (2019) define tacit knowledge as the internal knowledge possessed by individuals which is experience based, not easy to express and embedded in one's personal nature

Talent   Schiemann (2013) defines talent as the collective knowledge, skills, abilities, experiences, values, habits and behaviors of all labor that is brought to bear on the organization's mission

Talent Attraction Talent attraction is ensuring that the right people want to join the company effectively bringing new talented workers into the company (BethkeLangenegger, 2010).

Talent Development Talent development is about career growth and creating opportunities to learn new things in the work environment (Horrigan, 2014).

Talent Mobilization Talent mobilization is a talent management process supporting talent movement that hinges on organizational ability to effectively understand, develop, and deploy or move talent (Harrison & HCI, 2013).

Talent Retention Talent retention involves all the activities that prevent talented employees from leaving the organization (Tarique & Schuler, 2012).

Top Management This refers to persons charged with the responsibility of planning, coordinating and directing people and include the Board of Directors (BOD) and Chief Executive Officer (CEO) according to Dessler (2008).

Top Management Commitment Top management commitment refers to the involvement of the highest-level officials in the organization's quality improvement efforts (Nektarios, 2021). Cooper (2005) defines management commitment as engaging in and maintaining behaviors that help others achieve a goal, while Tzempelikos (2015) defines top management commitment as the demonstration of management belief.

ABSTRACT

Public sector organizations (PSOs) are the most knowledge centric organizations that create and utilize more knowledge than other organizations. Kenya Vision 2030 acknowledges the central role of knowledge in boosting wealth creation, social welfare and international competitiveness. Since knowledge is a critical resource mainly resident in the workforce it is a continually shifting asset which is at risk of being lost whenever there is employee separation thus there is a link between HRM and knowledge retention. Retaining critical knowledge is relevant for all organizations particularly knowledge-intensive ones like the public sector. With new generations entering and older ones exiting the job market, there is need for businesses to be more strategic and competitive in the way they manage their workforce. Talent management is therefore imperative in all organizations. At the heart of knowledge management there is need for organizations to use HRM systems to access the tacit knowledge held by individual workers and make critical decisions on knowledge retention. This study has examined the influence of talent management practices on knowledge retention in government ministries in Kenya. Specific objectives of the study were: to assess the influence of talent attraction, talent development, talent mobilization and talent retention on knowledge retention. The moderating effect of top management commitment on the influence of talent management practices on knowledge retention was also examined. The scope of the study was seven ministries that were systematically sampled out of twenty one government ministries in Kenya. The study was guided by Knowledge Economy, Resource Based View of the firm, Human capital, Social Exchange and Hertzberg's Two Factor theories. A conceptual framework was developed illustrating relationships among the independent, dependent and moderating variables of the study. Descriptive research design was adopted for the study. The target population of the study was 65,152 employees in 21 government ministries from which a population sample size of 385 respondents was statistically selected. There was purposive sampling of employees in the ranks of senior management and middle level management as respondents. A structure questionnaire was used for primary data collection and review of secondary sources of data was done. Pilot testing was done in one government ministry which was not included in the main study. Out of the distributed 385 questionnaires, 276 were completed and returned which was 72% response rate. The data collected was analyzed using SPSS Version 22. Descriptive analysis was done on the qualitative data. Pearson's correlation and regression analysis were done under the inferential analysis. Multiple regression model was used to test the relationship between the dependent and independent variables where all the study hypotheses were tested. Findings of the study indicated that all the talent management practices examined in the study had influence on knowledge retention. Top management commitment was also found to have a significant moderating effect on the influence of all the talent management practices on knowledge retention individually and collectively. On the basis of the results of the tests and study findings, the null hypotheses were rejected and the alternate ones accepted. It was concluded that talent management practices positively and significantly influence knowledge retention. Tables, pie charts, graphs and scatter plot were used to present the findings of the study from analyzed data results.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Knowledge is recognized as a resource that is at a par with other economic resources hence it should be managed systematically, like other economic resources (Okemwa, 2009). Knowledge is a continually shifting asset which is at risk of being lost through workforce retirement, resignation, attrition and transfers (Thomas, 2011). Luen and Al-Hawamdeh (2001) posit that many organizations in the public sector are knowledge-intensive and that poor knowledge management (KM) practices might lead to high costs, loss of institutional memory, knowledge gaps and poor decision making. Zhou and Gao (2007) suggest that KM in the public sector can enhance governments' competence and improve service quality. Knowledge management safeguards institutional memory and continuity (UNCTAD, 2012) yet managing knowledge assets for the purpose of gaining competitive advantage is one of the major challenges for organizations (Fong & Choi, 2009, quoted by Arif et al, 2012).

Employees are important knowledge assets that create and add value to organizational goals as they amass valuable knowledge and wisdom related to the data that drives the company, as organizations evolve (Tripathi & Agrawal, 2014). Analysts have postulated that in most organizations, up to 90% of the knowledge of the company is stored in the heads of its employees (Peña, 2014). Therefore, when they leave, they take with them a substantial amount of work, business and operational knowledge that is difficult to replace or duplicate if there are no internal systems to retain such knowledge (Peña, 2015). Human resources processes and practices represents one of the areas that will create an organizational infrastructure for knowledge retention (DeLong, 2004 quoted by Ida, 2017).

Chankova et al (2009) posit that public agencies across Sub-Saharan Africa are suffering from a loss of experienced employees due to various forms of attrition such as aging workforce, retirement, civil strife and the ravages of diseases which cause premature departure of employees. According to Arif et al (2012) organizations

regularly poach on workforces of each other, and with better offers from competition, it is not easy to hold on to workforce hence continued loss of knowledge with the departure of employees. From the foregoing information, employee separation is inevitable and given the value of knowledge, organizations need to employ various mechanisms or strategies to retain critical tacit knowledge before people possessing it leave which may include to capture, retain and manage it before it is lost (Adobor et al. 2019, Dube & Ngulube, 2013). Leibowitz (2009) opines that individual knowledge needs to be captured in other individuals' minds, documents, repositories, or elsewhere to avoid losing it. Durst et al. (2013) concur stating that companies need to capture knowledge of internal and external specialists for others in the organization to benefit from it.

Public sector organizations are increasingly focusing on knowledge management (KM) as a competence for delivering on their mission (Sandhawalia & Dalcher, 2011). Knowledge retention is an aspect of KM concerned with ensuring that the organization does not lose the knowledge embedded in the minds of employees (Tseole & Ngoako, 2022). According to Moria (2011) knowledge retention involves determining and prioritizing what will be retained, transferring knowledge from older employees or retirees, to ensure it does not lose the knowledge held by knowledge workers who leave, and integration to ensure transferred knowledge is integrated into the organizations' processes. The end goal of any knowledge retention process is to have knowledge maintained in a form that makes it useful in the future and anything retained must end up in an organization's memory (Levy, 2011). According to Sarina (2018), at the heart of knowledge management there is increasing need for organizations to use human resource management (HRM) systems to access tacit knowledge held by individual workers hence the approach of knowledge retention from talent management (TM) perspective in this study. Kamal and Lukman (2017) posit that TM is the capability to create and continuously optimize the talent resources needed to execute a business strategy. Zakaria (2018) defines talent management as an organization's commitment to hire, manage, develop and retain talented employees. Calo (2008) states that if the organization needs to take action to capture knowledge, the initiative has to come from within the human resource department.

The Civil Service or the public sector is a government body entrusted with the administration of the country and mandated to implement the policies of the government of the day. The sector includes national government ministries and all establishments where the national government has majority control. Civil services all over the world now exist in a rapidly changing world and the demands placed on them are dictated and determined by the wider environment. Therefore civil services have to adapt themselves to long term societal trends such as demographic change, global migration flows, information technology revolution, blurring of boundaries between the public and private and rising public expectations of government (Lodge & Kalitowski, 2007).

Yousaf (2013) defines commitment as a state of attachment that defines the relationship between an actor and an entity and is a great social value desired by everyone from top to bottom. Cooper (2005) points out that management commitment is engaging in and maintaining behaviors that help others achieve a goal. Kehinde (2012) posits that common themes around talent management are emerging but CEO involvement is among the main recurring themes. Therefore, to be effective, the talent mindset must be embedded throughout the organization starting with the CEO. Lack of ownership of a business problem or improvement opportunity by top managers contributes to failure in knowledge transfer (Razak et al, 2013). According to Armstrong cited by Harrison and HCI (2013), talent management tools are secondary to having leadership buy-in that can help implement development plans and support employees. Some of the inhibitors to transfer of knowledge within the organization are management's failure to signal its importance to the business as this implies vagueness of the objective, the mission or the goal to be achieved (Cooper, 2005).

Human Resource leaders will have to work closely with senior management to attract, hire, develop, and retain talent (Oladapo, 2014). Without top management support and involvement, plans are unlikely to succeed hence the need to examine the moderating effect of Top Management Commitment on the influence of talent management practices (independent variables) on knowledge retention (dependent variable) for this study. Most of the available studies on KM focus on the private,

not the public sector (Oluikpe, 2012) hence their findings may not apply to the public sector because of its unique context (Massaro et al., 2015). Biswas et al (2017) suggests that as public sector organizations (PSOs) are the most knowledge centric organization that create and utilize more knowledge than other organizations.

The Public Service Commission of Kenya is an independent government commission established under the Constitution of Kenya to manage human resources in the Kenya Civil Service and the Local Authorities. According to PSC (2015), the Public Service generates a lot of knowledge and information through normal operations, research, reports and observations. The knowledge is usually in the custody of the individual officers as tacit knowledge or in the organization as explicit knowledge. Knowledge is a resource to be shared by all, hence the need to harness, conserve and protect it from loss, misuse, mismanagement and abuse (PSC, 2015). There is therefore need to tap and retain the knowledge and skills of public servants, majority of whom are approaching retirement. As per the Kenyan Constitution (2010), Salaries and Remuneration Commission (SRC) of Kenya advises the national and county governments on the harmonization, equity and fairness of remuneration, for the attraction and retention of requisite skills in the public sector. The State Department for Planning in Kenya has been spearheading Knowledge Management Africa (KMA)–Kenya Chapter which is drawn from KMA which was founded in 2003 to facilitate the harnessing of knowledge to improve development outcomes in Africa.

This study sought to determine the influence of talent management practices on knowledge retention in government ministries in Kenya. The study specifically analyzed the influence of talent attraction, talent development, talent mobilization and talent retention on knowledge retention in government ministries in Kenya. The moderating effect of top management commitment on the relationship between talent management practices and knowledge retention was also assessed.

1.1.1 Knowledge Retention

Knowledge retention is part of knowledge management that helps convert tacit form of knowledge into an explicit form (Bolisani et al, 2018). Knowledge retention (KR) has been identified as one of the critical factors for maintaining sustainable performance (Minh Doan, Rosenthal-Sabroux. & Grundstein, 2011). Knowledge is a resource to be shared by all, hence the need to harness, conserve and protect it from loss, misuse, mismanagement and abuse according to Public Service Commission of Kenya (PSC, 2015). Knowledge loss can occur through failure to capture knowledge at organizational level, failure to store captured knowledge and maintain organizational memory (Levallet & Chan, 2019). Knowledge retention is needed when expert knowledge workers leave the organization after a long career (Moria, 2011). Retaining knowledge prevents losing intellectual capital (Urbancova, 2012). Arif et al (2012) are of the view that the blow of losing the employee might be softened if the knowledge of the departing employee is retained. Morera (2011) argues that given the nature of the knowledge and social ability of millennials, organizations should consider facilitated transfer of knowledge from them.

Kenya Vision 2030 acknowledges the central role of knowledge in boosting wealth creation, social welfare and international competitiveness. In the public sector, best practices in Knowledge Transfer and Retention is central to achievement of government agenda (Republic of Kenya, 2007). The State Department for Planning, has been spearheading Knowledge Management Africa (KMA)–Kenya Chapter drawing from KMA which was founded in 2003 with the objective of facilitating the harnessing of knowledge to improve development outcomes in Africa in social, economic, and cultural spheres. KMA was founded under the leadership of the Development Bank of South Africa (DBSA) in collaboration with New Partnership for Africa's Development (NEPAD) which was adopted by African Heads of State in 2001 and ratified by African Union (AU) in 2002 to address Africa's problems within a new paradigm of knowledge. KMA initiative focuses on linking three key groups of stakeholders who include policy makers, knowledge-generating institutions and knowledge users.

Towards this end KMA organized and held three Biennial Conferences under the following titles:

Knowledge to Address Africa's challenges, Johannesburg, South Africa (March 2005).

Knowledge to Remobilize Africa, Nairobi, Kenya (July 2007).

Knowledge to Reposition Africa, Dakar, Senegal (May 2009).

Kenya was mandated to spearhead the institutionalization of KM in Eastern Africa through capacity building and education during the 2007 and 2009 conferences. Declarations of the conferences were that countries form national chapters to institutionalize knowledge management. To this end GoK through the Ministry in charge of Planning, inaugurated KMA-Kenya Chapter National Steering Committee (NSC) in June 2009. This study aims to investigate the status of knowledge management specifically, knowledge retention in the public sector in Kenya, government ministries from strategic HRM perspective of talent management practices.

1.1.2 Global Perspective of Talent Management

Talent Management is the systematic attraction, identification, development, engagement, retention and deployment of those individuals who are of particular value to an organization (CIPD, 2012). Fegley (2006) in a report for the Society for Human Resource Management (SHRM) defines TM as integrated strategies or systems designed to improve processes for recruiting, developing and retaining people with the required skills and aptitude to meet current and future organizational needs. TM is associated with the process of integrating the components in human resources management to attract, develop, mobilize and retain talent (Clark, 2012; Dawn & Biswas, 2013). Armstrong (2009) argues that talent management ought to be fundamental to any human resource department particularly in the public sector. Cummings-White (2009) states that talent management is imperative in the public sector, which will lose nearly 50% of its workforce over the next five years. This has

led to pressure on HR professionals to practice talent management (Zimmermann & Parthasarathy, 2012). Companies that engage in TM are strategic and deliberate in how they source, attract, select, train, develop, retain, promote, and move (mobilize) employees (Acar & Yener, 2016).

Organizations have developed a keen interest in the field of talent management with surveys showing 75% of CEOs acknowledging that talent management is on top of their agenda according to Certified Institute of Personnel Development (CIPD, 2007). Hackett Group in a study in 2007 found that companies that excel at managing talent post earnings that are 15 % higher than their peers. A study by IBM (2007) found that public companies that are effective at talent management have higher percentages of financial performance than their counterparts with less effective talent management practices. A 2006 research study by McBassi & Company revealed that high scorers in human capital management posted higher stock market returns and better safety records.

A survey conducted by the Economist Intelligence Unit reveals that executives allocate as much as 50% of their time for responding to talent management challenges which include transferring key knowledge and relationships to new workers among others (Smutniak, 2004). The effect of losing employees could be reduce if the knowledge of the departing employee is retained in the organization after they exit (Arif et al, 2012). There is extensive literature on information and communication technologies that exist to support knowledge management related activities but less specific information exists on the infrastructure or practices for successfully retaining tacit knowledge.

Many civil services in the world are facing the imminent retirement of a large portion of their workforce due to changing demographics but only few companies have acknowledged the demographic shift in the workforce. Organizations regularly poach on workforces of each other and with better offers from competition, it is challenging to retain workforce for long. Macon and Artley (2009) posit that the success of any organization will depend on its ability to embrace an environment with methods to develop, motivate, and retain current workforce as well as attract, encourage, develop,

and retain the new generation of workers. Recruiting, developing and retaining high performing talent constitute major challenges and are recognized priorities in organizations (White, 2009). PSPMA (2006) posits that only few organizations have formal talent management processes which tend to be confined to graduate recruitment, training programs or accelerated development programs for more experienced managers leaving out other categories of employees and other techniques of talent management.

1.1.3 Regional Perspective of Talent Management

Talent management is highly under-researched in the North, West and Eastern African sub-regions of the continent therefore TM research can be described as being at an embryonic stage (Anlesiny et al 2019). The public service in many African countries has faced a myriad of challenges such as low staff morale and motivation leading to loss of qualified personnel (Tetty, 2006). The findings of a study by the African Association for Public Administration and Management (AAPAM) indicate that the African continent has not been able to recruit and retain well-trained and skilled personnel due to such challenges (AAPAM, 2008). According to Price Water House Coopers (PWC, 2012) lack of talent is a threat to growth in Africa so talent management has become top agenda for CEOs with 85% of them indicating that they plan to focus on strategies for managing talent.

1.1.4 Local Perspective of Talent Management

Business Review Management (2013) posits that Kenya faces the challenge of shortage of talent which is felt in both professional and nonprofessional management. Kagwiria (2014) posits that talent challenges in Kenya include hiring, retaining and motivating professional talent and early retirement resulting in shortage of staff and no qualified personnel to fill the vacant positions. Retaining Generation Y employees in the public sector may not be easy as there are fewer financial rewards in the public service than in the private sector (Kibui & Kanyiri, 2014) hence the need to tap and retain the knowledge and skills of these employees before they exit. The public sector therefore needs to initiate strategies to ensure their valued employees remain with them and or device ways of tapping their

knowledge and skills before they exit as it is harder and costly to find replacements.

1.1.5 Government Ministries in Kenya

Kenya is a sovereign republic, a multi-party democratic state with two levels of government, national government and county governments. A government ministry is a governmental organization headed by a minister meant to manage a specific sector of public administration where the government has majority control (Kenya Constitution, 2010). The Government recognizes that ministries hold a vital key to improving quality of lives of Kenyans and making the country globally competitive (RoK, 2013). Since Kenya attained independence, creation of productive and sustainable employment opportunities has remained a central policy priority of her government (Republic of Kenya, 1964 cited by Kibui & Kanyiri, 2013). Consequently, the government has been reviewing and reforming HR policies as the situation demands. For instance, government undertook a retrenchment strategy and froze the recruitment of civil servants as part of civil service reform programs. This measure reduced number of the civil servants from 272,000 in 1992 to 191,000 by 2003. These changes led to flatter, leaner, and more focused organizations with the capacity to efficiently manage public resources (RoK, 2007). The workforce retained after retrenchment became more important to the functioning of the Civil Service (Westman, 2007). However, according to Schmitt, Borzillo and Probst (2011), such downsizing or retrenchment initiatives fail to retain critical skills, capabilities, experience and knowledge in the organization if deliberate measures for retention are not taken. According to 2010 Constitution of Kenya, the Government recognizes Ministries and their Departments as key to improving quality of the lives of Kenyans, making the country governable and globally competitive (RoK, 2013). The Kenya national government comprises of 21 government ministries in line with the 2010 Constitution of Kenya. Civil servants fall under only one ministry at a given time and only perform the functions of that specific ministry. Government ministries are supported by state agencies that complement their efforts. State Corporations Advisory Committee (SCAC) and Salaries and Remuneration Commission (SRC) are among such agencies. SCAC was established under section 26 of the State Corporations Act, Cap. 446. Part of its mandate is to advise on the appointment, removal or transfer of

officers and staff of State Corporations, the seconding of public officers to State Corporations and the terms and conditions of any appointment, removal, transfer, or seconding, where necessary which are all talent management practices.

1.2 Statement of the Problem

The Public Service generates a lot of knowledge and information through normal operations, research, reports and observations and the tacit knowledge is in the custody of individual officers (PSC, 2015). Employees are therefore important knowledge assets that create and add value to organizational goals (Tripathi & Agrawal, 2014). There is high labor turnover in the public sector due to various forms of employee separation and employees leave with the knowledge embedded in them (Pena, 2015). Knowledge is therefore a continually shifting asset which is at risk of being lost (PSC, 2015) hence knowledge retention is needed as expert knowledge workers leave the organization (Moria, 2011). Retaining critical knowledge is relevant for all organizations particularly knowledge-intensive ones like the public sector (Sumbal et al., 2022). Though knowledge retention is considered crucial for long term organizational success, Liebowitz (2011) is of the opinion that few organizations have formal knowledge retention strategies. HRM can contribute to knowledge management since knowledge is shared among people besides capturing it through information technology (Aziri et al., 2013). According to Sarina (2018), at the heart of knowledge management is the increasing need for organizations to use HRM systems to access tacit knowledge held by individual workers. However, HRM has been faulted for not playing an effective role in facilitating knowledge-driven organizational cultures and structures (Phaladi, 2022). A Human Resources audit conducted in Kenya in 2015 established that over 50% of employees, 36,074 out of 65,152, in the Public Service in Kenya were over 46 years old (PSC, 2015). Kenya's public service is therefore faced with imminent retirement of more than half of the workforce with critical skills and competencies who will have attained retirement age of sixty years by 2031 (PSC, 2015). There is therefore need to put in place knowledge retention strategies to ensure the knowledge possessed by those employees is not lost when they leave.

One of the challenges in knowledge retention is lack of support from leaders and managers (Durst et al., 2018; Sumbal et al., 2017). Kagwiria (2014) observed that talent management challenges in Kenya include hiring, retaining and motivating professional talent, as well as early retirement of qualified staff. Okemwa (2009) underscored the role of knowledge management in enhancing government service delivery government ministries in Kenya. Kibui (2015) examined the role of talent retention from the perspective of Generation Y employees in state corporations. Mwende, Guyo and Odhiambo (2021) studied KM practices and employee performance in universities.

The cited studies are on talent management and knowledge management separately while the current study has included both. Knowledge management has been predominantly studied in general, and as independent variable but in the current study KR has been studied as an aspect of knowledge management and the dependent variable. Research relating to talent management and knowledge retention reviewed were predominantly in developed economies leaving a gap in developing economies. According to Sumbal et al (2021), there is limited research in the area of knowledge retention and the study of knowledge retention as a knowledge management process is still relatively overlooked (Levallet & Chan, 2019). Levy (2011) observed that KR topic requires more study than KM as the value of knowledge has grown to become a basic economic resource during the knowledge economy era. The current study sought fill the identified gaps and add to knowledge on strategic HRM and knowledge retention.

This study has investigated the influence of specific strategic HRM talent management practices which include talent attraction, talent development, talent mobilization and talent retention on knowledge retention, with top management commitment as the moderating variable.

1.3 Objectives of the Study

The current study was guided by general and specific objectives.

1.3.1 General Objective

To assess the influence of talent management practices on knowledge retention in government ministries in Kenya

1.3.2 Specific Objectives

1. To assess the influence of talent attraction on knowledge retention in government ministries in Kenya.

2. To examine the influence of talent development on knowledge retention in government ministries in Kenya.

3. To assess the influence of talent mobilization on knowledge retention in government ministries in Kenya.

4. To examine the influence of talent retention on knowledge retention in   government ministries in Kenya.

5. To assess the moderating effect of top management commitment on influence of talent management practices on knowledge retention in government ministries.

1.4 Hypotheses of the Study

H_01: Talent attraction has no significant influence on knowledge retention in government ministries in Kenya.

H_02: Talent development has no significant influence on knowledge retention in government ministries in Kenya.

H_03: Talent mobilization has no significant influence on knowledge retention in government ministries in Kenya.

H_04: Talent retention has no significant influence on knowledge retention in government ministries in Kenya.

H$_0$5: Top management commitment does not significantly moderate the influence of talent management practices on knowledge retention in government ministries in Kenya.

1.5 Significance of the Study

The most significant contribution of this study is creation of awareness on the important role played by strategic HRM in knowledge retention in the public sector specifically government ministries in Kenya. Potential beneficiaries of the study include the government of Kenya, researchers and scholars, and HR professionals among others. The Government of Kenya is a major player in the labor market and has been worst hit by high employee mobility hence the shift on knowledge from government ministries and other public corporations. The findings of this study are expected to sensitize GoK on the need to adopt effective HRM strategies in knowledge retention.

The findings of the study are also expected to guide HR managers and HR practitioners in formulation or modification of talent management and knowledge retention policies in the public sector. The study findings are also expected to be valuable to managers in dealing with various forms of employee separation and knowledge retention for business continuity and sustainability. Top level managers are expected to acknowledge, appreciate and examine their role in the success of knowledge retention hence be more alive to the need to be more committed to strategic HRM for knowledge management specifically knowledge retention. It is believed that this empirical study has added to the body of knowledge by linking talent management practices to knowledge retention. The tested hypothesis are also expected to form basis for further research. It is also expected that the study will be used as reference, for literature review and. Researchers and scholars could replicate the study in future.

1.6 Scope of the Study

This study concentrated on the influence of four TM practices which included talent attraction, talent development, talent mobilization and talent retention on knowledge

retention, the dependent variable. The moderation effect of top management commitment on the influence of the four TM practices on knowledge retention was studied. The focus of the study was on how the TM practices studied could be applied for knowledge retention in the public sector which is a huge internal labor market with higher number of highly skilled professional workers (Boxall & Purcell, 2008). Government ministries were the unit of analysis and 385 respondents were the unit of observation. Pilot study was conducted in the Ministry of Lands which was excluded from the main study. The respondents for the study included senior managers and middle level managers in government ministries in Kenya. The study was conducted in seven out of 21 national government ministries. The 7 ministries were: Ministry of Education, Ministry of Health, Ministry of Information and Communication Technology (ICT), Ministry of East African Community, Ministry of Energy, Ministry of Labor and Ministry of Water & Sanitation.

1.7 Limitations of the Study

The study looked into the influence of four talent management practices which included talent attraction, talent development, talent mobilization and talent retention on knowledge retention while there are many other TM practices which could influence knowledge retention. The study also limited itself to the use top management commitment as the moderating variable. The study only drew respondents among senior and middle level managers leaving out lower level managers. This study adopted a descriptive research design while there are other designs that can be used. A questionnaire with structured items was used to collect primary data. Secondary sources of data included publications in journals, textbooks, E-books, published empirical studies and other literature relevant to the area of study in the fields of general management, knowledge management and strategic HRM. The study was conducted in seven government ministries out of 21 ministries in Kenya. The study has a local perspective in a developing economy, Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Relevant theories and models underlying the study, a conceptual framework and a discussion of the variables of the study formed the basis of the literature review. A conceptual framework was developed illustrating all the variables of the study. Talent attraction, talent development, talent mobilization and talent retention were the independent variables while knowledge retention was the dependent variable. Top management commitment was the moderating variable of this study. All the variables and their relationships have been discussed.

2.2 Theoretical Review

The concept of management of knowledge as an organizational resource has been in use since early as 1989 in the management literature (Adler, 1989). An overview of knowledge management theories has been included in this section. Hertzberg' Two Factor Theory of Motivation has been reviewed as it is viewed to be related to all the variables of the study. Knowledge Economy Theory (KET), Resource Based View (RBV) Theory and Human Capital Theory (HCT) have been reviewed. Social Exchange Theory (SET) was also reviewed. KET focused on the value of knowledge as an economic resource for individuals and organizations. RBV focused on the strategic resources of the firm, human resources or talents and knowledge, as aides to gaining competitive advantage over other firms. HCT focused on people not merely as men and women in organizations but as a valuable and resourceful factor of production. SET highlighted social and economic exchanges as important factors in effective talent management and knowledge retention. Talent management theories were also reviewed.

2.2.1 Knowledge Management Theories

The concept of management of knowledge as an organizational resource has been in use since early as 1989 in the management literature. Knowledge is an innately

human quality, residing in the living mind because a person must identify, interpret and internalize knowledge. Strategic management theorists believe that by keeping a healthy alignment between the policies of HR with business wide strategy, the staff can accomplish their expected role in the company, which could be proved as a positive key to make the business a successful. Continuity management proposes the preservation of corporate knowledge motivated by the need to diversify knowledge across individuals in order for organizations to endure employee turnover with minimal or limited organizational knowledge loss. This view motivates knowledge managers to facilitate knowledge transfer among organizational members and to diversify organizational memory beyond single individuals as retainers. KM therefore is people centered and can be reviewed from economic and HR perspectives. HCT and KET theories has been reviewed for this purpose. Strategic Management theory regards knowledge as a fundamental resource that enables organizations to compete more effectively in the market hence its relevance in this study. Talent management is a strategic HR function hence the relevance of this theory in the study. KET, RBV are also relevant in knowledge management as knowledge is viewed as an economic factor or valuable resource that needs to be purchased, conserved, protected and retained and these are related to functions of management.

2.2.2 Herzberg's Two-Factor Theory of Motivation

Motivation theory focuses on what drives people to work towards a specific goal, the decision-making involved and how it impacts actions and behaviors. The drives may be intrinsic or extrinsic factors. In intrinsic motivation, there are internal factors where people are motivated by a desire to satisfy certain human needs, such as achieving personal or professional goals or pleasing their employer. In extrinsic motivation, external factors such as a bonus as a reward for hard work or a sanction if they fail to meet their targets motivate people. There are various HR theories of motivation but this study focused on Herzberg's Two-Factor theory of motivation or Motivation-Hygiene Theory. The proponent of this theory was Behavioral scientist Frederick, who founded it 1959. The theory was the result of interviews conducted with employees where workers were asked to think of a time they felt

good and bad about their job and why. From the study findings, Herzberg concluded that there are two exclusive factors that influence employee satisfaction and dissatisfaction which he named motivators and hygiene factors. Motivators include: Recognition, perks and opportunities for advancement, which increase motivation, commitment and productivity. Hygiene factors include: company policies, supervision, compensation and working conditions which contribute to consistent employee satisfaction when present and employee dissatisfaction when absent. In the current study both motivators and hygiene factors have potential to influence talent attraction, talent development, talent mobilization, talent retention, top management commitment, and ultimately, knowledge retention which are all variables of the study.

2.2.3 Knowledge Economy Theory

A knowledge economy is one in which the production of goods and services is based primarily upon knowledge-intensive activities. In a knowledge economy, a large portion of economic growth and employment are largely the result of knowledge-intensive activities. There is a paradigm shift from human resource to human capital which consists of the knowledge, skills and abilities of the people employed in an organization which is indicative of their value (Armstrong, 2009). Knowledge economy theory is concerned with the production and distribution of knowledge as a commodity for consumption within the organization's value chain. This theory developed out of concern for knowledge management in regard to the life cycle of knowledge within an internal or external market (Baskerville & Dulipovici, 2006). It was popularized by Peter Drucker in 1969 in his book titled The Age of Discontinuity but originated in the work of Fredrick Taylor on Scientific Management (Djeflat, 2009)). The theory holds that important management decisions are directly informed by the knowledge economics rationale. Knowledge is abundant but the ability to use it is scarce and much of an organization's valuable knowledge walks out the door at the end of the day, as it is embedded in highly mobile employees (Khanna et al, 2005). Knowledge management safeguards institutional memory and continuity (UNCTAD, 2012). Managing knowledge within an organization is considered important as professional knowledge is a valuable commodity.

In the present competitive condition, performing the techniques of knowledge management can be regarded a suitable response to the phenomenon of knowledge economy (Canter, Joel, & Schmidt, 2009). Knowledge retention is one of the facets of knowledge management triggered by the problem of knowledge loss that cuts across all industries (DeLong & IBM Consulting Services cited by Wamundila, 2008). Globalization and the development of information and communication technology in all aspects of life, and developing concepts and terms such as information society and knowledge economy have greatly affected the conditions governing the work place and organizations (Gelard & Boroumand, 2014). In the current study the theory of knowledge economy is anchored to talent development and talent mobilization which are independent variables and knowledge retention which is the dependent variable.

2.2.4 Resource-Based View of the Firm (RBV)

Resource-based theory focuses on valuable resources, such as knowledge and people in the firm as crucial factors for gaining a competitive edge in a given industry. The major strength of RBV is that it explores how resources are created and used for competitive advantage. RBV theory views organizational knowledge as a resource at the same level of importance with capital and a key ingredient to sustaining competitive advantage. Okemwa and Smith (2009) posit that knowledge is now considered an important factor of production and wealth creation in the knowledge society. From this perspective, the organization is a social community that transforms knowledge into economically rewarding products and services (Khanna et al, 2005) therefore it is an important resource. The RBV concept provides support for understanding the present day search to retain talents in companies, which are finding it necessary to maintain talented people, capable of occupying strategic positions in the organizational hierarchy (Holtom et al., 2008; Lee & Eberly, 2008). DeNise et al (2003) stress the value of managing knowledge-based resources as a source of competitive advantage as many jobs require people to think, plan, or make decisions, rather than to lift, assemble or build. The inherent value of knowledge means that the leverage of knowledge assets is imperative and if those who possess this powerful resource leave the organization, they take away the knowledge, skills and experience

accumulated over a period of years on the job (Hira, 2011). According to RBV proponents, it is more feasible to exploit external opportunities using existing resources in a new way rather than sourcing skills from outside. RBV holds that sustained competitive advantage can be achieved more easily by exploiting internal rather than external factors (Ovidijus, 2013).

One of the independent variables of this study is talent retention that mitigates high labor turnover to retain employees and their resourcefulness. Knowledge is considered an important resource (Okemwa & Smith, 2009) and knowledge retention is the dependent variable in this study. According to Cheng, Wang and Qu (2020) RBVs rationale is based on the fact that certain key decisions are made by top management regarding the management of knowledge. Top management commitment is the moderating variable in this study. RBV theory therefore has relevance in this study as it is related to the three aforementioned variables.

2.2.5 Human Capital Theory (HCT)

The current world of work puts the importance of human capital at the center of the organizational environment (Okemwa, 2009). Men working in a business organization were once referred to as a factor of production, later as human resources but more value has been accorded to them and are therefore regarded as human capital or talent working within the firm in modern organizations. Human capital is a concept borrowed from the intellectual capital theory and is defined as stock of flows of knowledge available to an organization according to Kehinde (2012). The term human capital was popularized by American economists, Gary Becker and Jacob Mincer in the 1960s. They used it to describe the mixture of skills, knowledge, experience, habits and personality in each of us that can be put to productive use (WEF, 2019). According to Cummings-White and Diala (2013) an organization's most significant resource is intellectual capital and knowledge. HCT views employees as valuable assets and posits that organizations can thrive by making investments in human capital to reach their goals and objectives, thus contributing to the organization's value. The theory suggests that individuals, organization and the society also derive economic benefits from investments in people. Therefore, HCT emphasizes investment in education, <u>training,</u>

and development to enhance employees' skills and knowledge. Human Capital Theory posits that the knowledge and skills a worker possesses generate a certain stock of productive capital. The theory views the well-being of a society as a function of the knowledge and skills of individuals among other factors (Cornachione, 2010). It views people as an asset capable of adding value to their organizations and in some cases ensuring their survival in a competitive environment (Sutherland, 2004). Armstrong (2009) refers to human capital as the human factor in organizations or the combined intelligence, skills and expertise that gives the organization its distinctive character. Intellectual capital, also known as human capital is considered the value of skills, thinking, knowledge, creativity, and experiences of the workforce (Cummings-White & Diala, 2013).

According to Stewart as cited by Sutherland (2004), a significant amount of an organization's value is possessed by its employees and when the key employees leave companies, they take this value with them. It is the knowledge, skills and abilities of individuals that create value hence the focus has to be on means of attracting, retaining, developing and maintaining the human capital they represent (Sutherland, 2004). As the workforce ages, workers acquire knowledge and experience customized to the operations and culture of the organization. This makes it a challenge to replace their knowledge as they exit the organization. Organizations may benefit by putting measures in place to capture and have access to human capital of the more mature workforce even if retired. The focus of the current study is on knowledge retention which is related to human/intellectual capital hence the theory is relevant. TM activities are considered important as a means of attracting, identifying, developing and retaining the human capital necessary to meet the strategic needs of the firm (Kabwe, 2011). In this study the theory is anchored to talent development, talent retention and knowledge retention.

2.2.6 Social Exchange Theory (SET)

Social exchange theory is a social psychological and sociological perspective which posits that human relationships are formed by the use of a subjective cost-benefit analysis and the comparison of alternatives. The theory was developed in 1961 by

George Homans has roots in economics, psychology and sociology. It is used in the business world to imply a two-sided, mutually contingent and rewarding process involving transactions or exchanges. Social exchange also influences commitment hence its relevance in this study which has top management commitment as a moderating variable. The social exchange theory views employment relationship as consisting of social or economic exchanges. Economic exchange relationships involve the exchange of economic benefits in return for employees' efforts and are often dependent on formal contracts which are legally enforceable. Social exchanges are voluntary actions which may be initiated by an organization's treatment of its employees, with the expectation that the employees will reciprocate the good deeds of the organization (Aryee *et al.*, 2002; Gould & Davies, 2005). According to this view, employees enter the organization with specific skills, desires and goals, and expect to find an environment where they can use these skills, satisfy their desires and achieve their goals. The expected returns from HC by employees are higher earnings, greater job satisfaction, better career prospects and better employment security (Baron & Armstrong, 2007).

The exchange approach implies that individuals will be attracted to and remain in organizations in return for rewards from organizations. Kibui (2015) observes that, according to the social exchange perspective, employees exchange their identification, loyalty and attachment to the organization, in return for incentives from the organization. Perception of favorable exchange or rewards results in increased attraction, engagement and retention of employees in their organization. Conversely, failure by the organization to provide sufficient rewards in exchange for efforts is likely to result in decreased attraction, engagement, and retention of employees leading to loss of knowledge and need for efforts to retain knowledge. SET suggests that employees either respond positively to favorable working conditions by engaging in activities that benefit the organization or negatively by engaging in unethical activities and acquiring negative work attitudes; in extreme cases they quit if working conditions are perceived to be unbearable (Haar, 2006; Crede et al., 2007 as quoted by Kibui, 2015). Section 12 of SRC Act, 2011, includes the principle of equal remuneration to persons for work of equal value which is in line with SET. In this study SET is anchored to talent attraction, talent development, talent mobilization and talent

retention, the independent variables of the study, and top management commitment, the moderating variable.

2.3 Conceptual Framework

Mugenda and Mugenda (2010) define a conceptual framework as a research tool intended to assist a researcher to develop awareness and understanding of the situation under study. According to Zikmund (2010) a conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. Kothari (2014) refers to a conceptual framework as a hypothesized model identifying the relationship between the dependent and independent variables with their sub-constructs. The goal of a conceptual framework is to categorize and describe concepts relevant to the study and map relationships among them. The framework helps a researcher to define the concept, map the research terrain or conceptual scope, systematize relations among concepts, and identify gaps in literature (Zikmund, 2010). The conceptual framework of this study shows the relationships among the independent, dependent and moderating variables. Talent attraction, talent development, talent mobilization and talent retention were the independent variables, knowledge retention was the dependent variable while top management commitment was the moderating variable of the study. In this section all the independent variables of the study were reviewed in line with the dependent variable. Literature on the moderating variable of the study was also reviewed. Discussions of the dependent variable of the study was also done. All the sub-variables for each of the variables are indicated in the conceptual framework. The presumed relationships among the independent, dependent variables and the moderating variable are illustrated in the hypothetical model in figure 2.1.

Talent Attraction		
• TA policy		
• Employee participation		
• Welfare program		

Talent Development
• Monitoring
• Opportunities
• Sponsorship

Talent Mobilization
• Job rotation
• Departmental Transfer
• Acting Position

Talent Retention
• Rewards
• Post retirement engagement
• Pension program

Top Management Commitment
• TM&KR Policies
• Participation
• Resources Provision

Knowledge Retention:
• Knowledge sharing
• Knowledge documentation
• Knowledge storage and retrieval

Independent Variables   **Moderating Variable**   **Dependent Variable**

Figure 2.1: Conceptual Framework

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2.3.1 Talent Attraction and Knowledge Retention

An organization's most significant resource is intellectual capital and knowledge. There is general consensus that organizations face intense competition for talent worldwide and confront major challenges in attracting; retaining and developing the people they need in many positions (Manpower Talent Shortage Survey, 2011). According to Pelster et al. (2013), talent management issues are caused by increasing difficulties in sourcing right skills in the labor market at the right time, developing a workforce capable of keeping pace with technology changes, and diverse expectations of employment relationship among baby boomers and generations X and Y in modern multi-generational workplace environment. According to Public Sector People Managers Association (PSPMA, 2006), concern about the quality and quantity of current and future public leaders has led to calls for better talent management which may include recruiting from the widest possible pool of talent, better management of the careers of high fliers, recruiting more graduates, facilitating more movement of staff across the public sector and participating in joint employee development with other public sector organizations. Ida (2017) posits that the need to recruit people to be able to have a strong competence base in the company ought to extend to thoughts about the access of resources in the future implying that organizations need to be intentional about talent attraction proactively.

A 2005 global survey of over 9,000 executives revealed that supply of talent is ranked as their most significant managerial challenge (Lubitsh & Smith, 2007; McKinsey Quarterly Survey, 2005). A study of 40 global companies found that virtually all of them identified lack of sufficient talent pipeline to fill strategic positions within the organization, which constrains ability to grow business (Ready & Conger, 2007). Core to addressing the rapid loss of skilled personnel from the public sector will be the accelerated development of both leadership and the broader employee base (Australia Government Report, 2010). According to Pelster et al. 2013, talent management issues are caused by increasing difficulties in sourcing right skills in the labor market at the right time, developing a workforce capable of keeping pace with technology changes, and diverse expectations of employment relationship among baby boomers and generations X and Y in modern multi-generational workplace environment.

Companies must excel at attracting, motivating, and retaining specialists as well as develop mechanisms for cultivating specialists who have the potential to take on broader roles or become leaders in the organization (Durst et al., 2013).

An increasingly ageing population, a move to more global and agile workforces, multi-generational organizations and more diversity, all impact on the supply of labor and talent, requiring new approaches to recruitment, retention and employee engagement (Deloitte, 2014). Ready and Conger (2008) stated that a strong company will always attract talent and will try to keep them as long as possible, as they are the engine of success as well as the leverage that sustains it. It is important to identify where the best knowledge is being generated in order to attract competence as the Global Human Capital Report (2008) indicates that when demand goes up for specialists with highly demanded skills, the public sector in developing countries experience shortage of competent personnel. Talent management practices ensure that the right people want to join the company and effectively bring new talented workers into the company (Bethkelangenegger, 2010).

There has been concern that many developing countries experience problems of attracting staff, providing them with training and development programs for succession purposes in the public service (Sira & Timbe, 2013). There is need for organizations to attract new employees so that external talent may join the organization. For any organization, the retention of knowledge is crucial in the recruitment and retention of employees especially for highly skilled positions as there is greater threat and difficulty in quantifying and replacing these employees (Tymon, 2010). There is a clear organizational imperative to attract and retain knowledge workers since they constitute an important resource, especially for knowledge intensive organizations (Gerges and Sonander, 2004). Worldatwork (2009) carried out a study on the relative influence of five reward elements on individual attraction, motivation and retention to an organization among three cohorts of professional accounting college students. Findings of the study indicated that development and career opportunities are the most important in attracting talented employees to all the big certified public accounting firms in the United States.

Oladapo (2014) observes that to attract and retain the best talent anywhere in the world, an organization must have strategies for managing those talents for achieving competitive advantage. According to Tarique and Schuler (2012) talent attraction is seen as an instrument to reach a distinctive corporate image and strengthen employers' position in the ranking of most preferred employers by creating a distinctive employee value proposition. Being perceived as the preferred employer, enhances attractiveness to highly skilled and knowledgeable employees and reduced labor turnover leading to retention of knowledge. Other advantages that accrue from talent attraction include the influx of new knowledge, different ways of thinking, varying experiences and successes. Competitive knowledge often comes with new hires as they have inside information in many areas of industry and competitor procedures or philosophies which may not otherwise be readily available (Schichtle, 2011).

Kibui and Kanyiri (2014) posit that, one of the most critical human resource problems facing managers in the public sector in Kenya today is how to attract and retain young educated workforce who are different from the older generations in the way they perceive the work environment, motivations, beliefs and structures. Understanding generation Y and their values will go a long way in attracting and retaining this generation which is the future workforce.

Brack and Kelly (2012) posit that, when trying to attract Millennials to an organization, managers should communicate to them what the organization does to engage workers by letting them know about the organization's culture, open communication policy, flexible work schedules as well as relevant training and development opportunities available to their employees. Millennials are said to highly value the training opportunities they get through their employers (Brack & Kelly, 2012). Such information would therefore attract millennials to organizations as they are known to prefer employment in organizations that give them such opportunities. Rudsada (2016), organizations emphasis on attracting talent that fits into the teamwork canvas, and thus contribute to effective work but the main goal of attracting and motivating talent is to retain the best in the organization. High performance organizations will continue to invest in and expand learning opportunities which will in turn provide a competitive advantage in attracting and retaining the talent they need (WEFR, 2020).

2.3.2 Talent Development and Knowledge Retention

Knowledge management as a powerful competitive weapon has been strongly emphasized in strategic management literature and is a major factor to retention and development of human resource in organizations (Amiri & Ranjbar, 2015). According to Turner and Makhija (2006) building a competitive advantage involves creating and acquiring new knowledge. A company's profitability depends, to a large extent, on its ability to learn and adapt as learning ability has been proven to increase when organizations knowingly employ dynamic processes that help nurture, leverage and motivate people to improve and share their capacity to act (Tzortzaki & Mihiotis, 2014). Limited growth opportunities in organizations impact knowledge retention as it will eventually cause employees to switch jobs causing knowledge loss. It is therefore important for there to be continuous professional development, in order for the staff of competitive agencies to stay at the forefront of their professional fields (Chitsaz-Isfahani & Boustani, 2014). Staffs prefer business environments in which they will develop, renovate themselves, learn continuously and in which their ideas are supported and encouraged (Chitsaz-Isfahani & Boustani, 2014). Talent training requires multiple parties to work together to ensure ongoing talent supply with universities providing theory while companies provide scenarios and opportunities for application (Xu William, 2022).

According to PSPMA (2006), few organizations have formal talent management processes and even where they exist they tend to be in form of graduate recruitment or training programs or accelerated development programs for more experienced managers leaving out other techniques. According to WEF Report (2020), in a workplace where learning is valued, knowledge is readily shared and performance steadily improves at individual and organizational levels. CIPD (2010) study on learning and talent development found that in- house development programs at 56% and coaching by line managers at 51% ranked among the top effective learning and development practices.

According to Malakwen (2014), although organizations have programs and have set aside reasonable funds for learning and development, the implementation of these

programs and aligning them to talent management is lacking hence this should be implemented. Top management out to provide empowerment and a supportive learning working environment where employees can acquire knowledge and skills for continuous improvement in their performance (Ahmed, Abd Manaf &Islam, 2021).

Training and development should therefore be about career growth and creating opportunities to learn new things in the work environment (Horrigan, 2014). Training practices in organizations should be guided by polices which should always be adhered to (Waleed, 2011). Smith (2011) states that organizations will do a better retention job by spending more resources on training and development as they will be more competitive, productive and will win loyalty of their workforce. Jeffrey (2011) posits that due to economic downturn, organizations need to invest in people in order to maximize innovation and the capability to meet challenges of the future.

Kenani (2011) posits that there is an urgent need for increasing scientific knowledge and skills of employees in Kenya to achieve their strategic business objectives hence organizations should work towards improved balance between labor supply and demand, better trained workforce and increased employability of the workforce. According to Kibui (2015) those already in employment tend to remain with the institution if there is a sense of achievement through personal development which is realized by providing growth opportunities. Meyer et al (2003) state that the training incentive is reinforced when it is well-defined and well communicated within the company and can help companies keep their valued employees (Zimmermann & Parthasarathy, 2012). Organizations that do succession planning and talent development have higher retention rates (Ernst & Young, 2007).

Human capital is one of the most critical resources needed for socio-economic development of an organization or nation and successful organizations invest heavily in human resource capacity development (Republic of Kenya, 2012). Organizations should develop a capacity development system that provides regular in-service training with successful completion leading to promotion (Republic of Kenya, 2012). The Public Service Commission (PSC) of Kenya is an independent government commission established under Article 233(1) of the Constitution of Kenya to

manage human resources in the Kenya Civil Service and the Local Authorities. Part of its mandate is to ensure that the public service is efficient and effective and to develop human resources in the public service. Staffs need to participate in work related attachments and study tours to agencies with strong institutional structures as an important component of professional training and development where knowledge is transferred to develop institutional capabilities (Chitsaz-Isfahani & Boustani, 2014).

Opportunities for training and development have a significant ability to retain talented people as high performers perceive development as a benefit which they are entitled to. An opportunity for continuous learning weighs heavily in the decision to remain in the profession for employees (Kibui, 2015). Waleed (2011) states that an organization that invests in training of its employees remains competitive. Ng'ethe (2012) is of the view that in the current competitive global market, the only strategy for organizations to improve workforce productivity significantly and enhance retention is to optimize their workforce through comprehensive training and development programs. Dockel (2003 as cited by Ng'ethe, 2013) posits that investment in training is one way to show employees how important they are. Training practices in organizations should be guided by policies. According to Brack and Kelly (2012), it is crucial that millennials receive soft-skills training like on how to adjust into a new workplace culture, to work with team members harmoniously, how to give feedback at the workplace, how to approach a supervisor on various issues and how to set long-term career goals. Millennials are said to highly value the training opportunities they get through their employers in order to acquire new skills and abilities to remain relevant and competitive in their jobs (Brack & Kelly, 2012). Such opportunities could include on-the-job training, coaching and mentoring of the millennials but reverse mentoring is also be practiced in some organizations to allow Millennials share their technological knowledge with other generations in the contemporary multigenerational workplace (Brack & Kelly, 2012).

Lazarova and Tarique (2005) posited that development experiences such as coaching, mentoring, and participation in conferences act as mechanisms to transfer information. Ng'ethe (2012) indicates that training and research imparts stocks of knowledge in academic staff that cannot be easily replaced when they depart hence argues it is

crucial to adopt a proactive approach to retention by having progressive employee retention strategies in place. Organizations should move away from the traditional classroom training based model by bringing meaningful development experiences to build character into the organization. Cappelli (2014) suggests that organizations should build a program to delegate innovation projects to subordinates mentored by senior experts as a way to help subject matter experts to teach younger innovators and enable them to learn thus ensure the knowledge remains in the organization. Mentoring programs provide an effective way to transfer knowledge and skills as well as the wisdom gained from years of experience (Davenport & Prusak, 2014).

One of the reasons why agencies choose to establish mentoring programs is for Knowledge Transfer as mentoring provides for the exchange of knowledge (Kirkpatrick, 2008). Coaches and mentors can share valuable information on a one-on-one basis sharing personal insights and professional advice that lead to greater individual and organizational success (Kelly, 2011). An effective method of softening the blow when older or more-experienced workers leave is having them serve as mentors and trainers, which allows them to pass on their knowledge to others within the organization (Pena, 2013). One outcome of talent development process is the transfer of tacit and valuable knowledge, especially from older workers to their younger co-workers or other members of the workforce (Calo, 2008). Proper training is needed to address the adverse impact of older workers leaving the workplace and to implement succession planning (Cummings-White & Diala, 2005). According to SHRM 2014 Report, there is a strict requirement in the U.S. Military that outgoing leaders ensure the individual filling their position becomes proficient, confident and capable in the post as quickly as possible.

Piktials and Greenes (2008) examined knowledge loss gaps and stress that two of the best methods to capture and pass knowledge cross-generationally are to customize knowledge transfer methods with regard to the present needs and to be clear on how each generation prefers to learn. Millennials feel more comfortable utilizing instant messages, blogs or podcasts to transfer their knowledge to others in the workplace but the Baby Boomer generation is not. Careful thought ought to be given when knowledge is converted when being transferred to the satisfaction of all parties involved.

A joint study conducted by International Business Machines Corporation and the American Society of Training and Development revealed that 60% of respondents utilize mentoring as a method of passing on knowledge, while half still used document or heavy repositories as tools for capturing knowledge (IBM & ASTD, Lesser, 2006). The study also noted that mentoring is most effective in learn-while-doing scenarios where mentors offer guidance to students in realistic situations they may be encountering. A mentoring relationship that bridges generational gap must be established for knowledge transfer to occur. Other forms of knowledge transfer include classroom training led by older workers, fostering learning communities to encourage sharing of learning and experiences between young and older workers, and leveraging multimedia tools such as audio/video interviewing and story-telling to preserve significant learning from aging employees (IBM & ASTD, Lesser, 2006).

According to World Economic Forum Report (WEFR) 2020, 44% of the skills that employees need to perform their roles effectively will change hence the need for organizations to create a culture of continuous learning; upskilling and reskilling for organizational sustainability and success as well as worker relevance. Organizations will look for new ways to make training and development more accessible, flexible, individualized and integral to overall employee experience (WEFR, 2020).

2.3.3 Talent Mobilization and Knowledge Retention

According to Bersin (2009) the biggest success-drivers in enduring organizations is their ability to rapidly and transparently move people from role to role and function to function as business needs change. Talent mobilization is an integrated talent management process supporting talent movement that hinges on an organization's ability to effectively understand, develop, and deploy talent (Harrison & HCI, 2013). According to Tarique and Schuler (2012) mobilizing talent includes all the activities related to moving talented employees across geographic locations; it embraces and plans for increased lateral and vertical movement among employees, domestic and global moves, and even transitions outside of the organization.

There has been concern about the quality and quantity of current and future public leaders which has led to calls for better talent management which may include

facilitating more movement of staff across the public sector among other strategies (PSPMA, 2006). According to Harrison (2013) organizations are under mounting pressure to develop highly adaptable employees, able to embrace evolving business conditions, new business opportunities, and shifting strategies in the face of relentless change. Jean- Paul Votron as cited by Claudia and Lowell (2005) posits that in the increasingly globalized and complex world in which we operate, there is great need for companies to be agile and mobilize their human capital. Talent mobilization has therefore become a more comprehensive workforce planning strategy and approach that encompasses the readiness for talent movement and the management process of shifting talent across an organization's projects, roles, teams, departments, and locations.

Harrison (2013) classifies organizations as either proactive or reactive talent mobilizers with the former characterized by activities such as identifying high-potential employees, creating development plans, holding regular career discussions, and creating and supporting succession plans. Findings from Lee Hecht Harrison's 2015 Talent Mobility Research reveal that 75% of organizations recognize talent mobility as moderately important to an effective talent management strategy while 40% recognize it as extremely important. According to the Report, 85% of organizations identify themselves as failing to demonstrate efforts in effective talent mobility stating that their strategy is at best moderately effective. The report also reveals that there are barriers to understanding, developing and deploying talent that are holding organizations back (Harrison, 2015). Organizations must be more transparent about opportunities for lateral moves and advancement opportunities, employee opportunities such as working in cross-functional teams, task or job rotation, and stretch assignments. Job rotation is seen as a strategy for knowledge retention when a person rotates a position to another and applies previous knowledge at the new position and shares their knowledge thus lowering the danger of knowledge concentration in individuals (Durst & Wilhelm, 2012).

The 2015 Mobility Report indicates that companies know they should be mobilizing talent but fail to do so yet a mobile workforce is always learning and always prepared for what is next, makes the organization better equipped to absorb, churn, attrition and

change course quickly (Harrison, 2015). Organizations that mobilize talent benefit from a deep pool of talented employees who are more productive, engaged and capable of taking on new challenges, assuming higher levels of responsibility and meeting increased demands to drive business growth according to Harrison (2013).

Successful talent mobility programs yield substantial enterprise wide benefits which include lower talent acquisition costs, stronger leadership teams, and better financial performance (Oracle, 2012). Talent mobilizers are 12% more likely to experience positive revenue growth than other organizations (Harrison, 2013). Talent mobility is in essence a strategy for adapting to change and making the most of new business opportunities (Harrison, 2013). There is beneficial relationship between knowledge inflows and knowledge retention through various practices which include personnel mobility and job rotation among others (Madsen et al., 2003 as quoted by Gonzalez et al, 2017). Job rotation is the process by which employees laterally mobilize and serve in different organizational levels (Bennet as quoted by Saravani & Abbasi, 2013). Wamundila (2008) recommends job rotation as one of the talent mobilization practices as staffs are exposed to the various operations and environments in the firm thus enhancing operational knowledge retention.

A telecommunications firm created a job-rotation program that allows high-performing specialists in remote offices to spend a few months at corporate headquarters, where they can get exposure to senior executives and expand their knowledge of the company (Dewhurst et al.2013). Ida (2017) found out that job rotation is highly important tool for increasing learning and enhancing robustness in the company in relation to learning which benefits both the employee and the company (Ida, 2017).

2.3.4 Talent Retention and Knowledge Retention

Retaining talent involves all the activities that prevent talented employees from leaving the organization (Tarique & Schuler, 2012). Talent retention challenge is the result of increasing job mobility in the global knowledge economy where workers average six employers over the course of a career (O'Neal, 2005 quoted by Amiri & Ranjbar, 2015). Other factors that further contribute to the challenge include baby boomer

retirement, brain drain and a smaller generation of workers entering their prime working age (Jamrog, 2009 as cited by Levy, 2011). A 2012 study by PayScale, found that the median job tenure for millennial generation was two years compared with five for Gen X, seven for baby boomers and ten for silent generation workers. As a result, the institutional knowledge, history and business continuity possessed by the silent generation and baby boomers might vanish with Generation Xers with millennials retaining little or no knowledge due to lack of appropriate models to learn from as a result of the brain drain (Dewah & Mutula, 2014).

To retain the best talents, strategies aimed at satisfying employee's needs are implemented regardless of the size of the firm (Amiri & Ranjbar, 2015). Talent retention seeks to enhance personal engagement in one's job, in the immediate team or department as well as in the public sector. The intention is to empower the employees to do their job, integrate each individual into a closely-knit team and recognize their value to the organization and public service. This engagement is expected to result in stronger commitment to public service and greater retention outcomes for the organization (Bellissimo, 2006).

Organizations should be concerned about the level and capacity of knowledge the people leaving possess (O'dell, 2014). If they are highly skilled, possessing knowledge not readily replaceable, organizations suffer hence the need to retain them and the knowledge they possess. Every effort should be made to retain and develop this vital resource to upgrade and sustain competitive advantage. In an effort to retain talent, the US Age Discrimination in Employment Act (ADEA) was amended in 1978 with the intention to prohibit mandatory retirement before age 70 in most occupations. The impact of this legislation was the possibility of older persons to remain at work (Barker & Clark, as cited by Burtress, 2013).

Using a phased retirement program benefits employers as they can retain older workers with more knowledge longer, allowing them time to train their younger counterparts (Gelade et al, 2014). Workers in Japan and South Korea remain in the labor force longer than do those in many other developed countries (Higo & Klassen, 2015). Retaining retirees is not just about reducing or avoiding the cost of recruiting new

people but also the hidden cost like loss of knowledge, potential leaders, experience and relationships. Leadership must therefore manage the multi-generational workforce to retain knowledgeable employees after mandatory retirement age.

While many managers worry about the level of turnover, greater concern should be about the level and Capacity of knowledge the people leaving possess. If they are highly skilled, possessing knowledge not readily replaceable, the organizations suffer. Retention of knowledge is crucial in the recruitment and retention of employees especially for highly skilled positions as there is greater threat and difficulty in quantifying and replacing such employees (Tymon, 2010). Analysts have postulated that in most organizations, up to 90% of the knowledge of the company is stored in the heads of its employees (Peña, 2014). Institutional knowledge held by tenured workers is valuable for maintaining consistency and quality as long-time employees are intimately familiar with the company culture, mission, and business objectives (Rupert, 2010).

A study by Wamundila (2008) established the existence of knowledge retention challenges which include retirements, resignations and deaths. Mackey (2008) states that it is incumbent upon organizations to tap the skills and knowledge of the more experienced exiting employees or hold on to their valued employees since it is getting harder to find replacements. Retaining talent involves all the activities that prevent talented employees from leaving the organization (Tarique & Schuler, 2012).

Ngethe (2013) is of the view that, in the current competitive global market, training and development is an important strategy for organizations to improve workforce productivity significantly and enhance retention. A common characteristic of Baby Boomers is their desire to work. Organizations may want to consider recycling Boomers into the labor force on a part- time basis to assist in mentoring the new generation of workers. Creating new positions, developing career paths, and flexibility in personnel arrangements can assist in retaining knowledge. In an effort to retain talent, the US Age Discrimination in Employment Act (ADEA) was amended in 1978 with the intention to prohibit mandatory retirement before age 70 in most occupations. The impact of this legislation was the possibility of older persons to remain at work

(Barker & Clark, 1980 as cited by Burtress, 2013). Using a phased retirement program benefits employers in that, they can retain older workers with more knowledge longer, allowing them time to train their younger counterparts (Gerber, 2014). Workers in Japan and South Korea remain in the labor force longer than do those in many other developed countries. Retaining retirees is aimed at reducing or avoiding the cost of recruiting new people and the hidden cost of loss of knowledge, potential leaders, experience and relationships (Higo & Klassen, 2015).

According to the findings of a study on knowledge retention at the University of Zambia, participation of staff in various meetings, exposure of staff to various units and the retention of employees beyond their retirement age are the strengths in transfer of knowledge, (Wamundila, 2008). The author recommends several knowledge transfer practices which could be considered in knowledge retention which include: succession planning, communities of practice, coaching, knowledge repositories, storytelling, orientation, formal and informal mentorship, job rotation and phased retirement.

Generation Y makes up a huge segment of the talent pool, hence the need to retain and develop them for they are the necessary pipeline for the future. Retaining Generation Y employees in the public sector may not be easy as there are fewer financial rewards in the public service than in the private sector (Kibui & Kanyiri, 2014). A 2011 Report by SBR Consulting Network Services, focusing on impact of the economy on recruitment and retention of millennials, found that there is a possibility 70% of millennials will change jobs once the economy improves (Morera, 2011). Without a plan or program to transfer business processes, institutional policies and practices, and historical knowledge to someone else, organizations may be faced with severe business continuity and knowledge issues as younger employees leave the organization.

Peña (2014) posits that the cost of losing millennial workers is steep hence organizations must prepare to retain the knowledge millennials may take with them as they leave. They ought to continue developing strategies to transfer and document institutional knowledge so that the knowledge gap created when younger employees

leave work sooner than expected is minimized (Peña, 2014). HR professionals reiterate the need to stimulate young professionals to mitigate the imminent loss of their professional knowledge when they retire, among other factors related to the use and retention of valuable people for the company (Veloso et al, 2014).

2.3.5 Top Management Commitment

Top management commitment refers to the involvement of the highest-level officials the organization's quality improvement efforts (Nektarios, 2021). Top management support is one of the essential requirements for the success of any organization (Kaynak, 2003). Top management normally provides useful direction and resources to the employees and teams for improving their performance to attain organizational goals (Dhar, 2015). Therefore top management support in KR is the degree to which top managers act as role models in knowledge retention, establish necessary conditions as well as provide needed resources for knowledge retention; all these managerial activities imply commitment to the success of KR.

According to Cheng, Wang and Qu (2020) key decisions need to be made by the top management regarding the management of knowledge. Cooper (2005) points out that management commitment is engaging in and maintaining behaviors that help others achieve a goal. Yousaf (2013) posits that commitment from top management may be the most critical factor in the success of any program as senior management commitment has been established to be paramount for any initiative to be successful. Top management commitment refers involvement of highest-level officials in the organization's quality improvement efforts (Nektarios, 2015) which include talent management and knowledge retention. Research carried out by Ballinger et al (2010) suggests that organizations should look more attractive by their supportive and caring environment toward their employees as the only way to survive and sustain in an ever-increasing competitive environment.

Managers are expected to point out where KR will be needed (Levy, 2011) therefore when they are not committed KR will fail or be ineffective. According to Zakuan et al (2012) the result of any critical decision made in an organization is highly dependent on top management support and commitment. Limited commitment from senior

management was cited by Dewah and Mutula (2014) as one of the challenges of managing knowledge assets in public sector organizations. HR department's efforts to encourage career development have little impact unless they are supported by top managers without which the necessary steps to implement organizational change in a policy would not occur (Calo, 2008). Calson et al. (2010) posit that managerial support improves perceptions of career which may attract new talented employees or trigger motivation for training and development among incumbent employees. According to Waleed (2011) training is an employer's commitment to their workforce. CIPD (2010) study on learning and talent development results indicated that senior managers and the human resource department are tasked with ensuring that courses are delivered and overall planning of the learning process is effective. Top management are required to be talent leaders and are expected to be aware of the relationship between talent and those who possess it in order to effectively develop their firm's human capital (Dalahmeh et al., 2020). Stahl et al. (2011) state that one of the most potent tools companies can use to develop leaders is to involve line managers in the recruitment of talent and make them accountable for developing the skills and knowledge of their employees.

According to Tandem HR (2010), given the time, resources, and high level of failure when bringing in outsiders, top management and HR managers need to work together to identify, develop and assess potential leaders for talent retention or smooth transition within a company. Conducting an inventory of skills, estimating the kinds and amounts of skills a firm needs to execute its strategy requires discussion among top managers, leaders of business units, and HR team members (Durst et al., 2013).

Interviews with employees or discussions with senior management can help target the critical knowledge that needs capturing (Vicki, 2009). Some of the inhibitors to transfer of knowledge within the organization are management's failure to sensitize employees on its importance to the business. Lack of ownership of a business problem or improvement opportunity to be addressed by top managers contributes to failure in knowledge transfer (Razak, N. A et al, 2013). According to Armstrong cited by Harrison and HCI (2013), talent management tools are great, but they are secondary to having leadership buy-in that can help implement development plans and support

employees. Knowledge retention plans require top management support and involvement failure to which even the best of them are unlikely to succeed hence the need to examine the moderating effect of top management commitment on the relationship between the dependent and independent variables of this study.

According to Ida (2017), focused, expectant and motivational leaders promote organized practices of knowledge retention that contribute to transferring knowledge between generations and also focus on enhancing learning in general. Top management leadership and commitment promotes participation of employees, provides company-wide education, and training which foster knowledge sharing (Zakuan et al, 2012). Crawford (2005) as quoted by Gelard and Boroumand (2014) states that knowledge management behaviors are highly predicted by transformational leadership, therefore leaders should be involved in knowledge management. Transformational leaders develop an environment which helps create, maintain, share, and apply knowledge (Gelard & Boroumand, 2014). Leaders use characteristics of the ideal, mental encouragement and developmental support to motivate their employees to create and share knowledge (Brayant, 2003). Dockel (2003) cited by Ng'ethe, 2012) posits that investment in training is a way for managers to show employees how important they are which is likely to make them loyal to the organization thus their knowledge is retained. Maende, Guyo and Odhiambo, (2021) opine that budget allocation ought to be made on priority basis to ensure requisite knowledge is purchased and knowledge base remains updated and this is a top management function hence their commitment is crucial. The foregoing discussions underscore the crucial role of top management in organizations particularly in terms of talent management and knowledge retention from the modern multi-generational workforce.

2.3.6 Knowledge Retention

Knowledge is every organization's largest asset, yet it can be overlooked and underutilized but if well managed, knowledge can be retained when people move, leave, or retire (APQC, 2015). Knowledge retention involves capturing knowledge in the organization so that it can be used later (CIPD, 2012). Since the Baby Boomer generation is the largest generation to enter the workforce, companies are scrambling

to retain their knowledge (Stevens, 2010). Durst et al. (2013) state that companies need to capture knowledge of internal and external specialists for others in the organization to benefit from it. They further suggest that companies should ensure specialists working remotely engage with the employees who use their work, and business leaders in cross-functional teams. Companies should also ensure leaders meet with specialist groups regularly as well as embed specialists in business units (Durst et al., 2013). According to Mackey (2008) it is incumbent upon organizations to tap the skills and knowledge of the more experienced exiting employees or hold on to their valued employees since it is getting harder to find replacements.

Although knowledge retention (KR) is considered crucial for long term organizational success, few organizations have formal KR strategies (Liebowitz 2011). Calo (2008) posits that organizational leaders need to recognize that once knowledge and expertise have left their organizations, it is difficult to recover it since it will go elsewhere (Ernst & Young, 2007). Employee separation is an ongoing process in all organizations as they exit for various reasons hence organizations need to put in place different mechanisms aimed at retaining critical knowledge before people possessing it can leave (Adobor et al., 2019). Unintentional knowledge loss can occur through failure to capture knowledge at organizational level and failure to maintain the stored knowledge and organizational memory (Levallet & Chan, 2019).

Knowledge retention is an aspect of knowledge management (KM) concerned with ensuring that the organization does not lose the knowledge embedded in the minds of employees who leave the organization (Tseole & Ngoako, 2022). It involves capturing that knowledge in the organization so that it can be used later (CIPD, 2012).

Dewhurst et al (2013) opine that companies must capture the knowledge of internal and external specialists so that other human resources in the organization can benefit from it. According to Adobor et al. (2019) organizations need to put in place different mechanisms aimed at retaining critical knowledge before people possessing it leave. Mohsin and Syed (2018) argue that there is a strong need for understanding KR strategies concerning the socio-economic factors of developing countries which include but are not limited to mentoring, exit interviews, communities of practice, job

shadowing, storytelling and job rotation. Liebowitz (2011) suggests that organizations can use intrinsic and extrinsic motivation or establish a two-way system of knowledge capture, where knowledge is passed down from senior to junior employees and vice versa to enhance knowledge retention. According to Arif et al (2012) the four levels that indicate the maturity of an organization in knowledge retention include knowledge sharing, documentation, storage and retrieval.

Organizations are more competitive, agile and engaged when knowledge is constantly and freely shared (WEF, 2020). Byukusenge and Munene (2017) posit that knowledge sharing is an activity through which skills and information are exchanged among people, peers, and friends or within organizations. Knowledge sharing assists in problem-solving, adopting new technology, creating an invention, and enhancing the dynamic capabilities of an organization (Ali et al., 2019). Brčić and Mihelič (2015) argue that of particular interest is the sharing of knowledge between employees belonging to different generational cohorts each of which possesses unique competencies. Dewah and Mutula (2014) posit that knowledge sharing is one way to implement social learning by enabling learners to ask questions to peers and mentors and this allows innovation to flourish freely as employees and organizations get feedback from the more skilled employees with different set of competences. However, Dewah and Mutula (2014) opine that challenges exist in managing knowledge assets in public sector organizations which include: limited or lack of incentives or rewards to share knowledge, lack of appropriate technology and limited commitment from senior management. Incentivizing individual employees to share their knowledge through rewards when they contribute to a forum or answer a question, empowers them to take initiative to share. Schultz et al (2012) argue that knowledge production by individuals or sub-units is of limited value if not shared with other parts of the organization.

The organization should ensure the flow of knowledge in order to leverage on it in the learning process among individuals, for improved performance (Yuan et al., 2010, quoted by Gonzalez et al, 2017). Turner and Makhija (2006) state that competitive advantage involves disseminating new knowledge in the appropriate parts of the firm, interpreting and integrating it with existing knowledge and ultimately, using it to

achieve superior performance. Sharing or transferring the know-how between individuals and groups is important if the firm is to benefit and develop competencies. Although sharing knowledge is an essential ingredient for business prosperity, a survey by Brandon Hall Group found that only a third of organizations have a defined corporate knowledge sharing strategy (Brandon Hall Group, 2016).

The study also revealed that only 20% of companies believe their knowledge sharing efforts are effective. A study by Waiganjo (2012) however had established that there is an increase in the extent to which information is shared with all employees where top managers and senior managers are becoming active in the communication process.

Coaches and mentors can share valuable information on a one-on-one basis by sharing personal insights and professional advice that lead to greater individual and organizational success (Kelly, 2011). An organization committed to capturing and transferring critical knowledge within their ever- changing workforce demographics can retain organizational knowledge and improve its workforce (Matlay, 2008). Multiple generations working side by side in the workplace affect retention and transfer of institutional knowledge (Kibui & Kanyiri, 2014).

An effective documentation process ensures that key company information is preserved. Collecting and organizing existing documentation related to an employee and keeping it in a shared location enhances KR hence any undocumented knowledge should be documented and the process should be planned and organized with consideration for those for the user (Ahlrik & Kamras, 2023). This promotes a structured continuous proactive KR and avoids reactive KR if one unexpectedly leaves. Employees need to be encouraged to document and maintain their own unique knowledge and processes through modern and traditional methods of documentation. Documentation can be used to simplify complex processes by providing new hires with important information about their roles, projects, or teams. Knowledge of departing employees and their essential duties can be documented for transition to other employees. Organizations can conduct exit interviews on employees to capture their knowledge, experiences and suggestions which need to be documented for

knowledge retention purposes. There is need to embed the documented knowledge within the organization knowledge bases to integrate it with what already exists and make it easily available to those who need it.

Knowledge storage refers to the organizational memory formation process, in which knowledge is formally stored in physical memory systems and informally retained as values, rules and beliefs (Gonzalez et al 2017). Massingham (2018) argues that knowledge loss leaves the strongest negative impact on companies, such as decreased work quality and quantity and low productivity and capability gaps. Firms are therefore investing large sums in techniques to analyze, store and retrieve knowledge (Holste & Fields, 2010). The fundamentals of these investments are that knowledge has evolved into a capital asset where

organizations have to turn the intellectual value tied to individual employees into intellectual capital tied to the organization (Beazley, Boenisch & Harden, 2003). Knowledge is typically stored in the form of a knowledge repository, which includes documents, reports and databases. However, many aspects of knowledge are not recorded in formal documents as in most organizations, up to 90% of the knowledge of the company is stored in the heads of its employees (Peña, 2014). Institutional knowledge held by tenured workers is valuable for maintaining consistency and quality as long-time employees are intimately familiar with the company culture, mission, and business objectives (Rupert, 2010). Capturing knowledge may therefore require more proactive methods such as conducting interviews with selected individuals or groups.

The mere fact that the organization has possession of knowledge is insufficient. Levallet and Chan (2016) posit that knowledge retention initiatives ought to focus on ensuring that created knowledge is effectively retained by an organization and can be reused by organizational members. The organization should ensure the flow of knowledge in order to facilitate the learning process between individuals, resulting in improved performance (Yuan et al., 2010). The value of knowledge is associated with the ability of individuals of an organization to locate, access, and use information and knowledge retained from employees and stored in the formal and informal organization memory systems (Gonzalez et al, 2017). Documented knowledge should

be made accessible to employees so that it can be spread across the organization (Ahlrik & Kamras, 2023). Top management in organizations ought to facilitate efficient retrieval and use of such knowledge to leverage it for competitive advantage.

2.4 Empirical Review

There is a plethora of research on general talent management and knowledge management but few studies have been conducted on knowledge retention. The available studies reveal that organizations have realized the significant contribution made by talent in the performance of an organization. A report about talent management by PSPMA posits that local governments need to become better at talent management for all employees, not just an elite group and oorganizations should take a more systematic and coordinated approach to talent management (PSPMA, 2006). Hackett Group 2007 Study found that companies that excel at managing talent post earnings that are 15 % higher than those of their peers. IBM conducted a study and found out that public companies that are effective at talent management have higher percentages of financial performance than groups of similar sized companies with less effective talent management practices.

On knowledge retention, a study by Tetty (2009) found that Africa is losing, in significant numbers, a fundamental resource in socio-economic and political development which is its intellectual capital. Cavanaugh (2013) carried out a study on brain drain and posits that with Baby Boomers reaching retirement age in massive numbers, human resource managers should help organizations prepare not only for the departure of valued employees, but find ways to hold onto and share historical industry and company knowledge they possess. Göthensten and Parson (2014) carried out a study on knowledge transfer in the Chinese Automotive Industry. The study found that the challenge of finding qualified staff is attributable to demographic transition towards an ageing population among other reasons.

In an article on knowledge retention and transfer strategy as key to staying competitive, Benjamin (2014) recommends honoring diversity, use of technology, mentorship program and provision of a flexible work environment to transfer knowledge, achieve a firm's plan of succession and gain new innovations at the same time. Thomas (2011)

carried out a study on facilitation of tacit knowledge transfer within an organizational structure and concluded that key factors in knowledge transfer are developing trust and the willingness to share information. According to the findings of a research study by Joe (2011) on workplace risk of losing baby boomer expertise, many organizations are underprepared for the loss of valuable knowledge as the oldest members of the baby boomer generation near retirement. Joe (2011) observes that few organizations have systems for identifying older experts or retaining their expertise after they retire. According to Veloso et al (2014) HR professionals posit that the imminent loss of professionals' knowledge when they retire, is one of the factors that inform efforts in retention of valuable people for the company. Wamundila (2008) carried out a study on knowledge retention at the University of Zambia and found out that participation of staff in various meetings, the exposure of staff to various units and the retention of employees beyond their retirement age are the strengths in transfer of knowledge.

Several studies related to talent attraction have been reviewed. Tarique and Schuler (2012) posit that talent attraction is an instrument to reach a distinctive corporate image and strengthen employers' position in the ranking of most preferred employers. Being perceived as the preferred employer, enhances attractiveness to highly skilled and knowledgeable employees and reduced labor turnover. Other advantages that accrue from talent attraction include the influx of new knowledge, different ways of thinking, varying experiences and successes. Competitive knowledge comes with new hires as they have information in areas of industry and on competitors otherwise not readily available (Schichtle, 2011).

According to the findings of manpower survey, there is general consensus that organizations face intense competition for talent worldwide and confront major challenges in attracting; retaining and developing the people they need in many positions (Manpower Talent Shortage. Survey, 2011). A 2005 global survey of over 9,000 executives revealed that supply of talent is ranked as their most significant managerial challenge (Lubitsh & Smith, 2007; McKinsey Quarterly Survey, 2005). A study of 40 global companies found that virtually all of them identified lack of sufficient talent pipeline to fill strategic positions within the organization a constraint to ability to grow business (Ready & Conger, 2007). It is important to identify where

the best knowledge is being generated in order to attract competence as the Global Human Capital Report (2008) indicates that when demand goes up for specialists with highly demanded skills, shortage of competent personnel is experienced in the public sector in developing countries.

The researcher has also reviewed various studies on talent development. A study by Göthensten and Parson (2014) revealed the need for relevant training since there is mismatch between the skills and knowledge of young graduates and the needs of the Chinese industry which needs well-trained workers for their product-oriented economy and not academic scholars (Wang, 2013). Managers need to become more fluent and transparent when speaking about talent, and employees to be more actively engaged and clear about their career aspirations and development goals (Deloitte, 2009). A study by Kibui and Kanyiri (2014) found out that Generation Y makes up a huge segment of the talent pool, hence the need to retain and develop them for they are the necessary pipeline for the future.

According to a study by The Aberdeen Group (2007), institutions that adopt both mentoring and coaching into their talent management model allow individuals the opportunity to grow personally as leaders, which complements the group developmental sessions. Core to addressing the rapid loss of skilled personnel from the public sector will be the accelerated development of both leadership and the broader employee base (Australia Government Report, 2010). Kenani (2011) posits that there is an urgent need for increasing scientific knowledge and skills of the employees in Kenya to achieve the strategic business objectives hence organizations should work towards improved balance between labor supply and demand, better trained workforce and increased employability of the workforce. According to Kibui (2015), those already in employment remain with the institution if there is a sense of achievement through personal development realized by provided growth opportunities.

Studies on talent mobilization have also been reviewed in this chapter. According to Harrison (2013), organizations are under mounting pressure to develop highly adaptable employees, able to embrace evolving business conditions, new business opportunities,

and shifting strategies in the face of relentless change. Organizations that mobilize talent benefit from a deep pool of talented employees. Such employees are more productive, engaged and capable of taking on new challenges, assuming higher levels of responsibility and meeting increased demands to drive business growth (Harrison, 2013).

Findings from Lee Hecht Harrison's 2015 Talent Mobility Research reveal that 75% of organizations recognize talent mobility as moderately important to an effective talent management strategy while 40% recognize it as extremely important. According to the Report, 85% of organizations identify themselves as failing to demonstrate efforts in effective talent mobility. The 2015 Talent Mobility Research Report indicates that there are barriers to understanding, developing and deploying talent that are holding organizations back (Harrison, 2015). The Report indicates that companies know they should be mobilizing talent but fail to do so yet a mobile workforce is always learning, always prepared for what is next, makes the organization better equipped to absorb, churn and attrition and change course quickly. Successful talent mobility programs yield substantial benefits, including lower talent acquisition costs, stronger leadership teams, and better financial performance (Oracle, 2012).

Various studies related to talent retention have been reviewed in this section. Many of the studies have found that there is need for not only recruiting qualified but also retaining competent staff or human capital. A research study by McBassi & Company (2006) revealed that high scorers in human capital management post higher stock market returns and better safety records. According to the findings of a study by CIPD & CMI (2010) on managing an aging workforce, majority of respondents are of the view that the knowledge and skills of older workers are highly valuable hence there are benefits of employing older workers with the principal driver being knowledge retention. From the findings of a study on baby boomers reinventing retirement, Sargent and Evans (2010) state that many nations are changing the way they handle retirement with many of them emphasizing productive, active continued engagement in work to be forever productive.

Retaining Generation Y employees in the public sector may not be easy as there are fewer financial rewards in the public service than in the private sector (Kibui & Kanyiri, 2014). A 2011 Report by SBR Consulting Network Services, focusing on the impact of the economy on recruitment and retention of millennials, found that there is a possibility 70 percent of millennials will change jobs once the economy improves (Morera, 2011). Peña (2014) posits that the cost of losing millennial workers is steep hence organizations must prepare to retain the knowledge millennials may take with them. They should continue developing strategies to transfer and document institutional knowledge so that the knowledge gap created when younger employees leave is minimized.

In the study on Leaderships' Perception of Organizational Readiness to Address the Impending Baby Boomer Exodus, Wysocki (2009) posits that overcoming the challenges retirement-based knowledge drain requires that organizations identify critical knowledge resources within the company and document that knowledge prior to the retirement of the workforce that possesses it. Cummings-White and Diala (2013) conducted a study on baby boomer exodus from the workforce and concluded that knowledge is critical to organizational success. Results of the study indicate that while there are measures in place to capture knowledge such as mentoring, succession planning, and policies and procedures, there is lack of consistency with these programs. On work flexibility, majority of respondents indicate that their organizations offer part-time and flexible working to all employees to provide employment benefits in an age-free way. These ways of working are considered important strategies for retaining staff beyond conventional retirement ages.

According to the findings of a study by CIPD & CMI (2010) on managing an aging workforce, majority of respondents agree that the knowledge and skills of older workers are highly valuable hence there are benefits of employing older workers with the principal driver for improving an organization's approach to managing older workers being knowledge retention. Social or personal motivations, such as maintaining social connections and being personally fulfilled, are also important. On work flexibility, majority of respondents reported that their organizations offer part-time and flexible working to all employees to provide employment benefits in an

age-free way. These ways of working are considered important strategies for retaining valuable staff beyond conventional retirement ages (CIPD & CMI, 2010).

2.5 Critique of Existing Literature

The studies by Hackett Group and IBM were based on large firms in developed economies and the situation could be different in small or medium-sized firms in developing economies hence findings may not be generalized to the latter. Most of the studies focused on high potential employees ignoring the collective or team contribution that is crucial in success. All jobs must be performed well for organizational success and these positions are not confined to leaders and executives; critical positions may also lie at the core of conducting everyday business or be central to long-term new product strategy (Oracle Whitepaper, 2013). Cavanaugh (2013) views talent tapping as a function of HR managers while this is a strategic function affecting more than just the HR department. This author focused on technology as the sole tool for tapping knowledge from Baby Boomers while there are many other tools. Technology lacks the social interaction element which is crucial in tapping tacit knowledge hence it should be used alongside other methods to take care of the human aspect. The study also assumed that only Baby Boomers possess important knowledge to be retained and disregards knowledge possessed by all other employees.

Benjamin (2014) acknowledged that older employees are a reservoir of knowledge and experience that need to be tapped. There was emphasis on remaining competitive through knowledge retention. The recommendations of the study included: honoring diversity, use of technology, mentorship program and provision of a flexible work environment to achieve a firm's plan of succession and gain new innovations at the same time. The author also recommended a multi-pronged approach to knowledge transfer. The study by Cummings-White and Diala (2009) highlighted the importance of leadership in knowledge transfer. Leaders were shown as willing and supportive players in knowledge transfer unlike in other studies where they are shown as complacent. This study recommended that leadership recognizes the possibility of the loss of Boomer knowledge and develop knowledge transfer methods to continue organizational effectiveness (Dychtwald & Baxter 2007;Cappelli, 2008). The study

also revealed that there are risks and challenges in capturing and transferring knowledge hence emphasized the need for proper planning for it to succeed. While acknowledging the efforts that had been made in knowledge transfer, the study recommended that more methods should be implemented to prepare for the baby boomer exodus.

Thomas (2011) suggested that there should be mediators in mentorship and this indicates constrained relations between senior managers and novices. Cordial relations between managers and staff should be cultivated in order to demystify management and facilitate direct mentorship. Recommendations for mentoring by Thomas (2011) included engaging in organizational learning for departments to successfully understand learning demographics and construct a custom Mentoring Model based on the human resource data; conducting a knowledge/experience inventory throughout the organization and developing a tiered level mentoring program. The research revealed that two key factors in knowledge transfer are developing trust and the willingness to share information. Through mentor/protégé team building activities and communication organizations could better equip the personnel with the communication tools needed to transfer tacit knowledge.

Joe (2011) argued that many organizations are underprepared for the loss of valuable knowledge as the oldest members of the baby boomer generation near retirement. The focus of this study was baby boomer intelligence with emphasis on systems for identifying older experts or retaining their expertise after they retired. The author indicated that not all older workers are experts hence it is important to identify the few experts to enhance efficiency in knowledge transfer. Sargent and Evans (2010) commended nations that are already changing the way they handle the responsibility for retirement with many of them emphasizing productive, active and positive ageing. The authors advocated recognition of older employees as holders of valuable knowledge necessary for organizations' competitiveness. They posited that since Generation X and Y employees are fewer and less experienced than Baby Boomers, there is possibility of knowledge vacuum unless the exit of the boomers is well planned. The study recommended formulation of new retirement policies which is in line with proactive management. Wysocki (2009) disregarded the importance of social

interaction or the human aspect in tacit knowledge transfer and also did not explore other possibilities of tapping baby boomer knowledge such are post retirement retention which is of mutual benefit to retirees and organizations

Most of the reviewed studies viewed baby boomers as the sole custodians of the knowledge at risk of being lost and ignored the resourcefulness of the younger generations working along them in the modern multi-generational workplace. Consequently, the knowledge retention strategies suggested were also biased towards the same group while knowledge retention from the other generations may be totally different and peculiar to each group. The strategies that work with baby boomers are different from what works for Generation Z or for Millenial Generation. The current study is concerned with knowledge retention from multiple generations.

2.6 Summary of Literature Reviewed

Various theories related to the study variables were reviewed in this chapter. A review of global, regional and local empirical studies on the independent, dependent and moderating variables was done. Literature on general knowledge management, HRM and strategic HRM was also reviewed. A critique of each of the studies was done in order to acknowledge what has been done establish possible research gaps to justify the conduct of the current study.

2.7 Research Gaps

Existing empirical studies were mainly based in developed economies leaving a gap in developing economies which this study has filled. There was limited research on such studies in Kenya hence the need for this study to fill the gap from a Kenyan perspective. Most of the available related studies had been conducted in the private sector while the public sector is a major employer likely to be significantly affected by exit of multiple generations of employees hence the author addressed this gap. In the reviewed studies, knowledge management has been predominantly studied in general, and as independent variable but in the current study knowledge retention has been studied as an aspect of knowledge management and as the dependent variable of the study. The reviewed studies have studied talent management and knowledge

management separately while the current study has included both. None of the reviewed studies was on influence of talent management practices on knowledge retention which was the focus of this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter details how the study was conducted. It describes the research design, research philosophy, target population, sampling frame, sample size determination and sampling technique. Data collection instrument used for this study and pilot testing are also discussed. The chapter also discusses the type of data collected, data collection techniques and methods used for data analysis. The statistical measurements and models used in the analyses and the hypotheses tests have also been included in the chapter.

3.2. Research Philosophy

Research philosophy refers to the foundation of knowledge upon which important assumptions and predispositions of a study are based. It is a belief about the way in which data about a phenomenon should be gathered, analyzed and used. Social studies mainly use two research philosophies namely positivism/scientific and phenomenology/interpretivist which may also be viewed from quantitative and qualitative perspectives respectively (Coopers & Schindler, 2006). Bryman and Bell (2015) posit that positivism is an epistemological position which studies social reality and beyond by employing natural science methods.

Positivist philosophy premises that knowledge is based on facts and that no abstractions or subjective status of individuals is considered. Positivism thus derives a quantitative perspective which holds that there is an objective reality that can be expressed numerically, with explanatory and predictive power (Furrer, Thomas & Goussevkaia, 2008). Positivists prefer quantitative methods such as social surveys, structured questionnaires and official statistics because these have good reliability and representativeness (Thompson, 2015). Knowledge t h e r e f o r e, is only valid if based on reason and facts, gathered through direct observations and experience, measured empirically by quantitative methods and statistical analysis. Consequently, theoretical

models developed are generalizable to explain cause and effect relationships (Saunders, Lewis & Thornhill, 2007).

Problem solving under positivist philosophy approach follows a pattern of formulating hypotheses in which assumptions of social reality are made and the hypotheses tested using quantitative techniques. This approach was considered for the current study since positivism is the most popular research paradigm amongst social science studies (Thompson, 2015). The philosophical foundation of the current study was positivism where study hypotheses were formulated and tested by quantitative and statistical methods to help the researcher determine whether to accept, reject or not accept the them.

3.3 Research Design

Singh (2009) defines research design as the blueprint of the detailed procedures of testing hypotheses and analyzing obtained data. Research design encompasses the methodology and procedures employed to conduct scientific research and provide specific direction for the procedures (Creswell, 2012, 2014). It involves systematic gathering of information from a sample of respondents for the purpose of understanding or predicting some aspects of the behavior of the population of interest (Nachimias & Nachimias, 2008). Descriptive survey research design is concerned with describing the characteristics of a particular individual or group, specific predictions and narration of facts and characteristics concerning individual, group or situation (Kothari, 2013). This study adopted the descriptive research design as it describes the actual situation on the ground as perceived or experienced by the respondents.

According to Abok as cited by Kibui (2015), descriptive research design helps the researcher to understand the characteristics of a group in a given situation, offers ideas for further probe and research and helps in making certain decisions. Singh (2009) states that descriptive survey is designed to obtain pertinent and precise information concerning the current phenomena and to draw valid general conclusions. Many scholars, (Nyanjom, 2013; Kagwiria 2014; Ngethe et al, 2012; Kibui, 2015) who have researched on topics related to the current study have successfully used this research design in their studies hence it was deemed appropriate for this study.

3.4 Target Population

Mugenda and Mugenda (2012) refer to a population as a large collection of all subjects from which a sample is drawn. Kothari (2013) posits that all items in any field of inquiry constitute a universe or population and a complete enumeration of all items in the population is a census. Sekaran (2008) defines population of study as the total collection of elements about which inferences are made; all possible cases which are of interest for a study which include events or objects having common observable characteristics. The target population of this study were employees in government ministries in Kenya. Specifically, the study targeted employees in government ministries in Kenya, specifically senior and mid-level managers.

Table 3.1: Target Population of the Study

Category	Job Group	Number
Senior Managers	{P-T}	3, 182
Middle Level Managers	{J-N}	25, 836
Support Staff	{A-H}	36, 134
Total		65, 152

Source: Salary Review for Civil Servants in National Government in Kenya (PSC, 2017)

3.5 Sampling Frame

A sampling frame is a list of all items in any field under investigation from which a sample can be drawn (Kothari, 2012; Bafarasat, 2021; Sekaran, 2006). In this study the sampling frame was a list of 21 government ministries in Kenya which included: Ministry of Education, Ministry of Health, Ministry of Lands, Ministry of Water and Sanitation, Ministry of Energy, Ministry of Devolution and ASAL Areas, Ministry of East African Community and Northern Corridor Development, Ministry of Defense, Ministry of Interior and Co-ordination of National Government, Ministry of Information, Communication and Technology, Ministry of Transport and

Infrastructure, Ministry of Agriculture and Irrigation, Ministry of Petroleum and Mining, Ministry of Labor and Social Protection, Ministry of Industrialization and Enterprise Development, Ministry of Environment and Forestry, Ministry of Tourism and Wildlife, Ministry of Foreign Affairs and International Trade, Ministry of Public Service, Youth and Gender Affairs, Ministry of The National Treasury and Ministry of Planning and Ministry of Sports and Heritage.

3.6 Sample and Sampling Technique

Sampling is the process of obtaining information about an entire population by examining part of it (Kothari, 2012) and according to Stratton (2021), a sample size is a representative of the targeted population in a study. There can be either probability or non-probability samples (Saunders, Lewis and Thornhill, 2003) where the former are those based on simple random sampling, systematic sampling, stratified sampling or cluster sampling and the latter are based on convenient or purposive sampling, judgment sampling and quota sampling (Kothari, 2012). Simple systematic sampling of seven ministries was conducted from the list of government ministries in Kenya on a three (3) by three (3) interval to come up with the 7 ministries from which data was collected. The 7 selected ministries are: Ministry of Education, Ministry of Health, Ministry of Water and Sanitation, Ministry of Information, Communication and Technology, Ministry of Petroleum and Mining, Ministry of Labor and Social Protection and The National Treasury. Employees in government ministries are in three categories which include senior managers, middle level managers and support staff but the sample included respondents from senior managers and middle level categories who were 29,018 out of total population of 65,152 employees in national government ministries in Kenya (PSC, 2017) who were the target population of the study. The researcher used a formula recommended by Kothari (2012) for calculating the sample size when the population is more than 10,000 participants as illustrated in this section.

$$N = \frac{Z^2 \, p \, q}{d^2}$$

Where:

N = the desired sample size (if target population is greater than 10,000)

Z = the standard normal deviate at the required confidence level.

P = the proportion of the target population estimated to have the characteristics being measured.

q = 1- p

d = the level of statistical significance set.

Mugenda and Mugenda (2012) recommend that 50% of the population should be used if there is no estimate available of the proportion in the target population assumed to have the characteristics of interest. Z statistics is taken as 1.96 and desired accuracy is at the 0.5 level.

The sample size was therefore calculated as follows:

$$N = \frac{(1.96)^2 \,(.50)\,(.50)}{(.05)^2}$$

N= 384 (as the target population was >10,000).

The sample size (384) was then divided by the number of ministries included in the study to get the number of questionnaires to be administered in each of the selected ministries. The results were: 384/7 = 54.85 which was rounded off to 55. Therefore, 384/7 = 55 respondents from each of the sampled 7 government ministries. Purposive sampling was used where only senior and mid-level managers were issued with questionnaires.

3.7 Data Collection Instrument

According to Creswell (2014) a research instrument is a specific tool that assists in the collection of research data by way of measuring, quantifying or observing the data of

interest. Zickmund (2010) describes a questionnaire as a means of eliciting the feelings, beliefs, experiences, perceptions, or attitudes of respondents. Mugenda and Mugenda (2012) refers to a questionnaire as a data collection tool designed by the researcher for the main purpose of communicating to the respondents and to elicit desired responses to achieve the research objectives. The study employed a structured questionnaire with close-ended questions which helped guide respondents' answers within the choices given to ensure they stayed focused on study objectives. The questionnaire was divided main into six parts. Part A gathered bio-data and information on the respondent's background. The items in the rest of the questionnaire were related to the independent, dependent, and moderating variables of the study as follows: Part B gathered information on talent attraction, part C on talent development, part D on talent mobilization, part E on talent retention, part F on top management commitment while part G addressed knowledge retention. Respondents were presented with descriptive statements in a 5-point Likert scale where they were required to rate by scoring the extent to which they perceived a particular statement descriptive of the situation in their ministry. Questionnaires were administered to senior and mid-level managers in the selected seven government ministries in Kenya.

3.8 Data Collection Procedure

Prior to the data collection exercise, the researcher personally visited the selected ministries and presented an introduction letter from the university and research authorization from NACOSTI and Nairobi County Education Office for researcher introduction. The visit was used to create rapport to ease the data collection process and debrief the ministry officials on the research area of interest: talent management practices and knowledge retention in government ministries in Kenya. Dates were set for the administration of the questionnaires with each of the selected ministries. Data was collected through drop and pick method where the questionnaires were dropped in the selected ministries with the help of research assistants and picked after a mutually agreed period to allow respondents time to complete them. Questionnaires were only administered to senior and mid-level managers identified through purposive sampling with the help of contact persons in the ministries.

3.9 Pilot Test

According to Singh (2009) a pilot test is a preliminary experiment conducted prior to the main experiment with a small number of subjects. Kothari (2012) refers to a pilot study as the replica and rehearsal of the main survey. A pilot test, being a test of sound measurement, must meet the tests of reliability, validity and practicality (Kiriinya, 2015). To ascertain both the validity and reliability of the research instruments, the study conducted a pilot study in one government ministry that was randomly sampled. The ministry was not included in the main study. The objective of the pilot study was to pre-test the study instrument to ensure clarity and information validity prior to its administration in the main study (Strauss & Corbin, 2007). The questionnaire was administered to 55 employees in the Ministry of Lands in Kenya. Out of the 55 questionnaires issued, 46 were completed and returned. They were then coded and responses were input into SPSS 22.0 to generate the reliability coefficient. The pilot test results led to necessary modifications on the instrument to ensure the right questions were asked, the right data was collected and data collection methods were appropriate for the main study.

Validity of the Research Instrument

Validity refers to the degree to which an instrument measures what it is supposed to measure and the extent to which any differences found reflect the true differences among those being tested (Kothari, 2012). According to Singh (2009) a test is valid to the extent that inferences made from it are appropriate, meaningful and useful when compared to ideal measures or criteria. There is external validity of research which refers to its generalizability to other populations, settings, treatment variables and measurement variables (Creswell, 2014). Internal validity of a research design refers to its ability to measure what it aims to measure (Kothari, 2007; Singh, 2009). Validity of the instrument for this study was ensured by having objective items covering various aspects of the variables. The items in the instrument were discussed with the supervisors as well as colleagues their inputs were effected.

Criterion related validity, the ability to predict some outcome or estimate the existence of the current condition, was also tested during the pilot study. The researcher was

able to assess the clarity and ease of use of the instrument through enquiring on the length, clarity or ambiguity of the questions from the respondents. Based on the feedback obtained, necessary revisions were done to ensure relevance, freedom from bias and reliability of the instrument.

Reliability of Research Instrument

The quality of a research study to a large extent depends on the accuracy of data collection procedures according to Kothari (2012). Reliability refers to whether scores to items on an instrument are internally consistent or whether the item responses are consistent across constructs, stable over time, that is, test-retest correlations, and whether there was consistency in test administration and scoring (Creswell, 2014). A reliable scientific instrument should always yield accurate and consistent results (Singh, 2009).

Reliability in research is influenced by random error which is the deviation from true measurement due to factors that have not effectively been addressed by the researcher (Zikmund, 2010). Such errors may arise from inaccurate coding, ambiguous instructions or questions, interviewer fatigue, and interviewer bias among others. Three types of random errors that arise at the time of data collection include error due to inaccuracy of the instrument; error due to inaccuracy of scoring by the researcher and unexplained error. These errors may combine to produce inconsistencies in the measurement, which ultimately affect the reliability of the data collected (Mugenda & Mugenda, 2010). There was therefore need to conduct pilot test to eliminate or at least minimize such errors. Reliability analysis for testing internal consistency of the items was conducted using the Cronbach's Alpha test whose values range between 0 and 1. Cronbach's alpha is the most commonly used co-efficient of internal consistency of responses. The formula is: Alpha = N r / (1 + r (N-1) where r + inter item is the correlation and N = number of items in the scale. High alpha coefficient values of 0.70 or above indicate that the scales are more reliable and acceptable (Kipkebut, 2010).

3.10 Data Analysis and Presentation

The study generated both quantitative and qualitative data related to the research objectives. The returned questionnaires were edited for completeness, coded and entries made into Statistical package for social sciences (SPSS version 22). The software assisted in generating tables, pie charts and graphs which facilitated graphical presentation of findings, interpretation and understanding of the relationships among the variables of the study. The unit of analysis were 65,152 employees in government ministries in Kenya while unit of observation were 385 respondents selected from 7 government ministries. The social demographic characteristics of the respondents were analyzed using descriptive statistics which are used to summarize large volumes of data with few figures. The descriptive analysis of the data was done using scores ranging from 1-5 to provide a measure for the qualitative data that needed to be subjected to statistical processes. Mean and standard deviations were used as measures of central tendency and dispersion respectively. These provided insights into the characteristics of the samples. Descriptive statistics provided a basis for inferential statistics using correlation and multiple regressions. Score of 1 assumed the worst or disagreement with the provided statement while 5 assumed the best case scenario or agreement. A score of 5 meant strongly agree (SA), 4 agree (A), 3 Neutral (N), 2 Disagree (D) and 1 Strongly Disagree (SD). Table 3.2 shows the 5-level Likert Scale adopted in this study. The unit of analysis were 65,152 employees in government ministries in Kenya while unit of observation were the 385 respondents selected from 7 government ministries.

Table 3.2: Likert Scale Scores

Scale 5	Scale 4	Scale 3	Scale 2	Scale 1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Quantitative data analysis was done to generate summative statistics like percentages, means, variance and standard deviation. The main inferential statistics carried out in

the study were correlation analysis which showed the strength of the relationship between the variables under study. Multiple regression analysis was used to measure the interaction between the independent and dependent variables and were conducted based on the four independent variables of this study. This resulted into two statistical models: a reduced model, which excluded the moderating variable, and full multiple moderated regression model, which included the moderating variable as presented below.

Multiple Regression Models

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{Reduced Model.}$$

Where:

Y = Dependent Variable: Knowledge Retention

X_1 = Talent Attraction

X_2 = Talent Development

X_3 = Talent Mobilization

X_4 = Talent Retention

β_1 = regression coefficients for X_1

β_2 = regression coefficients for X_2

β_3 = regression coefficients for X_3

β_4 = regression coefficients for X_4

e = error term

To measure the moderating effect of top management commitment the following full model was used:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + Z(\beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4) + e \ldots \textbf{Full Moderated}$$

Multiple Regression Model (MMR)

Where:

β_0 = intercept

Z= Top Management Commitment

$X_i Z$=Interaction term of top management commitment with each of the independent variables (X_1, X_2, X_3, X_4).

e = error term.

3.11 Diagnostic Tests

Diagnostic tests were carried out to determine the study sample adequacy for statistical testing. The tests were conducted to ensure the study model would be applicable to the required analysis for regression and moderating effect. They were also conducted to ensure that the data fulfilled key assumptions for linear relationships, normality and little or no multi-collinearity (Sanders et al, 2015).

Tests of Sample Adequacy

To examine the adequacy and appropriateness of the data collected for inferential statistical tests, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy Test and Bartlett's Test of Sphericity were conducted on all the study variables. Kaiser-Meyer-Olkin (KMO) Test is a measure of how suited data is for Factor Analysis. It is a statistic that indicates the proportion of variance in variables that might be caused by underlying factors. The test measures sampling adequacy for each variable in the model and for the complete model. (Field, 2009).

Normality Test

This test was conducted for all the variables of the study to ascertain whether the data collected from the respondents for each of them had normal distribution. Normality tests are used to determine if a data set is well modelled by a normal distribution, and to compute how likely it is for a random variable underlying the data set to be normally distributed according to Farrel and Rogers (2006). This study conducted the Shapiro-Wilk Test of normality where the rule is to reject the null hypothesis that data fits a normal distribution if the p-value is less than 0.05 and accept the alternate hypothesis that data is not normally distributed (Ghasemi & Zahediasl, 2012).

Multi-collineality Test

The test is used to check for general inter-correlation among independent variables. Existence of high degree of Multi-collinearity makes it difficult to isolate the effect of a single independent variable on the dependent variable in a study. Presence of multi-collinearity is a violation of assumption of Classical Linear Regression Model which assumes there should be no multi-collinearity among exploratory variables. Multi-collinearity in this study was tested using the Variance of Inflation Factor (VIF) whereby if VIF values exceed 10 there is serious multi-collinearity problem.

Homoscedasticity Test

One of the assumptions of parametric tests is that independent variables exhibit homoscedasticity that their standard deviations are the same or there is constancy of variance. Homoscedasticity in regression is an important assumption and if the assumption is violated, it is not possible to use regression analysis. For any linear regression analysis, the error terms are assumed to be the same across all values of the independent variables (Hamsici & Martinez 2007). If the standard deviations are different from each other they are said to exhibit heteroscedasticity which implies violation of the statistical assumption of homoscedasticity and the probability of obtaining a false positive result. Assumption of homoscedasticity ensures that each observation is equally reliable so that the estimates of the regression coefficients and hypothesis tests on them are free from bias.

The test for homoscedasticity in this study was done through plotting a residual scatter plot for predicted scores and standardized residual values also known as errors of prediction. A residual scatter plot is a figure that shows one axis for predicted scores and another axis for errors of prediction. According to Tabachnick and Fidell (2007) the primary benefit of a scatter plot is that homoscedasticity assumption can be viewed and analyzed at a glance and any violation determined quickly and easily. Residual scatter plots provide a visual examination of the assumption of homoscedasticity between the predicted dependent variable scores and the errors of prediction. When an analysis meets the assumptions, the chances for making errors are reduced and this improves the accuracy of research findings.

3.12 Hypotheses Testing

Hypothesis testing was conducted on all the five hypotheses developed for each of the research objectives of the study. Testing hypotheses helps determine whether they are valid or not, on the basis of the collected data (Kothari, 2012). Quantitative data analysis was done using the proposed models in statistical package for social sciences (SPSS 22) to generate summative statistics like percentages, means, variance and standard deviation. Inferential analysis was done to determine the effect of the independent variables on the dependent variable. The assumption was that variables were normally distributed. The main inferential analysis conducted was correlation analysis which showed the strength of the relationship between the variables under study. Multiple regression analysis was used to measure the interaction between the independent and dependent variables. Kothari (2012) posits that the relationship between a set of all independent variables and the dependent variable is known as multiple correlations while partial correlation measures the relationship between a particular independent variable and the dependent study variable, all other variables held constant. Multiple correlation and partial correlation analysis were conducted based on the four independent variables of this study resulting in a reduced model, which excluded the moderating variable, and full multiple moderated regression model, which included the moderating variable.

3.13 Definition and Measures of Study Variables

A variable is defined as a measurable characteristic that assumes different values among various subjects. Measurement of variables or the operational definition of

variables is critical in research since studies using exactly the same variables may have different results depending on how each researcher operationalizes the variables (Mugenda & Mugenda, 2012). Variable measurements in this study were based on a mix of items as some aspects of the study were qualitative while others were quantitative.

The variables in this study included knowledge retention as the dependent variable which had four sub-dimensions (knowledge sharing, knowledge documentation, knowledge storage and retrieval). One item required respondents to state whether there were efforts to retain knowledge in their ministries. A Likert Scale with 5 levels was used to test the level of agreement with nine statements provided to collect data relating to the sub-dimensions of knowledge retention.

The first independent variable was talent attraction and its sub-dimensions were: availability and enforcement of policy, sourcing for talent and rewards for talent. The first item required respondents to indicate whether there was policy on talent attraction in their ministry. Likert Scale with 5 levels was used to test the level of agreement with six items provided to collect data on talent attraction and its sub-dimensions.

The second independent variable was talent development where the sub-dimensions used included: policy, mentoring, and training. The first item required respondents to indicate if there was policy on talent development in their ministry. The second item required respondents to tick on the available options of talent development available in their ministry. Likert Scale with 5 levels was used to test the level of agreement with seven items provided to collect data on talent development and its sub-dimensions.

The third independent variable, talent mobilization had job rotation, appointment to acting positions and departmental transfers as the sub-dimensions. The first item required respondents to indicate if there were efforts made to move employees to work in different capacities in their ministry. Likert Scale with 5 levels was used to test the level of agreement with seven statements provided to collect data on talent mobilization and its sub-dimensions. The fourth independent variable was talent

retention and the sub-dimensions were: employee welfare, security/job tenure and post retirement contracts. The first item on this variable required respondents to state whether there were high numbers of employees leaving their ministry. The second item asked respondents to select from provided list of talent retention efforts employed in their ministry. Likert Scale with 5 levels was used to test the level of agreement with eight statements provided to collect data on this variable and its sub-dimensions.

The moderating variable was top management commitment. The sub-dimensions used for this variable were: formulation and implementation of HR and KR policies, employee involvement, top management support and participation in talent management and knowledge retention activities. Likert Scale with 5 levels was used to test the level of agreement with eight items were used to collect data on this variable. Both descriptive and inferential analysis were conducted on the resultant responses to the items for all the variables (dependent, independent and moderating) as some aspects of the study were qualitative while others were quantitative in nature. The study variables and their sub-dimensions are presented in Table 3.3.

Table 3.3: Variable Definitions and Measures

Variable	Nature	Indicator	Measure
Knowledge Retention	Dependent	• knowledge sharing • knowledge documentation • knowledge storage • knowledge retrieval	Ordinal Scale 1=Strongly 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree
Talent Attraction	Independent	• Policy • Sourcing • Rewards	Ordinal Scale 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree
Talent Development	Independent	• Policy • Mentoring • Training	Ordinal Scale 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree
Talent Mobilization	Independent	• Job Rotation • Appointment to acting positions • Departmental Transfers	Ordinal Scale 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree
Talent Retention	Independent	• Employee welfare • Security of tenure • Post retirement contract	Ordinal Scale 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree
Top Management Commitment	Moderating	• HR & KR Policies • Employee involvement • Support &Participation	Ordinal Scale 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

The general objective of this research was to assess the influence of talent management practices on knowledge retention in government ministries in Kenya. Results of the pilot study are presented before the main study analysis. Descriptive and inferential analysis was done to establish the relationship of each of the independent study variables with the dependent variable. The moderating effect of the moderating variable on the relationship between the independent and dependent variables was also analyzed. Results of data analysis and discussions of the key research findings of the study are included in this chapter.

4.2 Pilot Test Results

Pilot test was done in the Ministry of Lands in Kenya which was not included in the final study. The suitability of the questionnaire for this study was tested by first administering it to 55 respondents out of which 46 of them were completed and returned. The collected data was analyzed using SPSS version 22.

Validity and Reliability Test Results

Validity of the instrument for this study was ensured by including objective items covering various aspects of the variables. The items in the instrument were discussed with the supervisors as well as colleagues and adjustments were made based on their inputs. The researcher was able to assess the clarity and ease of use of the instrument through discussion on the length, clarity or ambiguity of the set items. According to Mugenda and Mugenda (2012), construct validity is tested to examine the degree to which a research instrument measures what it was intended to measure.

Reliability of the research instrument was tested using Cronbach's Alpha coefficient whose values range from 0 to 1 whereby the closer the value is to 1, the better the research instrument. Corrections were done on the research instrument before using it

in the main study. Two items on talent attraction were dropped from the research instrument as they were found to be redundant. Other items were revised for better clarity, to avoid ambiguity. The Alpha values for this study were between 0.821 and 0.895 implying the research instrument was reliable as presented in table 4.1.

Table 4.1: Reliability Test Results

Construct	No. of items	Cronbach's Alpha	Comments
Talent Attraction	6	0.840	Reliable
Talent Development	7	0.821	Reliable
Talent Mobilization	7	0.877	Reliable
Talent Retention	8	0.895	Reliable
Top Management Commitment	8	0.843	Reliable
Knowledge Retention	9	0.871	Reliable

4.3 Response Rate

Out of the 385 questionnaires administered, 276 were competed and returned which was 72% response rate as presented in figure 4.1. According to Mugenda and Mugenda (2011), a 50% response rate is considered adequate, 60% good, while 70% and above rate is considered very good. Sinclair et al (2012) posit that researchers are encountering greater problems making contact with potential respondents and rising refusal or lack of co-operation rates among those contacted. They further argue that a high response rate on its own does not necessarily indicate lack of bias. Therefore, 72% response rate for this study was considered satisfactory and representative enough. Follow up calls and visits to the ministries could have played a role in the high response rate.
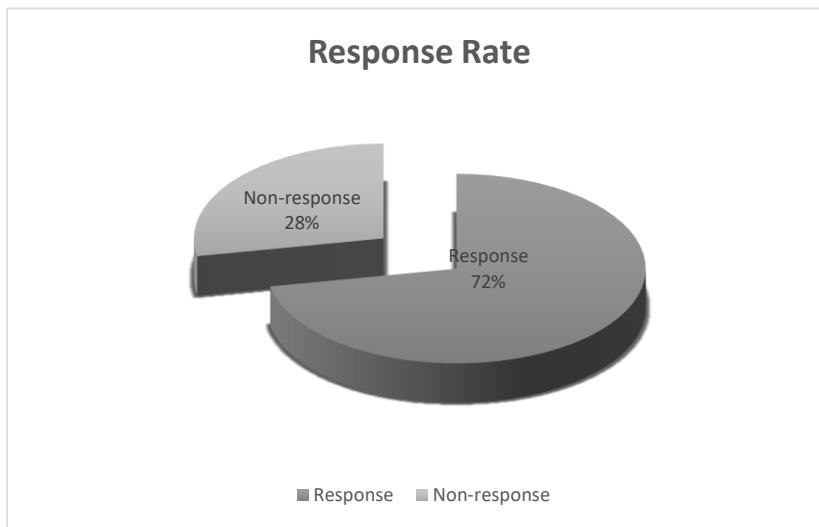
Figure 4.1: Response Rate

4.4 Descriptive Analysis of Background of Respondents

The study instrument begun by items on demographic data required from the respondents which included: gender of the respondent, age of the respondent, number of the years the respondent had worked in the specific ministry, and the education level of the respondent. This background data on respondents is paramount in social science as it is used to group respondents into heterogeneous groups that can be generally studied.

4.4.1 Gender of Respondents

Out of the 276 respondents who completed and returned the questionnaire, 53% were female and 47% were male contradicting the notion that male gender is predominant in employment in the public sector in Kenya by Waiganjo (2015) and the findings of Kibui (2015) where 57% of the respondents were male and 43% were female. It also disagreed with the findings of the study by Maganga and Wario (2017) in national government ministries in Kenya whose results indicated 79% were males with only 21% as females. These findings are presented in figure 4.2. From these findings there is evidence of compliance with the two thirds gender rule as per Kenya Constitution (2010) which states that no gender should exceed two thirds of the total number of employees in the public sector.
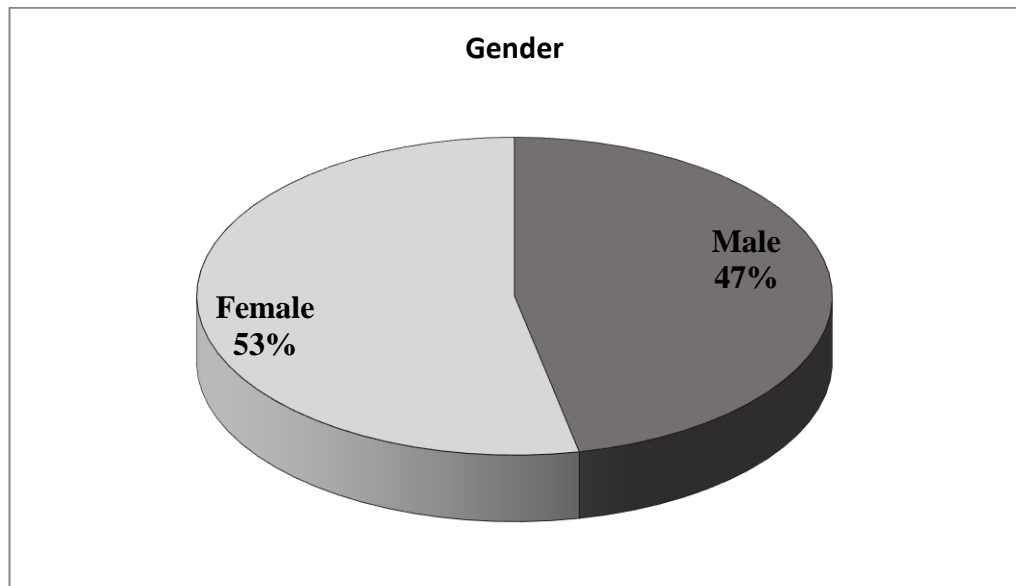
Figure 4.2: Gender of Respondents

4.4.2 Age of Respondents

According to the findings of this study employees aged below 30 years make up 11% of the respondents, 31-40 years 29%, 41-50 years 32% and 51-60 years 28%. None indicated to be older than 60 years as indicated in figure 4.3. The composition of the respondents in this study indicates existence of a dynamic multi-generational workforce implying the workers had diverse age and range of skills beneficial to government ministries in Kenya. With 60% of the employees falling between 41-60 years, this implied that majority of the employees were in middle age and ageing categories. These findings are inconsistent with the findings of Munyiva (2015) in a study on the effect of talent management practices on employee retention where only 16% of the respondents were in this bracket. Lack of respondents who were above 60 years old was an indication that government ministries do not retain employees past mandatory retirement age. The situation was also inconsistent with the findings of a study by Gerber (2014) that organizations retain older workers with more knowledge past retirement to allow them time to train their younger counterparts. The findings also contradicted those of Higo and Klassen (2015) who found that organizations retain retirees to reduce costs of loss of knowledge, potential leaders, experience and

relationships among other benefits. This was also contrary to the proposal for the Public Sector to develop and implement 'emeritus initiative' to support transfer of knowledge and information sharing through development of a structured framework for harvesting the tacit knowledge and expertise held by the emeritus (RoK, 2018).

The low percentage of employees aged below 30 years in this study was an indication that only few people from millennial generation had been employed in government ministries in Kenya. The findings were consistent with the findings of Devine and Powell (2008) who established that there is a dwindling supply of young workers, more so for public sector organizations. The findings also concurred with those of Jamrog 2009 as cited by Levy (2011) who established that a smaller generation of young workers was entering the labor market. They also confirmed the findings of Kibui and Kanyiri (2014) that HR managers in the public sector in Kenya have a challenge in attracting and retaining young educated workforce. The findings were contrary to the assertion by GoK that the public sector would develop programs for young professionals so as to create a pool of young professionals in the public service targeting young professionals in the public service and those aspiring to join (RoK, 2018). The low number of younger employees could be attributed to the success of government efforts to tame the bloated wage bill in the public sector by cutting on recruitment.
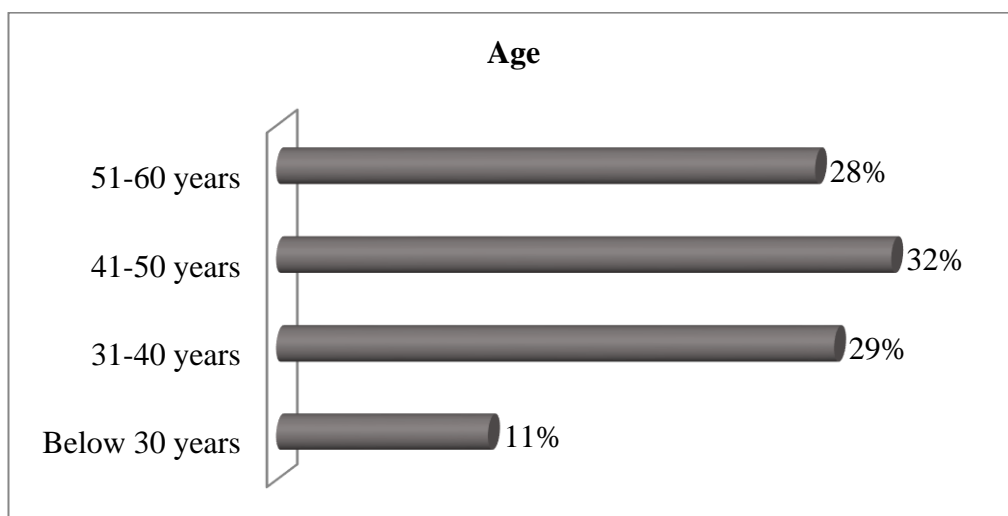
Figure 4.3: Age of Respondents

4.4.3 Work Experience of Respondents

As per study findings presented in figure 4.4, 6% of the respondents had worked in their ministry for less than one year so they were new hires. Those who had worked for 1-5 years make up 32%, an indication that many employees were relatively new in their ministries and may lack the wealth of knowledge and understanding of their ministry that comes with long service. However, those with experience of 6-10 years made up 29% implying that they had served in the ministries long enough to be conversant with presence or absence of talent management and knowledge retention practices in the ministries.

Low percentage of those with 11-20 years of experience who make up 17% of employees in government ministries could be an indication of high labor turnover possibly due to natural attrition or resignations, early retirements or lack of willingness to remain in the ministry for long which concurred with the findings of Munyiva (2015). Those who had worked in the ministry for over 21 years made up 16% and were mainly in the 41-60 age bracket. This implied that that older employees are more loyal than younger ones. It could also be attributed to the fact that older people have fewer new job openings as employers prefer more energetic and dynamic younger employees. It could also indicate that older employees fear losing the benefits accrued over the years hence opt not to switch jobs but work till retirement which concurs with the views of Kibui (2015).
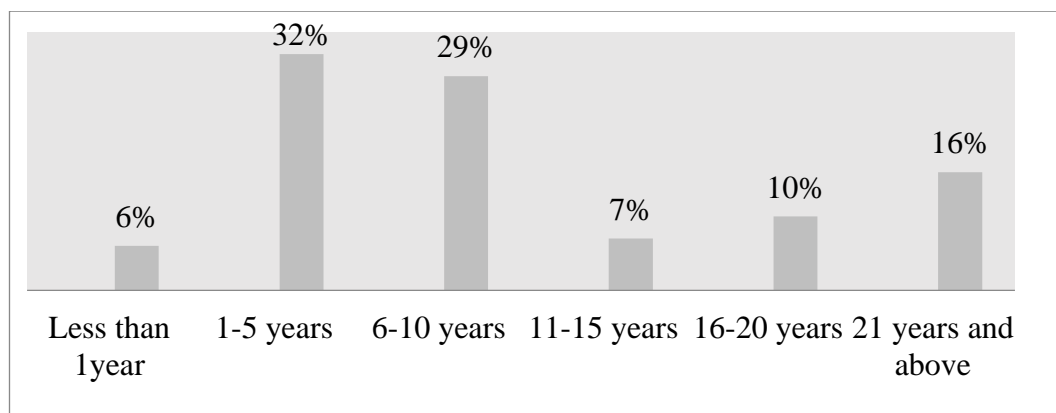
Figure 4.4: Number of Years Worked by the Respondents

4.4.4 Education Level of Respondents

Only 1% of the respondents had Primary level education, 11% had Secondary education, 42% had College education while 46% had University education. This concurred with the findings of Maganga and Wario (2017) which also indicated that 46% of employees in government ministries had university education. These findings implied that efforts had been made to attract and engage employees with high qualifications since 88% of the respondents had college and university education. It also meant the results of the study could be trusted as the respondents had capacity to understand and respond to the items in the questionnaires rationally. The results are presented in figure 4.5.
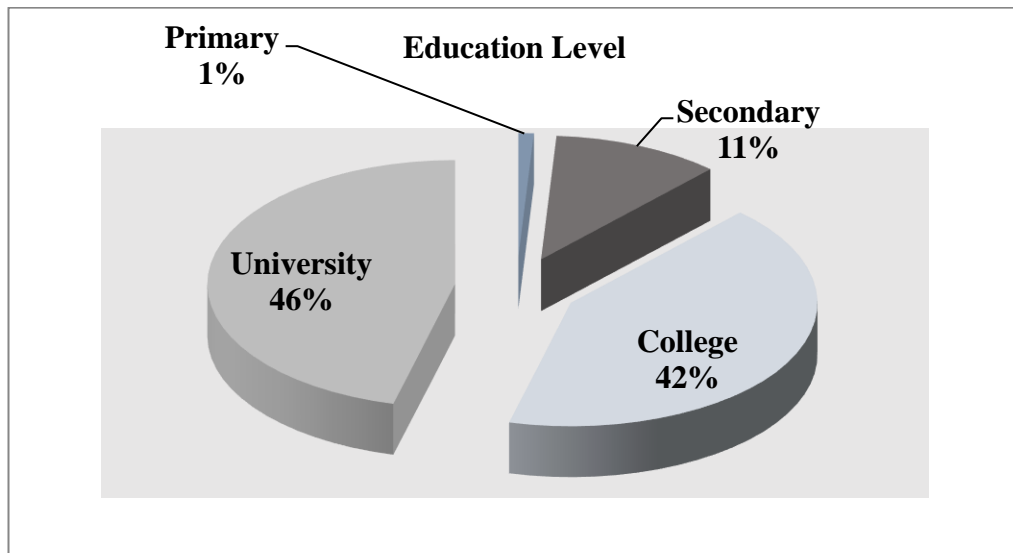
Figure 4.5: Education Level of Respondents

4.5 Descriptive Analysis Based on Research Objectives

This research had five objectives which in included: to establish the influence of talent attraction on knowledge retention, to determine the influence of talent development on knowledge retention, to establish the influence of talent mobilization on knowledge retention and to assess the influence of talent retention on knowledge retention in government ministries in Kenya. There was also a moderating variable whose specific objective was to assess the moderating effect of top management commitment on the influence of talent management practices on knowledge retention in government

ministries in Kenya. To achieve these objectives, the researcher came up with a number of items on each of the objectives and the analysis of responses to each of the items was done and presented in this section.

4.5.1 Talent Attraction and Knowledge Retention

According to the findings of the study on whether efforts were made to attract qualified employees to the ministry, 76% agreed while 24% disagreed that such efforts were made. These findings are presented in figure 4.6. The high percentage (76%) of those who agreed was an indication that many employees were satisfied with the efforts made to engage qualified employees while a smaller percentage were not satisfied. However, 24% is also a significant number of the respondents who appeared to be of the opinion that the government was not doing enough to attract talent. This scenario confirmed the findings of Sira and Timbe (2013) who established that many developing countries experience problems of attracting staff, providing them with training and development programs for succession purposes in the public service. The views of the 24% of respondents who disagreed were consistent with those of the Manpower Talent Shortage Survey (2011) whose findings indicated that organizations confront major challenges in attracting; retaining and developing the people they need in many positions. This could be an indication of weakness on the part of government ministries as Ready and Conger (2008) established that a strong company will always attract talent and will try to keep them as long as possible. There is need for management to investigate the reasons behind the disagreement by the 24% of the employees and put in place measures to change their perceptions.
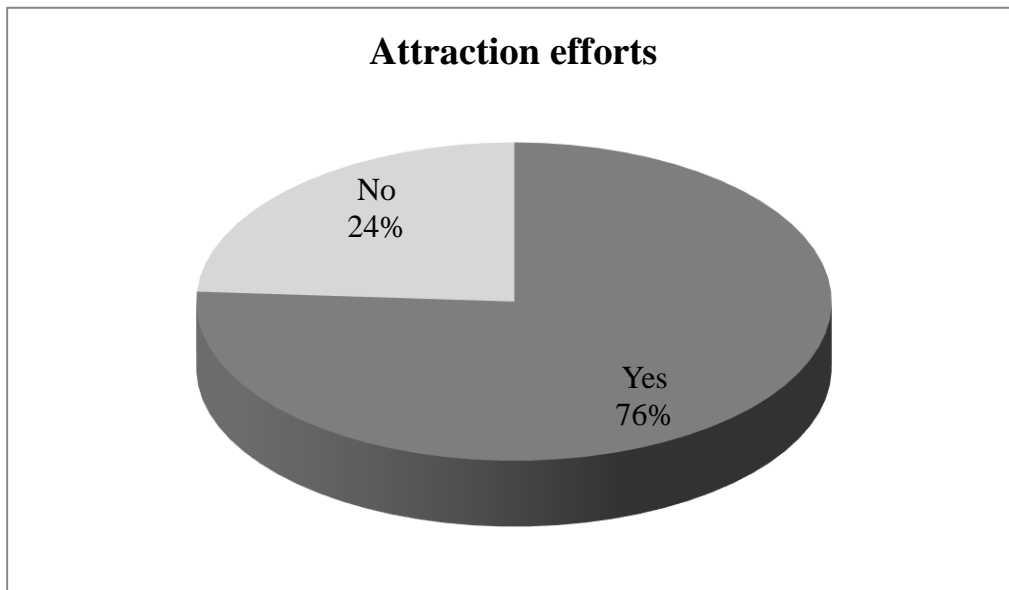
Figure 4.6: Attraction of Qualified Employees

Respondents were required to indicate their levels of agreement or disagreement with provided statements on talent attraction on a 5-points Likert Scale of: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1). The closer to 5, the higher the agreement and the further from 5 the higher the disagreement with the statement. A score of 3 indicated indecision while below three indicated disagreement or dissatisfaction with the statement.

From this study findings, 19% strongly agreed that their ministry had a policy on talent attraction 33% agreed, 26% were neutral, 12% disagreed, 10% strongly disagreed. The mean for this item was 2.6 and the standard deviation was 1.2. The high percentage of those who strongly agreed and agreed combined (52%) implied that the policy was in place. However, a significant percentage, 48% of those who were neutral, disagreed and strongly disagreed imply that the majority of employees were not aware of or familiar with the policy or dissatisfied with the policy. There is need to communicate the policy to all.

According to the study findings, 70% agreed, 12% disagreed while 18% were neutral or undecided on the statement that employees are sponsored for training and career development. The mean for this item was 2.6 and the standard deviation was 1.2. The

high percentage of those who agreed (70%) was an indication that government ministries attract employees through sponsorship for training and career development. There is need for management to establish why the other 30% in the other categories combined had a different opinion. On the question of whether the ministries are Equal Opportunity Employers, 26% strongly agreed, 33% agreed, 19% were neutral, 13% disagreed while 8% strongly disagreed. The mean was 2.44 and the standard deviation 1.23. The study also found out that 14% strongly agreed, 27% agreed, 27% were neutral, 21% disagreed and 11% strongly disagreed on the statement that their ministry has an elaborate employee welfare scheme. The mean for this item was 2.89 and the standard deviation was 1.21. The high number of undecided respondents implied that if the scheme was in place, most employees were not aware of it or they did not find it attractive enough.

A statement on employee involvement in making important decisions drew the following responses: 12% strongly agreed, 30% agreed, 25% were neutral, 19% disagreed while 14% strongly disagreed. The mean for this item was 2.9 and the standard deviation was 1.23. The last item on talent attraction was on offer of internship opportunities to college and university students to which overwhelming 44% of the respondents strongly agreed, 36% agreed, 11% were neutral, 4% disagreed while 5% strongly disagreed. The high percentage (80%) of those who strongly agreed and agreed combined indicated that government ministries attract talent through offer of internship opportunities. The mean for this item was 1.91 and the standard deviation was 1.09. The percentages of the level of agreement with all the statements on talent attraction and the mean and standard deviation are presented in table 4.6.

Generally, the study revealed that there was a significant positive relationship between talent attraction and knowledge retention in government ministries in Kenya. The study findings were consistent with those of a research by Horwitz, Heng and Quazi (2013) that established that talents in South-East Asian were attracted, motivated and therefore intended to stay with the organization longer thus their knowledge was retained in their organizations.

The findings also concurred with those of Rudsada (2016) who conducted a study on talent management in Thai hospitality industry and found out that organizations that put more emphasis on attracting talent contributed to effective work and retained the best talent. The findings were also consistent with those of Schichtle (2011) that competitive knowledge comes with new hires who bring new information from other industries and competitor procedures which may not previously have been available in the organization they join.

Table 4.2: Descriptive Statistics on Talent Attraction

STATEMENT	SA	A	N	D	SD	M	S.D
There is a policy on attracting knowledgeable and skilled employees in all generations in this ministry	19%	33%	26%	12%	10%	2.6	1.2
Employees are sponsored for training and career Development in this ministry	30%	40%	18%	8%	4%	2.16	1.06
This ministry is an Equal Opportunity Employer	26%	33%	19%	13%	8%	2.44	1.23
This ministry has elaborate employee welfare program scheme	14%	27%	27%	21%	11%	2.89	1.21
Employees are involved in making important decisions in this ministry	12%	30%	25%	19%	14%	2.9	1.23
This ministry offers internship opportunities to college and university students	44%	36%	11%	4%	5%	1.91	1.09

4.5.2 Talent Development and Knowledge Retention

As presented in figure 4.7, 34% of the respondents agreed that there is a policy on talent development in government ministries while an overwhelming 66% of the respondents indicated that such a policy did not exist in government ministries in Kenya. This implies that government ministries need to develop policy on talent development in order to streamline talent development practice. The ministries that already have such a policy should clearly communicate the same to all employees. According to Maganga and Wario (2017), clear communication of policy outputs and outcomes to stakeholders can be the starting point to transforming uncompetitive

public sector organizations into dynamic and knowledge-intensive learning organizations.

Policy on talent development
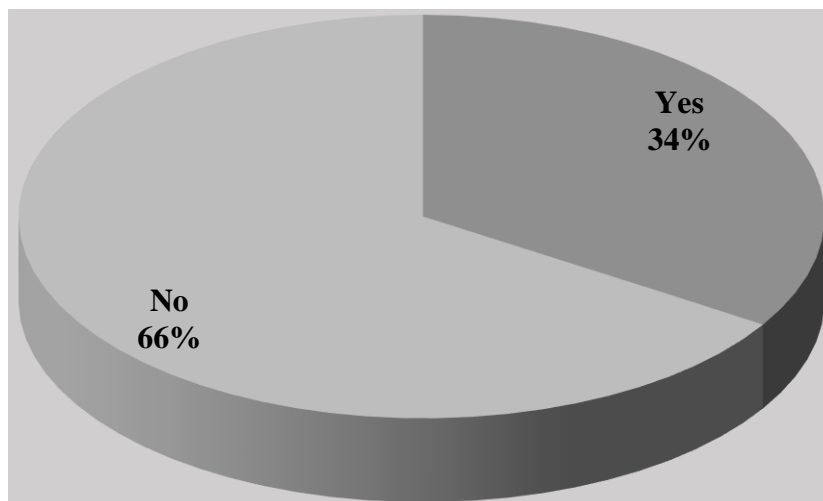
Figure 4.7: Policy on Talent Development

Opportunities for Talent Development

In response to the item on opportunities available for employees to develop their talents, results of the study revealed that, 40% of the respondents indicated there were seminars and workshops for employees, 26% indicated that employees were given time off for training, 25% indicated there was sponsorship for training, 8% felt that all these opportunities were available and 1% indicated there were scholarships as talent development efforts in government ministries. The responses are presented in figure 4.8. The high number of respondents who agreed with this statement was a clear indication that talent development was practiced in government ministries in Kenya.

Findings of the study agreed with those of World at work (2009) whose study established that development and career opportunities are the most important in attracting talented employees to big certified public organizations. The findings also concurred with those of Kibui (2015) who established that employees tend to remain

with the institution if there is a sense of achievement through personal development which is realized by providing growth opportunities. They were also in agreement with the findings of Australia Government (2010) who established that core to addressing the rapid loss of skilled personnel from the public sector is the accelerated development of both leadership and the broader employee base.

Opportunities for Development

Category	Value
schorlaship	1%
all	8%
seminars/workshops	40%
sponsorship	25%
time off for training	26%
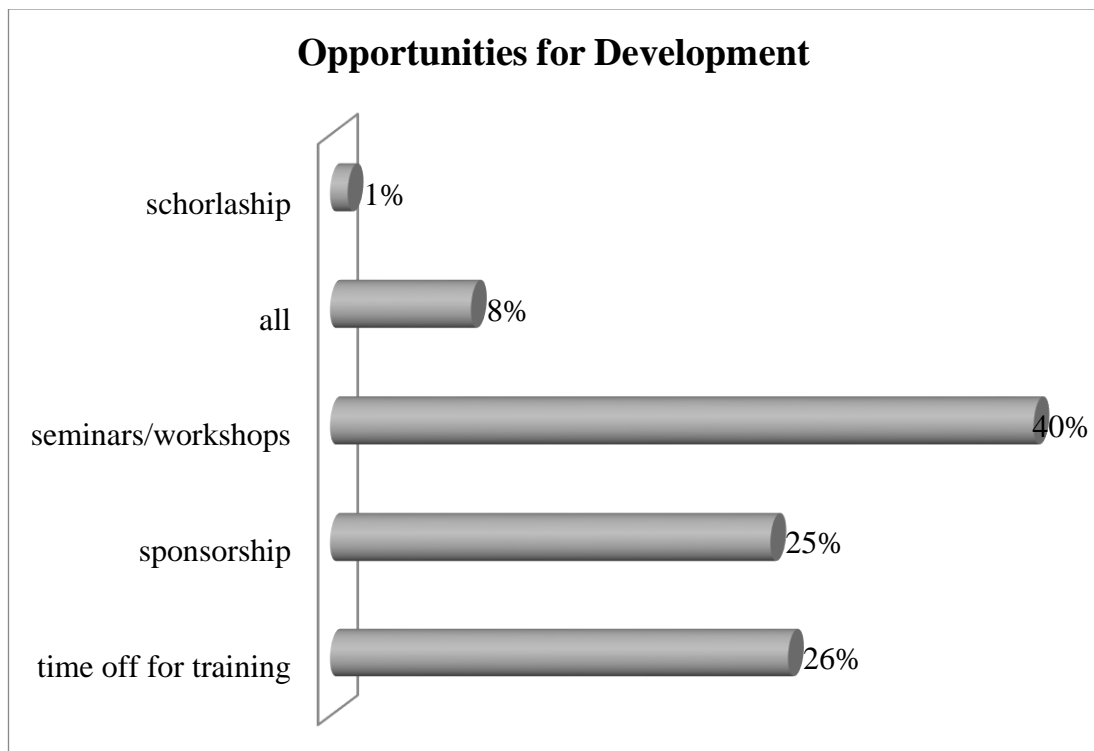
Figure 4.8: Talent Development Opportunities

Respondents were required to indicate their levels of agreement or disagreement with provided statements on talent development on a 5-point Likert Scale of Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1). On the first item on the level of agreement with the statement that progress and career development policy is clearly outlined and known to all employees, 23% of the respondents strongly agreed, 31% agreed, 29% were neutral, 7% disagreed and 10% strongly disagreed. The mean for this item was 2.51 and the standard deviation was 1.21. From these results, although the majority of respondents, 54%, are satisfied with the state of affairs, many others 46% appear not satisfied. In regard to the statement that employees are encouraged to improve their knowledge and skills, 32% agreed, 34% agreed, 21%

were neutral 7% disagreed and 6% disagreed. The majority of respondents appeared satisfied with the efforts made in their ministries. The mean for this item was 2.21 and the standard deviation was 1.14. In regard to a statement that HR department frequently undertakes employee training needs analysis to guide them on career development paths, 20% strongly agreed, 32% agreed, 28% were neutral, 8% disagreed while 12% strongly disagreed. The mean for this item was 2.6 with a standard deviation of 1.24. The results indicated that the majority were satisfied, but a big number 48% of employees were not satisfied with needs training needs analysis efforts made in their ministries. This calls for improvement in needs assessment and advice on career development.

According to the results of this study, 9% strongly agreed, 28% agreed, 33% were neutral while 17% disagreed and 13% strongly disagreed that employees in their ministry are mentored and coached to develop their knowledge and skills. Evidently, the majority of the respondents did not appear convinced their ministries were doing well in mentorship and coaching of employees. The mean for this item was 2.99 and the standard deviation was 1.15. Efforts should therefore be made to mentor and coach employees in government ministries in order to enhance knowledge retention. In response to the statement that heads of departments are sensitized on the need for nurturing talent, 16% of the respondents strongly agreed, 19% agreed, 33% were neutral, 20% disagreed, while12% strongly disagreed. The majority, 65%, of the respondents were not sure, disagreed or strongly disagreed and this could be an indication that they had not benefitted from or witnessed efforts to nurture their talent by their HoDs. Only 35% appeared satisfied with the efforts made. The mean for this item was 2.99 and the standard deviation was 1.15. HoDs should therefore be sensitized on the need to nurture talent and communicate the same to their staff and be seen to be actively nurturing talent to assure the staff the ministries value them.

On the statement that employees are rewarded upon completion of training, 8% strongly agreed, 21% agreed, 27% were neutral, 22% disagreed while 22% disagreed. The majority of respondents, 71%, were undecided or disagreed. The mean for this item was 3.27 and the standard deviation was 1.25. This could imply that only few employees, 29%, may have been rewarded on completion of training which could have

led to feelings of unequal treatment and job dissatisfaction among employees. It could also imply that employees felt there were no added monetary or nonmonetary benefits for the efforts they made in improving their skills and knowledge. Rewards are a powerful motivator hence it is recommended that government ministries consider rewarding their employees who successfully complete their training to encourage them improve their skills and knowledge thus motivating them to remain.

With regard to the statement that ministry partners with academic institutions in training employees on specific skills, 23% strongly agreed, 26% agreed, 23% were neutral, 15% disagreed while13% strongly disagreed. The mean for this item was 2.67 and the standard deviation was 1.32. While 49% of the respondents appear satisfied with this practice, the simple majority of 28% are dissatisfied and23% do not appear aware of such partnerships. There is therefore need for the management to communicate clearly about such arrangements to all employees. The responses to all items on talent development are presented in table 4.3 in percentages, means and standard deviations.

Generally, the findings of this study in regard to the influence of talent development on knowledge retention were that a significant influence exists. The findings were consistent with those of Waleed (2011) who established that an organization that invests in training of its employees remains competitive. They were also in agreement with those of Ng'ethe (2012) who established that training and research impart stocks of knowledge in staff and Pena (2013) that an effective method of softening the blow when experienced workers leave is having them mentor and train other employees, thus pass on their knowledge and retain it within the organization. Davenport and Prusak (2014) also established that mentoring programs provide an effective way to transfer knowledge, skills and the wisdom gained from years of experience.

The findings of the study also concurred with those of CIPD (2010) study on learning and talent development which indicated that senior managers and the human resource department are tasked with ensuring that courses are delivered and overall planning of the learning process is carried out effectively. The findings were also consistent with the findings by Chitsaz-Isfahani & Boustani (2014) that staffs prefer business

environments in which they will develop, renovate themselves, learn continuously and where their ideas are supported and encouraged. The findings were also in agreement with those of Kenani (2011) on the need for increasing scientific knowledge and skills of employees to achieve strategic business objectives hence organizations ought to balance on labor supply and demand, trained workforce and increased employability of workforce. Table 4.3 presents a summary of responses on talent development for knowledge retention.

Table 4.3: Descriptive Statistics on Talent Development

STATEMENT	SA	A	N	D	SD	M	S.D
Progress and career development policy is clearly outlined and known to all employees in this ministry	23%	31%	29%	7%	10%	2.51	1.21
Employees are encouraged to improve their knowledge and Skills	32%	34%	21%	7%	6%	2.21	1.14
The HR department frequently undertakes employee needs analysis to guide them on development paths in this ministry	20%	32%	28%	8%	12%	2.59	1.24
Employees in this ministry are mentored and coached to develop their skills	9%	28%	33%	17%	13%	2.99	1.15
Heads of departments in this ministry are sensitized on the need for nurturing talent	16%	19%	33%	20%	12%	2.92	1.23
Employees in this ministry are rewarded upon completion of training	8%	21%	27%	22%	22%	3.27	1.25
This ministry partners with academic institutions in training employees on specific skills	23%	26%	23%	15%	13%	2.67	1.32

4.5.3 Talent Mobilization and Knowledge Retention

The study revealed that 62% of the respondents agreed that efforts were made to enable employees work in different environments in the ministries while 38% indicated that such efforts did not exist as shown in figure 4.9. Although many were in agreement, ministries should ensure that such efforts are made, communicated to and experienced by all in order to enhance knowledge retention.

Different Work Environment

No 38%

Yes 62%
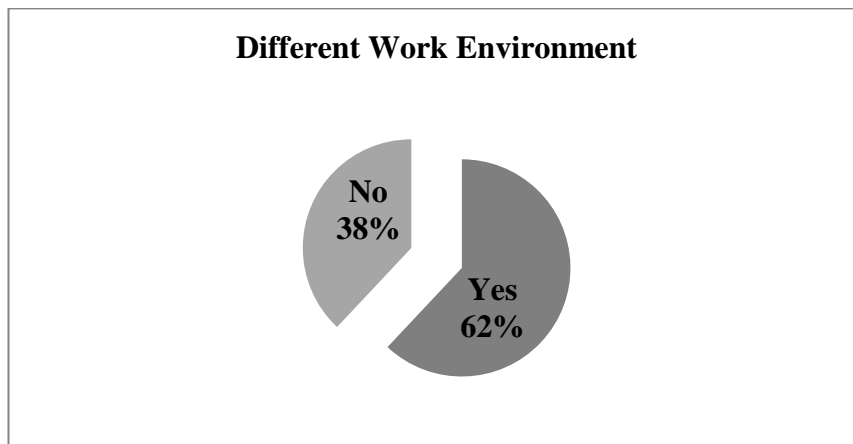
Figure 4.9: Efforts to Enable Employees Work in Different Environments

On the item that required respondents to indicate ways in which employees are mobilized, the study revealed that 59% of the respondents indicated transfer to different departments as the most dominant practice in talent mobilization in government ministries followed by assignment to different projects at 33%, overseas assignments at 4%, all at 2% and none at 2%. Only a meager 2% disagreed. It was therefore evident that talent mobilization was a common practice in government ministries in Kenya. All the responses are presented in table 4.4 in frequencies and percentages. The study findings were consistent with the findings of Harrison (2013) that organizations are under pressure to develop adaptable employees able to embrace evolving business conditions, new business opportunities, and shifting strategies in the face of rapid change. They also agreed with the views of Jean- Paul Votron as cited by Claudia and Lowell (2005) who established that in the current globalized and complex world there is need for companies to be agile and to mobilize their human capital.

Table 4.4: Talent Mobilization Practices in Government Ministries

Choices	Frequency	Percent
Overseas assignment	12	4
Transfer to different departments	162	59
Assignment to different projects	92	33
All	5	2
None	5	2
Total	276	100

Respondents were required to indicate their levels of agreement or disagreement with provided statements on talent mobilization on a 5-point Likert Scale of: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1). On the statement that there is a policy on employee mobilization in government ministries, 14% strongly agreed, 24% agreed, 33% were neutral, 13% disagreed while 16% strongly disagreed. The mean for this item was 2.94 and the standard deviation was 1.25. The 33% of respondents who were neutral together with the 29% who either disagreed or strongly disagreed was an indication that the majority were not familiar with such a policy or had not benefitted from it. This was inconsistent with the findings of Maganga and Wario (2017) that ministries should communicate their policy to all their staff as clear communication of policy to stakeholders to transform uncompetitive public sector organizations into dynamic knowledge-intensive organizations.

According to the findings of the study, 22% strongly agreed, 32% agreed, 21% were neutral, 16% disagreed and 9% strongly disagreed with the statement that field visits by employees are common. The mean for this item was 2.59 and the standard deviation was 1.25. Most of the respondents (54%) were in agreement with the statement and the researcher could attest to this as in most ministries data collection was delayed as many of the respondents were said to be in the field on official duties therefore not available in their offices. The significant percentage of those who disagreed and those who were neutral (46%) combined implied that such employees had neither been involved nor made aware of such visits. The findings were inconsistent with the views of Harrison (2015) that organizations should be transparent about opportunities for

lateral moves and advancement opportunities, employee opportunities such as working in cross-functional teams, task or job rotation, and stretch assignments.

In response to the statement that heads of departments are sensitized on the need to appoint employees to act in various positions, the results revealed that 13% of the respondents strongly agreed, 34% agreed, 32% were neutral, 11% disagreed while 10% strongly disagreed. The mean for this item was 2.70 and the standard deviation was 1.11. As evident from the results, the majority of respondents, 53% either disagreed were undecided on this issue. A sizeable number of respondents, 32%, were neutral on this item implying that they might not even have been aware of or familiar with the mandate of heads of departments.

The study found out that, 16% strongly agreed, 31% agreed, 21% were neutral, 17% disagreed and 15% strongly disagreed in regard to the statement that employees are appointed to act in senior positions in the ministry. The mean for this item was 2.84 and the standard deviation was 1.31. The results implied that many of the employees were not satisfied with the state of affairs in relation to appointment to act in senior positions in their ministries. This could be attributed to the possibility that the respondents might never have been personally appointed to act in any senior position or were not aware of anyone who had been appointed for the same. In regard to the statement that employees are sent on overseas assignments or deployed to other branches and departments, 17% strongly agreed, 37% agreed, 28% were neutral, 12% disagreed while 6% strongly disagreed. The mean for this item was 2.54 and the standard deviation was 1.19. From the results, 54% of the respondents agreed with the item indicating satisfaction with this practice. However, 46% seemed not sure or disagreed hence the need to investigate the cause of their sentiments since this is a significant percentage whose views should not be ignored.

According to the findings of the study, 21% strongly agreed, 33% agreed, 25% were neutral, 14% disagreed, while 7% in regard to the statement that employees are aware of possible mobility paths in their career. The mean for this item was 2.53 and the standard deviation was 1.18. The big percentage of those who agreed was an indication that government ministries have clearly defined paths for mobilizing their talent but

the undecided and dissenting views should be investigated to establish the underlying causes of their views.

In regard to the statement that employees are given opportunity to handle challenging tasks and responsibilities that are outside their domain in this ministry, the study revealed that 18% strongly agreed, 28% agreed, 25% were neutral, 17% disagreed while 12% strongly disagreed. The mean for this item was 2.78 and the standard deviation was 1.26. Most of the employees (54%) seemed dissatisfied with this statement as they fell within neutral and disagree responses. The percentages of responses, the mean and standard deviation for all the items on talent mobilization and knowledge retention are presented in table 4.5. There is therefore need for management to investigate the underlying reasons to these views in order to streamline talent management practices in government ministries in Kenya.

Overall, the findings of this study agreed with those of Harrison (2013) that organizations that mobilize talent benefit from a deep pool of talented employees who are more productive, engaged and capable of taking on new challenges, assuming higher levels of responsibility and meeting increased demands to drive business growth. The findings also agreed with those of Madsen et al (2003) as quoted by Gonzalez et al (2017) that there is beneficial relationship between knowledge inflows and knowledge retention through various practices which include personnel mobility and job rotation. The findings also concurred with findings by Lee Hecht Harrison's 2015 Talent Mobility Research which established that organizations recognize talent mobility as an effective talent management strategy. Bersin (2009) also posited that the biggest success-drivers in enduring organizations is their ability to rapidly and transparently move people from role to role and function to function. Wamundila (2008) also recommended job rotation as one of the talent mobilization practices as staffs get exposed to the various operations and environments in the firm thus enhancing knowledge retention.

Table 4.5: Descriptive Results on Talent Mobilization

STATEMENT	SA	A	N	D	SD	M	S.D
There is a policy on employee mobilization in this Ministry	14%	24%	33%	13%	16%	2.94	1.25
Field visits by employees are common in this	22%	32%	21%	16%	9%	2.59	1.25
Heads of departments are sensitized on the need for appointing employees to act in various positions	13%	34%	32%	11%	10%	2.70	1.11
Employees are appointed to act in senior positions in this ministry	16%	31%	21%	17%	15%	2.84	1.31
Employees are sent on overseas assignments or deployed to other branches and departments from time to time in this ministry	17%	37%	28%	12%	6%	2.54	1.19
Employees are aware of possible mobility paths in their career in this ministry	21%	33%	25%	14%	7%	2.53	1.18
Employees are given opportunity to handle tasks and responsibilities that are outside their domain in this ministry	18%	28%	25%	17%	12%	2.78	1.26

4.5.4 Talent Retention and Knowledge Retention

There was an item that sought to find out if there were high numbers of employees leaving government ministries where many respondents (69%) disagreed while 31% agreed that there was high labor turnover as shown in figure 4.10. The findings were in contradiction to the findings by Manpower Talent Shortage Survey (2011) that organizations confront major challenges in attracting, retaining and developing the people they need. The findings implied that most employees in government ministries were not leaving their jobs possibly due to high levels of unemployment in the country and the fear of failure to secure other jobs. It could also be an indication of job satisfaction hence lack of motivation to look for other jobs or that there are good talent retention practices in government ministries in Kenya.
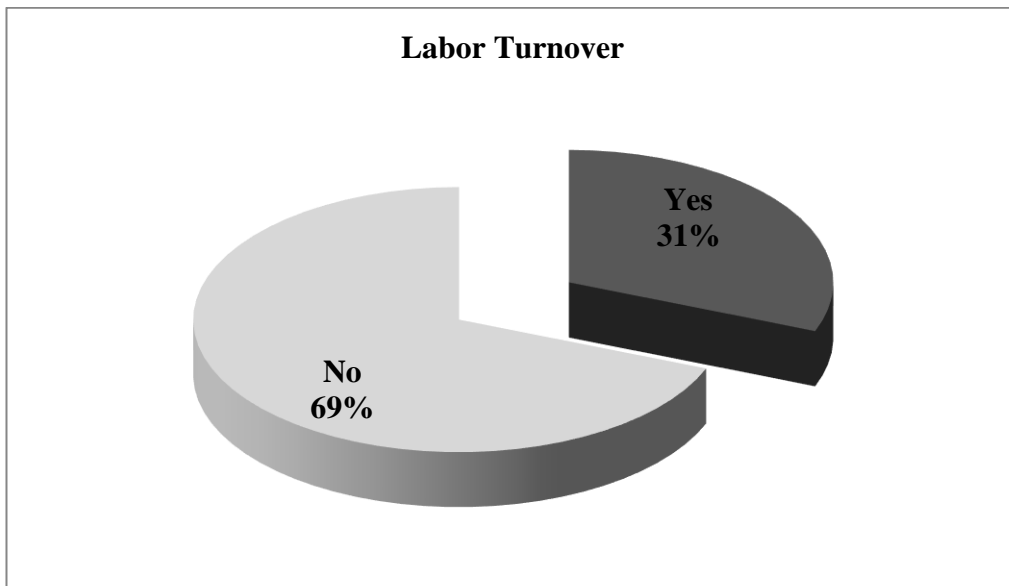
Figure 4.10: Labor Turnover in Government Ministries

The study findings revealed that 33% of the employees felt that award of contracts to retirees was common, 3% indicated there was part time work for employees, 49% indicated flexible work arrangements were common, 12% indicated employees were given overtime incentives while 3% indicated mortgage as the effort made to retain talent. The majority of respondents, 49%, indicated that flexible work arrangement was the most significant among the talent retention efforts in government ministries. This concurred with the views of Brack and Kelly (2012) who posited that managers should communicate to prospective employees about flexible work schedules among other talent attraction practices which also enhance talent retention.

Award of contracts to retirees was also found to be common though at a distant second (33%). Overtime incentives was found to be among the efforts made with 12% of respondents agreeing with it. Part time work and mortgage appeared to be the least popular among the talent retention efforts with 3% of the respondents for each of them. These results are presented in figure 4.11.

Figure 4.11: Efforts to Retain Talent in Government Ministries

Respondents were required to indicate their levels of agreement or disagreement with provided statements on talent retention on a 5-point Likert Scale of: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1).

According to the findings of the study, 20% strongly agreed, 41% agreed, 26% were neutral, 8% disagreed while 5% strongly disagreed in response to the statement that there were good work relations among employees in government ministries. The mean for this item was 2.37 and the standard deviation was 1.03. The agreement by the majority (61%) implied that there are cordial working relations but a significant number of employees (39%) were either neutral or disagreed implying they felt interpersonal relations in their ministries were poor. Efforts should be made to establish the causes of disgruntlement among the 39% of employees and ensure there are cordial relations.

According to the findings of this study, 19% strongly agreed, 25% agreed, 31% were neutral 18% disagreed while 7% strongly disagreed that heads of departments are sensitized on the need for talent retention in government ministries. The mean for this item was 2.69 and the standard deviation was 1.17. The majority of respondents (56%)

were either neutral, disagreed or strongly disagreed while a significant minority (44%) strongly agreed or agreed. This could be an indication that heads of departments do not appear keen on talent retention to majority of employees. It could also indicate that many employees were not aware whether HoDs are sensitized or not sensitized. On the statement that employee views and initiatives are respected in the ministry, the study established that 12% of the respondents strongly agreed, 30% agreed, 28% were neutral, 29% disagreed while l% strongly disagreed. The mean for this item was 2.87 and the standard deviation was 1.16. The significant number (58%) of the respondents comprising of those who were either neutral or disagreed with the statement was an indication of high levels of dissatisfaction with the manner in which employee views and initiatives were treated in government ministries.

On the issue of long service awards for employees, 9% of the respondents strongly agreed, 5% agreed, 26% were neutral, 23% disagreed while 27% strongly disagreed. The mean for this item was 2.87 and the standard deviation was 1.16. The 76% of the respondents who either disagreed or were neutral implied that there were no long service awards. Employees are known to remain in organizations where they are guaranteed of rewards for their efforts or service. There is therefore need to consider introducing long service awards as this might improve talent attraction as well as talent retention in government ministries.

On the statement that employees are bonded to continue working in government ministries after sponsorship for training, 29% strongly agreed, 41% agreed, 12% were neutral, 13% disagreed while 5% strongly disagreed. The mean for this item was 2.26 and the standard deviation was 1.16. The high percentage (70%) of those who agreed was an indication that this practice is common and most employees in government ministries were familiar with it. However, there is need to for proper communication of the situation to the minority (30%) who seemed ignorant or dissatisfied with the practice in order to enable them make informed decisions when taking up training opportunities on sponsorship.

Regarding a statement that there is an attractive employee welfare program in government ministries, 10% of the respondents strongly agreed, 19% agreed, 38%

were neutral, l8% disagreed while 15% strongly disagreed. The mean for this item was 3.09 and the standard deviation was 1.17. The majority (71%) who were either neutral or disagreed indicated dissatisfaction with the status of employee welfare program by majority of employees hence there is need to look into ways of establishing one if it does not exist or reviewing the one in place to enhance its attractiveness as a measure of talent retention.

On another statement that employees are guaranteed security of tenure in government ministries, 19% of respondents strongly agreed, 39% agreed, 20% were neutral 12% disagreed and 10% strongly disagreed. The mean for this item was 2.56 and the standard deviation was 1.22. The 58% of the employees who agreed was an indication that they were satisfied with security of tenure but a significant percentage (42%) seemed dissatisfied. The views of the 42% who disagreed with the statement could be attributed to the fact that the government has been making efforts to reduce the wage bill by reducing the number of employees as part of the ongoing reforms in the public sector hence the fear of job loss could have led to feelings of insecurity among employees. There is need to assure employees of their job security in order to enhance talent retention particularly where rare specialized skills and knowledge are concerned.

On the statement that there is an attractive employee pension scheme 19% of the respondents strongly agreed, 30% agreed, 25% were neutral, 15% disagreed while 11% strongly disagreed. The mean for this item was 2.71 and the standard deviation was 1.25. The high percentage (51%) who were either neutral or disagreed was an indication of general dissatisfaction and lack of clarity on the pension scheme. However a significant percentage also appeared satisfied with the pension scheme offered by the government. There is therefore need to investigate the cause of this disparity in opinions with a view to improving the attractiveness of the pension scheme. The results of the responses in percentages, mean and standard deviation for all these items in this section are presented in table 4.6.

The findings of this study were inconsistent with those of Gerber (2014) who found out that a phased retirement program benefits employers as they help retain older workers with more knowledge longer, allowing them time to train the younger ones

thus enhancing retention of knowledge in the concerned organizations. They also disagreed with the findings of Rupert (2010) who established that institutional knowledge held by tenured workers is valuable for maintaining consistency and quality.

The findings on the strategies used to retain talent were consistent with those of Cummings-White and Diala (2013) who found out that part-time and flexible work schedules help retain valuable staff beyond retirement hence enhance knowledge retention. The findings also concurred with those of Higo and Klassen (2015) who found that workers in Japan and South Korea remained in the labor force longer than those in other developed countries thus enhanced knowledge retention in their institutions.

Table 4.6: Descriptive Statistics on Talent Retention

STATEMENT	SA	A	N	D	SD	M	S.D
There are good working relations in this ministry	20%	41%	26%	8%	5%	2.37	1.03
Heads of departments are sensitized on the need for talent retention in this ministry	19%	25%	31%	18%	7%	2.69	1.17
Employee views and initiatives are respected in this Ministry	12%	30%	28%	21%	9%	2.87	1.16
There are long service employee awards in this Ministry	9%	15%	26%	23%	27%	3.47	1.27
After sponsorship for training, employees are bonded to continue working in this ministry	29%	41%	12%	13%	5%	2.26	1.16
There is an attractive employee welfare program in this ministry	10%	19%	38%	18%	15%	3.09	1.17
Employees are guaranteed of security of tenure in this ministry	19%	39%	20%	12%	10%	2.56	1.22
This ministry has an attractive pension scheme	19%	30%	25%	15%	11%	2.71	1.25

4.5.5 Descriptive Statistics for Knowledge Retention

In response to an item on whether there are efforts to retain knowledge in government ministries the study found out that 52% of the respondents agreed while 48% disagreed as presented in figure 4.12. The higher percentage of those who responded in the affirmative was an indication that the majority were satisfied with the efforts made. However, a significant number of respondents indicated there were no such efforts. There is therefore need to look into the underlying factors that made 48% of the respondents disagree and consider their suggestions on what could be done to improve on knowledge retention in government ministries in Kenya. According to Morera (2011), without a plan or program to transfer business processes, institutional policies and practices, and historical knowledge to someone else, organizations may be faced with severe business continuity and knowledge issues as younger employees leave the organization.
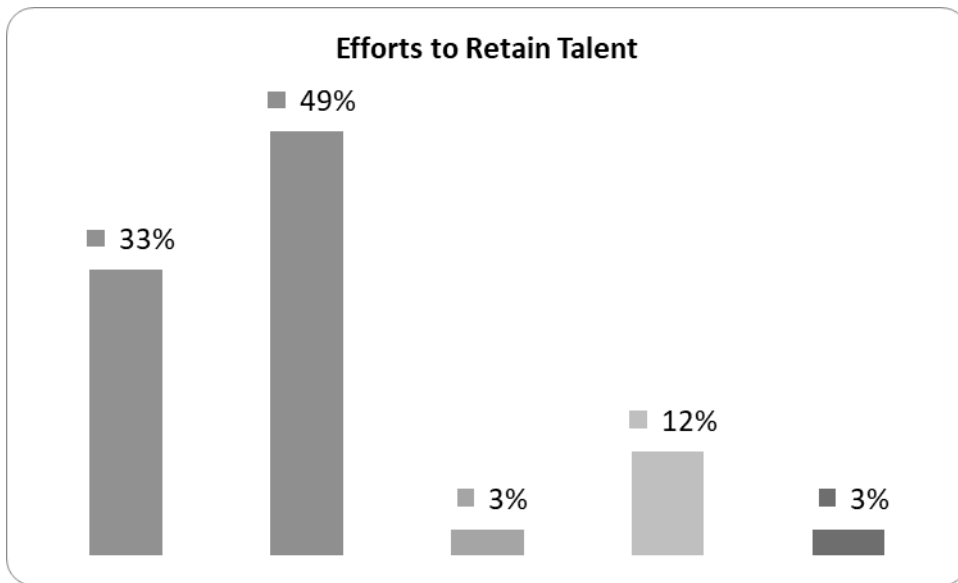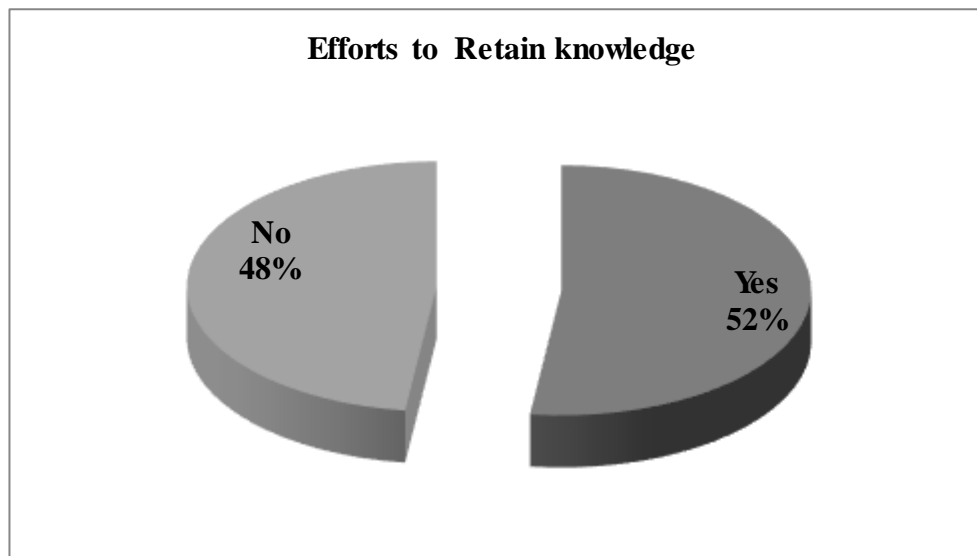

Figure 4.12: Knowledge Retention Efforts are made in Government Ministries

Respondents were required to indicate their levels of agreement or disagreement with provided statements on knowledge retention on a 5-point Likert Scale of: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1).

On the statement that all employees are sensitized on the need for knowledge retention, 15% of the respondents strongly agreed, 25% agreed, 25% were neutral, 20% disagreed and 15% strongly disagreed. The mean for this item was 2.98 and the standard deviation was 1.28. The combined 60% of the respondents who were either neutral or disagreed implied that employees were dissatisfied or were not convinced that there was sensitization on the need for knowledge retention. There is therefore need to ensure there is sensitization of employees on this issue as it is believed this would make employees internalize, value as well as own hence support knowledge retention efforts in their ministries.

From the study findings, 32% of the respondents strongly agreed, 48% agreed, 15% were neutral, 4% disagreed while 1% strongly disagreed with regard to the statement that the ministry records and stores minutes of meetings. The mean for this item was 1.94 and the standard deviation was 0.86. The overwhelming percentage (80%) of the respondents who agreed implied that meetings were held, minutes were taken and stored for knowledge retention.

According to the study findings, 13% of the respondents strongly agreed, 28% agreed, 25% were neutral, 16% disagreed while 18% strongly disagreed in regard to the statement that the ministry retains resourceful employees past retirement age. The mean for this item was 2.96 and the standard deviation was 1.30. The high percentage (59%) of the respondents who were either neutral or disagreed implied that generally employees were not satisfied with the practice. There is need to remain in contact and consultation with resourceful retired employees as a means of knowledge retention hence employers should improve on this practice. On the statement that the ministry facilitates knowledge sharing among employees, 12% of the respondents strongly agreed, 30% agreed, 29% were neutral, 19% disagreed and 10% strongly disagreed. The mean for this item was 2.86 and the standard deviation was 1.15. The high number of employees (58%) who disagreed with this statement implied that knowledge sharing may not be clearly facilitated in government ministries. The 42% who agreed could have been among senior managers who should be facilitating this practice.

With regard to the statement that mentorship across different generations is encouraged in government ministries, 10% strongly agreed, 20% agreed, 32% were neutral or non-committal, 24% disagreed while 14% strongly disagreed. The mean for this item was 3.12 and the standard deviation was 1.18. The low 30% of those who agreed was an indication that most employees (70%) felt that mentorship was not adequately practiced. Mentorship should be enhanced as it ensures that knowledge remains in the organization after exit of those who possess it ensuring there is no vacuum.

The results of the study indicated that 16% of the respondents strongly agreed, 33% agreed, 22% were neutral, 14% disagreed while 15% strongly disagreed with the statement that work teams composed of employees of different generations are encouraged in government ministries. The mean for this item was 2.78 and the standard deviation was 1.29. The significant number (49%) of those who agreed that multigenerational work teams exist in government ministries implied that knowledge retention was done through knowledge sharing hence no possibility of knowledge vacuum when some of the employees exit. However, the high number of the respondents who were either neutral or disagreed (51%) could be interpreted to mean that this practice may not have been well communicated to all employees. It could also imply that most employees were dissatisfied with the state of affairs.

From the study findings on the statement that government ministries conduct exit interviews for leaving employees and keeps records of results of the interview, 12% strongly agreed, 17% agreed, 27% were neutral 21% disagreed, while 23 % strongly disagreed. The mean for this item was 3.26 and the standard deviation was 1.31. The overwhelming high number (71%) of the respondents who were either neutral or disagreed was an indication of dissatisfaction with the state of this practice by most employees. Government ministries should therefore improve on exit interviews and communicate the same to their employees.

The study revealed that 24% of the respondents strongly agreed, 38% agreed, 23% were neutral, 7 % disagreed while 8% disagreed with regard to the statement that there is a resource center where all important records and reference materials are kept in the

ministry. The mean for this item was 2.37 and the standard deviation was 1.15. Many respondents (62%) agreed and this was an indication that the resource centers exist and employees were aware of their existence. This also implied there were efforts made for knowledge retention. However, the remaining 38% of those who disagreed is significant hence there is need to investigate the possible causes of disagreement. On the statement that old work records are archived for future reference and preservation in the ministry 32% strongly agreed, 35% agreed, 21% were neutral, 5% disagreed while 7% strongly disagreed. The mean for this item was 2.21 and the standard deviation was 1.16. The fact that many (67%) of the respondents strongly agreed or agreed implied that knowledge is preserved in government ministries for future use or reference and employees are satisfied with the status of this practice. However, there was also a significant 33% of respondents who either disagreed, were not certain, or were dissatisfied with the state of affairs. The management should therefore look into the underlying issues that could have led to such feelings with a view to addressing them. Responses to all the statements in this section are presented in table 4.7.

The findings of the current study concurred with those of a study by Wamundila (2008) on knowledge retention at the University of Zambia that established that participation of staff in various meetings was among the strengths in transfer and retention of knowledge. The findings were also consistent with those of Liebowitz (2011) who established that few organizations have formal knowledge retention strategies. However, the findings of the study disagreed with those of Brčić and Mihelič (2015) who found out that sharing of knowledge between employees belonging to different generational cohorts is crucial in knowledge retention since each of them possesses unique competencies.

Promoting a culture that encourages knowledge sharing can help fill the generational knowledge gap. The findings of the study also contradicted the US Age Discrimination in Employment Act (ADEA) amended in 1978 to prohibit mandatory retirement before age 70 in most occupations with the impact of older persons to remaining at work (Barker & Clark, 1980 as cited by Burtress, 2013). The study findings were also inconsistent with those of Floor (2007) who posited that well-planned and effective knowledge transfer needed to be done among all generations of employees to avoid

knowledge disappearance and imbalance of knowledge levels.

The findings also disagreed with views of Kibui and Kanyiri (2014) who established that multiple generations working side by side in the workplace affect retention and transfer of institutional knowledge. The findings concurred with those of Gonzalez et al (2017) who found out that knowledge is typically stored in the form of a knowledge repository, which includes documents, reports and databases. This does not concur with the views of Peña (2014) who established that up to 90% of the knowledge of the company is stored in the heads of employees in most organizations.

Table 4.7: Descriptive Statistics on Knowledge Retention

STATEMENT	SA	A	N	D	SD	M	S.D
All employees are sensitized on the need for knowledge retention in this ministry	15%	25%	25%	20%	15%	2.98	1.28
This ministry records and stores minutes of meetings	32%	48%	15%	4%	1%	1.94	0.86
This ministry retains resourceful employees past retirement	13%	28%	25%	16%	18%	2.96	1.30
This ministry facilitates knowledge sharing among employees	12%	30%	29%	19%	10%	2.86	1.15
Mentorship across different generations is encouraged in this ministry	10%	20%	32%	24%	14%	3.12	1.18
This ministry encourages work teams composed of employees of different generations	16%	33%	22%	14%	15%	2.78	1.29
This ministry conducts exit interviews for leaving employees and keeps records of results of the interview	12%	17%	27%	21%	23%	3.26	1.31
There is a resource center where all important records and reference materials are kept in this ministry	24%	38%	23%	7%	8%	2.37	1.15
Old work records are archived for future reference and preservation in this ministry	32%	35%	21%	5%	7%	2.21	1.16

4.5.6 Descriptive Statistics on Top Management Commitment

Top management commitment was the moderating variable in this study. In regard to the on whether top management is concerned with talent management for knowledge retention in government ministries, 41% of the respondents affirmed this while 59% respondents disagreed as presented in figure 4.13. Most of the employees (59%) were of the opinion that top management in government ministries is not concerned about talent management and knowledge retention as indicated by high percentage of those who disagreed. There is therefore need for top management to show concern for and put efforts in talent management to enhance knowledge retention in their ministries and satisfy their employees.
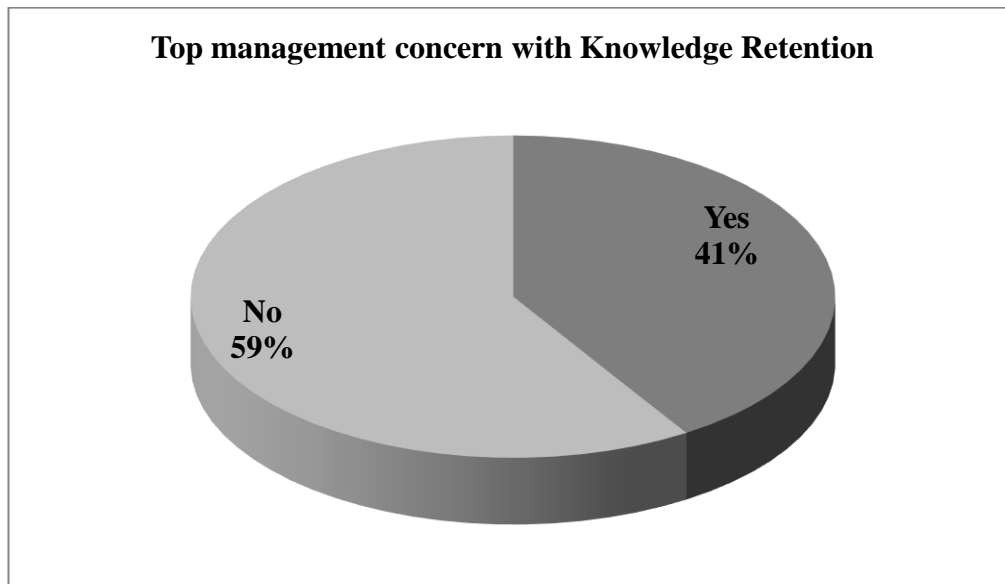
Figure 4.13: Top Management Concern for TM and KR

Respondents were required to indicate their levels of agreement or disagreement with provided statements on top management commitment on a 5-point Likert Scale of: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1). According to the findings of the study, 11% of the respondents strongly agreed, 15% agreed, 34% were neutral, 24% disagreed while 16% disagreed in regard to the statement that top management has come up with talent management and knowledge

retention policies. The mean for this item was 3.21 and the standard deviation was 1.19. The big percentage (74%) of respondents who were neutral or disagreed was interpreted to mean disagreement or lack of awareness of existence of such a policy. Top management should communicate about such policy to employees if it exists or come up with one if there is none as communication of policy to stakeholders is imperative.

On the statement that top management facilitates implementation of talent management and knowledge retention policies in the ministry, 9% of the respondents strongly agreed, 22% agreed, 28% were neutral, 25% disagreed while 16% strongly disagreed. The mean for this item was 3.16 and the standard deviation was 1.20. Most of the respondents (69%) were neutral or disagreed indicating dissatisfaction with the state of this practice. This could be an indication that top management does not appear committed to implementation of talent management and knowledge retention policies to employees. Top management in government ministries should be involved in implementation of the relevant policies to reassure employees of their commitment and support of the same.

Responses to the item that the ministry has a budget for talent management and knowledge retention activities indicated that 7% of the respondents strongly agreed, 19% agreed, 31% were neutral, 23% disagreed while 20% strongly disagreed. The mean for this item was 3.30 and the standard deviation was 1.19. Most of the respondents (74%) disagreed implying lack of commitment to talent management and knowledge retention. There is need for management to have a budget or set aside some resources for these practices as this would show commitment and enhance the practices.

On the statement that top management honors the best employee with an employee of the year award, 11% strongly agreed, 14% agreed, 22% were neutral, 25 disagreed and 28% strongly disagreed. The mean for this item was 3.46 and the standard deviation was 1.32. Many respondents (75%) disagreed or were neutral in regard to the statement. Rewards enhance talent retention and knowledge retention by extension hence there is need for top management to explore the possibility of rewarding

outstanding employees to make them remain. The 25% of the respondents who agreed with the statement implied that such an award existed hence the need to improve on it and sensitize all employees about it to enhance talent retention and knowledge retention by extension.

The study established that 28% of the respondents strongly agreed, 40% agreed, 22% were neutral 6 % disagreed, while 4% strongly disagreed in regard to the statement that top management delegates authority to heads of department in the ministry. The mean for this item was 2.18 and the standard deviation was 1.03. The 68% of the respondents who strongly agreed or agreed was an indication of satisfaction with the status of this practice by majority. The 32% who were either neutral or disagreed could be an indication that those respondents were not aware of delegation or may not have been delegated to.

Regarding the statement that top management facilitates job rotation to various departments, 12% of the respondents strongly agreed, 23% agreed, 32% were neutral, 19% disagreed while 14% strongly disagreed. The mean for this item was 2.98 and the standard deviation was 1.22. The majority (65%) representing those who were either undecided or disagreed implied that majority of employees may not have personally experienced job rotation or even seen it happen to their colleagues. There is need to practice job rotation in order to expose employees to various sections or departments and equip them with capacity, knowledge and skills, to avoid a vacuum in the event that some employees exit without prior notice.

From the results of the study, 21% of the respondents strongly agreed, 30% agreed, 29% were neutral, 12% disagreed while 8% strongly disagreed with the statement that top management organizes seminars and workshops for employees. The mean for this item was 2.56 and the standard deviation was 1.18. Though most of the employees agreed with the statement, there is need to establish the underlying causes to the disagreement by a significant number of respondents (49%) in order to understand and possibly change their perception.

On the statement that top management consults with senior and middle level managers on important issues, 17% of the respondents strongly agreed, 28% agreed, 33% were

neutral, 12% disagreed while 10% strongly disagreed. The mean for this item was 2.72 and the standard deviation was 1.20. Disagreement with the statement by a significant number of respondents (55%) implied dissatisfaction with the state of affairs in this regard. Therefore, there is need for top management to improve on this practice by involving employees in decision making in a bid to enhance talent management and knowledge retention. Table 4.8 presents responses to all the items in this section.

The findings of this study were consistent with those of Tymon et al (2010) who found out that offering management support creates long-term motivation leading to the willingness of employees to contribute and stay in the organization thus knowledge is retained within the organization. They also concurred with the findings of Dewah and Mutula (2014) who established that challenges for managing knowledge assets in public sector organizations include limited commitment from senior management among other factors. The findings also concurred with those of Yousaf (2013) that senior management commitment is paramount for any initiative to be successful. Zakuan et al (2012) established that the result of any critical decision made in an organization is highly dependent on top management support and commitment which was confirmed by the findings of this study.

Table 4.8: Descriptive Statistics on Top Management Commitment

STATEMENT	SA	A	N	D	SD	M	S.D
Top management has come up with talent management and knowledge retention policies in this ministry	11%	15%	34%	24%	16%	3.21	1.19
Top management facilitates implementation of talent management and knowledge retention policies in this	9%	22%	28%	25%	16%	3.16	1.20
This ministry has a budget for talent management and knowledge retention activities	7%	19%	31%	23%	20%	3.30	1.19
Top management honors the best employee with an employee of the year award in this ministry the year	11%	14%	22%	25%	28%	3.46	1.32
Top management delegates authority to heads of department in this ministry	28%	40%	22%	6%	4%	2.18	1.03
Top management facilitates rotation of employees in various departments in this ministry	12%	23%	32%	19%	14%	2.98	1.22
Top management organizes seminars and workshops for employees in this ministry	21%	30%	29%	12%	8%	2.56	1.18
Top management consults with senior and middle level managers on important issues in this ministry	17%	28%	33%	12%	10%	2.72	1.20

4.6 Diagnostic Tests

Various tests were conducted to ensure the study model would be applicable to the required analysis for regression and moderating effect. Validity and reliability of the scales were tested. The unit of analysis were 65,152 employees in government ministries in Kenya while unit of observation were 385 respondents selected from 7 government ministries. Normality of the data, factor analysis, correlation, homoscesdacity and multicollinearity tests were among the tests conducted to ensure the data fulfilled key assumptions for linear relationships (Sanders et al, 2015).

4.6.1 Reliability and Validity Analysis

Cronbach Alpha was used to test the reliability of items in the questionnaire used for data collection. Cronbach's Alpha measures internal reliability for tests with multiple possible answers. Reliability is expressed as a coefficient between 0 and 1.00 and the higher the coefficient, the more reliable the test is. According to Cronbach (1951) quoted by Kiriinya (2015), a threshold of a Cronbach Alpha of 0.7 and above is acceptable. The findings of this study indicated that talent attraction had a coefficient of 0.840 talent development had a coefficient of 0.821, talent mobilization had a coefficient of 0.877, talent retention had a coefficient of 0.895, top management commitment had a coefficient of 0.843 and knowledge retention had a coefficient of 0.871. All constructs had Cronbach's Alpha greater than 0.700 hence the study they were considered reliable.

4.6.2 Results of Normality Tests

This study conducted the Shapiro Wilk Test is a statistical test of the hypothesis that sample data is drawn from a normally distributed population. In the Shapiro-Wilk Test, the null hypothesis (H_0) is that the study sample population is normally distributed (Shapiro & Wilk, 1965) while the alternate hypothesis (H_1) is that the tested data is not from a normally distributed population hence it is not normal. The rule is to reject H_0 if the P- value is less than 0.05 if the p-value is less than 0.05 and accept the alternate hypothesis that data is not normally distributed if p-value is greater than 0.05 (Ghasemi & Zahediasl, 2012). The test was used as the numerical means of assessing normality of data for each of the variable investigated in this study.

Test of Normality for Talent Attraction

A test on normality using Shapiro-Wilk test on talent attraction is illustrated in table 4.9. The results show that the standardized residuals are significantly normally distributed as significance is 0.463 which is greater than 0.05(0.463>0.05). Therefore, the hypothesis that the sample data was normally distributed was accepted. Based on these results the study concluded there was enough evidence that this variable met the requirement of normality and could be subjected to further analysis.

Table 4.9: Test of Normality Results for Talent Attraction

	Shapiro-Wilk Test		
	Statistic	Df	Sig.
Talent Attraction	.966	276	.463

Test of Normality for Talent Development

A test on normality using Shapiro-Wilk test on talent development is illustrated in table 4.10. The results show that the standardized residuals are normally distributed as significance was 0.387 which is greater than the set significance value of 0.05 (0.387>0.05). Therefore, the null hypothesis that there was normal distribution of data was accepted and not rejected. This implied that the data could be subjected to further statistical analysis.

Table 4.10: Test of Normality Results for Talent Development

	Shapiro-Wilk Test		
	Statistic	Df	Sig.
Talent development	.974	274	.387

Test of Normality for Talent Mobilization

A test on normality using Shapiro-Wilk test on talent mobilization is illustrated in table 4.11. The results show that the standardized residuals were normally distributed as significance was 0.384 which is greater than the set significance value of 0.05 (0.384>0.05). This indicated that the data did not deviate from a normal distribution hence the null hypothesis that the sample data had normal distribution was accepted and not rejected but the alternate hypothesis that data distribution was not normal was rejected. This implied that the data could be subjected to further statistical analysis.

Table 4.11: Test of Normality Results for Talent Mobilization

	Shapiro-Wilk Test		
	Statistic	Df	Sig.
Talent Mobilization	.982	276	.384

Test of Normality for Talent Retention

A test on normality results using Shapiro-Wilk test on talent retention is illustrated in table 4.12. The results show that the standardized residuals were normally distributed as significance was 0.608 which is greater than the set significance value of 0.05 (0.608>0.05). This indicated that the data did not deviate from a normal distribution hence the researcher could state with 95% confidence that the data had come from a normally distributed population hence the null hypothesis was not rejected. Therefore, the data could be subjected to further statistical analysis.

Table 4.12: Test of Normality Results for Talent Retention

	Shapiro-Wilk Test		
	Statistic	Df	Sig.
Talent Retention	.987	276	.608

Test of Normality for Top Management Commitment

A test on normality using Shapiro-Wilk test on top management commitment is illustrated in table 4.13. The results show that the standardized residuals were normally distributed as significance was 0.615 which is greater than the set significance value of 0.05 (0.615>0.05). This implied that the data had a normal distribution and therefore the null hypothesis that data on top management commitment did not have normal distribution was rejected but the alternate hypothesis was rejected. This implied that the data could be subjected to further statistical analysis.

Table 4.13: Test of Normality Results for Top Management Commitment

	Shapiro-Wilk		
	Statistic	Df	Sig.
Top Management Commitment	.988.	276	.615

4.6.3 Test of Sample Data Adequacy

To examine the adequacy and appropriateness of the data collected for inferential statistical tests, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy Test and Bartlett's Test of Sphericity were conducted on all the study variables. Kaiser-Meyer-Olkin (KMO) Test is a measure of how suited data is for Factor Analysis. It is a statistic that indicates the proportion of variance in variables that might be caused by underlying factors. The test measures sampling adequacy for each variable in the model and for the complete model (Field, 2009).

 KMO returns values between 0 and 1 where high values close to 1.0 generally indicate that a factor analysis may be useful. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5. If the value is less than 0.5 factor analysis for the data may not be useful.

KMO values between 0.8 and 1 indicate that the sampling is adequate while values less than 0.6 indicate that the sampling is not adequate. KMO Values close to zero mean that there are large partial correlations compared to the sum of correlations or there are widespread correlations which are a problem in factor analysis.

The Bartlett's Test of Sphericity is the test for the null hypothesis that the correlation matrix has an identity matrix. Taking this into consideration, these tests provide the minimum standard to proceed with Factor Analysis for the sample data. The closer the significance values are to 1 the better for factor analysis and the value of 0.6 is the suggested minimum. Smaller values (less than 0.05) of the significance level indicate that a factor analysis may be useful with the data.

KMO and Bartlett's Test for Talent Attraction

The KMO statistic for talent attraction was 0.523 which was higher than the critical level of significance of KMO test which is set at 0.5 (0.523>0.5). This implied that the factor analysis results would be useful. The Bartlett's Test of Sphericity was also highly significant with Chi-square of 51.842 at 28 degrees of freedom at p value of $0.000 < 0.05(0.000{<}0.05)$. The results of the KMO and Bartlett's Test for TA are summarized in Table 4.14. These results justified factor analysis on the data.

Table 4.14: Results of KMO and Bartlett's Test for Talent Attraction

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.523
Bartlett's Chi- Square	51.842
Bartlett's df	28
Bartlett's Sig.	0.000

KMO and Bartlett's Tests for Talent Development

Test results showed that the KMO statistic for talent development was 0.554 which was significantly higher or greater than the critical level of significance of the test which was set at 0.05 (0.554>0.5). This implied that the sample data on talent development was adequate and could be subjected to factor analysis.

The Bartlett's Test of Sphericity was highly significant with Chi-square of 61.804 at 28 degrees of freedom, at p value 0.000 which was less than the set value of 0.05 (0.000<0.05). These results justified factor analysis on the data. The results of the KMO and Bartlett's Test are summarized in Table 4.15.

Table 4.15: Results of KMO and Bartlett's Tests for Talent Development

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.554
Bartlett's Chi- Square	61.804
Bartlett's df	28
Bartlett's Sig.	0.000

KMO and Bartlett's Tests for Talent Mobilization

Test results showed that the KMO statistic for talent mobilization was 0.524 as shown in table 4.16 The significance was higher or greater than the critical level of significance for the test which is set at 0.5 (p=0.524>0.5). This showed that the data on talent mobilization was adequate and could be subjected to factor analysis.

Bartlett's Test of Sphericity was also highly significant with Chi-square = 20.685 at 21 degrees of freedom, at p value 0.001 which was less than the set level of significance at 0.05(p=0.000<0.05). These results justified factor analysis on the data.

Table 4.16: Results of KMO and Bartlett's Tests for Talent Mobilization

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.524
Bartlett's Chi- Square	20.685
Bartlett's df	21
Bartlett's Sig.	0.001

KMO and Bartlett's Test for Talent Retention

Test results presented in Table 4.17 showed that the KMO statistic for talent retention was 0.522 which was higher than the critical level of significance of the test which was set at 0.5 (0.522>0.5). This implied that factor analysis on talent retention statements was going to be very useful. Bartlett's Test of Sphericity was highly significant with Chi-square of 54.162 at 28 degrees of freedom and p value of 0.002 which was less than the set value of the test at 0.05 (p=0.002<0.05). These results justified factor analysis on the data.

Table 4.17: Results of KMO and Bartlett's Test for Talent Retention

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.522
Bartlett's Chi- Square	54.162
Bartlett's df	28
Bartlett's Sig.	0.002

KMO and Bartlett's Tests for Top Management Commitment

KMO test results statistic for top management commitment was 0.570 which was significantly higher or greater than the critical level of significance of the test which is set at 0.5 (0.570>0.5). This implied that the sample data on top management commitment was adequate and could be subjected to factor analysis.

Bartlett's Test of Sphericity was also highly significant with Chi-square of 55.542 with 28 degrees of freedom at 0.001 level of significance which was lower than the set p value of 0.05 (p=0.001<0.005). These results justified further factor analysis on the data. The results of the KMO and Bartlett's Test are summarized in Table 4.18.

Table 4.18: Results of KMO and Bartlett's Tests for Top Management Commitment

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.570
Bartlett's Chi- Square	55.542
Bartlett's df	21
Bartlett's Sig.	0.001

KMO and Bartlett's Tests for Knowledge Retention

The results of the test showed that the KMO statistic for knowledge retention was 0.527 which was higher than the critical level of significance of the test which is set at 0.5, 0.527>0.5. This implied that factor analysis on data on knowledge retention would yield useful results. Bartlett's Test of Sphericity was highly significant with Chi-square of 63.308 with 21 degrees of freedom at 0.003 level significance which is less than the set value of 0.05 (p=0.003<0.05). This justified factor analysis on statements related to knowledge retention. The results of the test are summarized in table 4.19.

Table 4.19: KMO and Bartlett's Test for Knowledge Retention

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.527
Bartlett's Chi- Square	63.308
Bartlett's df	36
Bartlett's Sig.	0.003

Table 4.20: Summary of KMO and Bartlett's Tests for Sampling Adequacy

Variable	KMO	Bartlett Chi-Square	Chi-square df	Significance Level
Talent Attraction	0.523	21.842	15	0.000
Talent Development	0.554	61.801	21	0.000
Talent Mobilization	0.524	20.682	21	0.001
Talent Retention	0.522	54.162	28	0.002
Knowledge Retention	0.527	63.308	36	0.003
Top Management Commitment	0.570	55.542	28	0.001

4.6.4 Factor Analysis for Statements on Study Variables

Sekaran and Bougie (2013) opine that factor analysis is executed to find out the factors that have high explanatory power on the problem under investigation and establish the degree of interconnectedness amongst study variables. Factor analysis in this study was conducted using Principal Components Method (PCM) approach. The extraction of the factors followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. The analysis was conducted on all the statements on each of the variables of the current study and this section presents these results.

Principal Component Factor Analysis for Talent Attraction

Table 4.21 depicts factor analysis results for six statements on talent attraction. All the 6 items had coefficients of more than 0.4 hence all were retained for analysis. The loadings ranged between 0.592 and 0.911 as presented in the table. According to Rahn (2010) factor loadings equal to or greater than 0.4 are considered adequate and have good factor stability leading to desirable and acceptable results hence all the items on the first independent variable, talent attraction, were retained for analysis.

Table 4.21: Factor Analysis Results for Talent Attraction

Statement	Component Matrix[a]
There is a policy on attracting knowledgeable employees of all generations in this ministry	.813
Employees are sponsored for training and career development in this ministry	.894
This ministry is an equal opportunity employer	.867
This ministry has an elaborate employee welfare scheme	.887
Employees are involved in making important decisions in this ministry	.911
This ministry offers internship opportunities to college and university students	.592

Extraction Method: Principal Component Analysis.

Principal Component Factor Analysis for Talent Development

As depicted in Table 4.22 factor analysis results indicated that all the seven statements on talent development attracted coefficients of more than 0.4. According to Rahn (2010) factor loadings equal to or greater than 0.4 are considered to be adequate and to have good factor stability leading to desirable and acceptable results. Kiriinya (2015) also asserts that a factor loading of 0.4 has good factor stability and is deemed to lead to desirable and acceptable solutions. The loadings for this variable ranged between 0.733 and 0.893. Therefore, the researcher retained all the six items on talent development for analysis.

Table 4.22: Factor Analysis Results for Talent Development

Statement	Component Matrix[a]
Progress and career development policy is clearly outlined and known to all employees	.810
Employees are encouraged to improve their knowledge and skills	.768
Employees are mentored to develop their skills	.841
Heads of department are sensitized on the need to nurture talent in this ministry	.733
Employees in this ministry are rewarded on completion of training	.893
This ministry partners with academic institutions in training employees on specific skills	.807

Extraction Method: Principal Component Analysis

Principal Component Factor Analysis for Talent Mobilization

Table 4.23 depicts factor analysis results for talent mobilization which indicated that all the seven statements on talent mobilization could be factored into 1 as evident in the factor loadings for each of the statements on this variable. All the 7 items had coefficients of more than 0.4 hence all were retained for analysis. According to Rahn (2010) factor loadings equal to or greater than 0.4 are considered adequate and have good factor stability leading to desirable and acceptable results. The loadings for this variable ranged between 0.616 and 0.919. Therefore, all the 7 items on talent mobilization were retained for analysis.

Table 4.23: Factor Analysis Results for Talent Mobilization

Statement	Component atrix[a]
There is a policy on talent mobilization in this ministry	.874
Field visits by employees are common in this ministry	.798
Employees are sent on overseas assignments or deployed to other branches in this ministry	.919
Heads of departments are aware of the need to appoint employees to act in various positions	.726
Employees are appointed to act in senior positions in this ministry	.697
Employees are aware of possible mobility paths in this ministry	.616
Employees are given opportunity to work on tasks and responsibilities that are outside their domain in this ministry	.620

Extraction Method: Principal Component Analysis

Principal Component Factor Analysis for Talent Retention

Table 4.24 shows the factor loadings for statements on talent retention. All the eight statements attracted coefficients of more than 0.4 hence all were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is also supported by Black (2002) as quoted by Kiriinya (2015) who asserts that a factor loading of 0.4 and above has good factor stability and is deemed to lead to desirable and acceptable solutions. The loadings for this variable ranged between 0.821 and 0.984.

Table 4.24: Factor Analysis Results for Talent Retention

Statement	Component Matrix[a]
There are good working relations among employees in this ministry	.933
Heads of department are sensitized on the need for talent retention in this ministry	.943
Employee views and initiative are respected in this ministry	.923
There are long service employee awards in this ministry	.898
After sponsorship employees are bonded to continue working in this ministry	.926
There is an attractive employee welfare program in this ministry	.821
Employees are guaranteed of security of tenure in this ministry	.984
This ministry has an attractive pension scheme	.954

Extraction Method: Principal Component Analysis

Principal Component Factor Analysis for Top Management Commitment

Table 4.25 shows the factor loadings for statements on top management commitment. All the eight items attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is also supported by Black (2002 as quoted by Kirimi (2015) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirabe and acceptable solutions. The loadings for this variable ranged between 0.576 and 0.840. All the items were therefore retained for analysis.

Table 4.25: Factor Analysis Results for Top Management Commitment

Statement	Component Matrix[a]
Top management has come up with talent management and knowledge retention policies in this ministry	807
Top management facilitates implementation of talent management and knowledge retention policies in this ministry	.796
This ministry has a budget for talent management and knowledge retention activities	.605
Top management honor the best employee with an employee of the year award in this ministry	.840
Top management delegates authority to heads of department in this ministry	.731
Top management facilitates rotation of employees in various department in this ministry	.576
Top management organizes seminars and workshops for employees in this ministry	.747
Top management consults with senior and middle level managers on important issues in this ministry	.716

Extraction Method: Principal Component Analysis

4.6.5 Test of Multicollinearity

Multicollinearity is said to exist in a situation where there is a high degree of association between independent variables. According to Simon (2004), multicollinearity exists when the standard errors and thus the variances of the estimated coefficients are inflated. Variance Inflation Factor (VIF) was undertaken to test multicollinearity in this study. Existence of high degree of Multicollinearity makes it difficult to isolate the effect of a single independent variable on the dependent variable in a study. Presence of multicollinearity is a violation of assumption of Classical Linear Regression Model which assumes there should be no multicollinearity among exploratory variable.

According to Porter and Gujarat (2010) the rule of the thumb is that if the VIF of an independent variables exceeds 10, multicollinearity among the variables exists. The results of this test for this study indicated that the VIF values of all the independent variables were below the cut-off value of 10. VIF of X_1=2.475, X_2=3.311, X_3= 2.481 and X_4=2.767 as presented in the multicollinearity test results table 4.27. Since the obtained values were between 0 and 10 and based on the rule of thumb, it was concluded that there was no multicollinearity among the independent variables hence the study was reliable and valid.

Table 4.26: Results of Test of Multicollinearity

Model		**Collinearity**	**Statistics**
		Tolerance	**VIF**
1	Talent Attraction	.404	2.475
	Talent Development	.402	3.311
	Talent Mobilization	.403	2.481
	Talent Retention	361	2.767

Dependent Variable: Knowledge Retention

4.6.6 Test for Homoscedasticity

The test for homoscedasticity in this study was done through a residual scatter plot for predicted scores and standardized residual values also known as errors of prediction. Residual scatter plots provide a visual examination of the assumption homoscedasticity between the predicted dependent variable scores and the errors of prediction hence its use in this study. The homoscedasticity assumption is met if the scores are randomly scattered about a horizontal line. An examination of the residual scatter plot in figure 4.14 reveals that the scores are indiscriminately spread. The scores appeared to be randomly scattered along the horizontal line meaning that homoscedasticity assumption was not violated in this study. The researcher therefore concluded that the data was homoscedastic.

Scatterplot

Dependent Variable: y
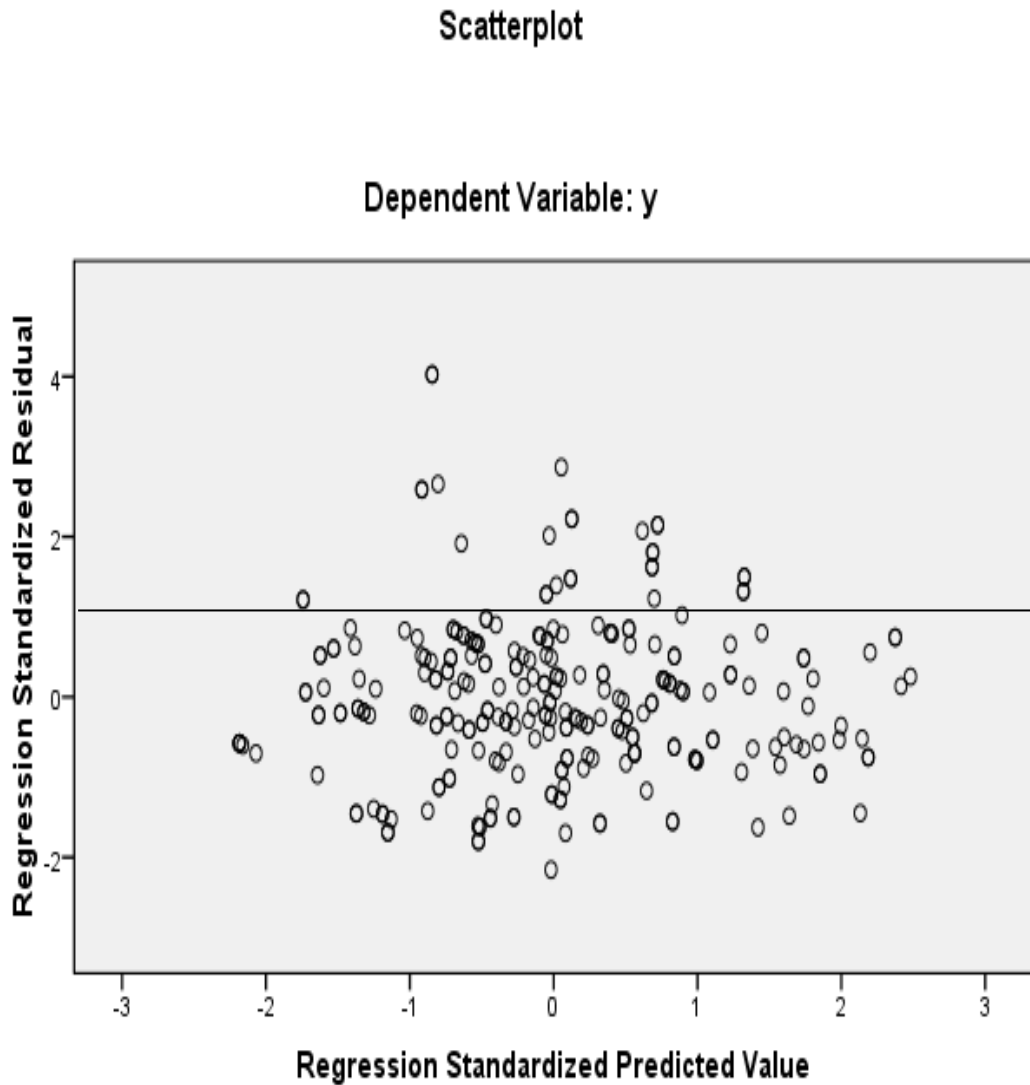
Figure 4.14: Scatter Plot Showing Homoscedasticity Test Results

4.6.7 Correlation Analysis

The study used correlation technique to analyze the degree of influence of Talent Management Practices (X_1, X_2, X_3, X_4) on Knowledge Retention (Y) with Pearson correlation coefficient (R), which yields a statistic that ranges from -1 to 1. The coefficient assumes that there is a linear relationship or correlation between the independent and the dependent variable hence each of the independent variables of this study was correlated with the dependent variable.

According to Mugenda and Mugenda (2012), the bigger the absolute value (R), the stronger the association between the two variables. If the correlation coefficient is positive, it means that there is a positive relationship between the two variables whereby if the independent variable increases the dependent variable increases proportionately. A negative relationship means that, as the independent variable decreases, the dependent variable increases or that there is an inverse relationship. A zero value of R indicates that there is no association between the two variables. The closer the correlation tends to zero the weaker it becomes and the closer to 1 the stronger it becomes. The results of correlation analysis between each of the independent variables and the dependent variable are presented in table 4.27. As depicted by the results, the correlation was for all the variables was strong, positive and significant.

Correlation between talent attraction and knowledge retention was strong and positive with a value of R=0.551 at a p value of 0.000 hence it was statistically significant. This implied that talent attraction and knowledge retention changed in the same direction and the relationship was strong and statistically significant at a p value of 0.000. Correlation results indicated that an increase of 0.551 in talent attraction led to a proportional increase in knowledge retention.

Correlation between talent development and knowledge retention was also strong with a value of R=0.619 which implied a positive correlation with the two variables changing positively by increasing in the same direction. Results indicated that an increase of 0.619 units in talent development led to a proportional increase in knowledge retention.

Correlation results for talent mobilization and knowledge retention indicated a strong relationship between the two variables with a value of R=0.603 at a p value of 0.000. This implied that an increase of 0.603 units in talent mobilization led to a proportional increase in knowledge retention.

Results of correlation between talent retention and knowledge retention also indicated a strong, positive and statistically significant relationship with a value of R=0.717 at a p value of 0.000. Results indicated that an increase of 0.717 units in talent retention

led to a proportional increase in knowledge retention.

Talent retention had the strongest correlation with knowledge retention (0.717) at a p value of 0.000 implying the relationship was positive, strong and statistically significant. The second was talent development with R=0.619, third was talent mobilization with R=0.603 and the least significant was talent attraction with R=0.551. However, from the findings of the study, all the independent variables of the study had statistically significant positive relationship with the dependent variable.

Table 4.27: Correlation Analysis Results among Talent Management Practices (X_1, X_2, X_3, X_4) and Knowledge Retention (Y)

	Y	**X_1**	**X_2**	**X_3**	**X_4**
Pearson Correlation Sig.(2-tailed) For:	1				
TA (X_1)	.551(**)	1			
	.000				
TD (X_2)	.619(**)	.752(**)	1		
	.000	.000			
TM (X_3)	.603(**)	.565(**)	.706(**)	1	
	.000	.000	.000		
TR (X_4)	.717(**)	.663(**)	.722(**)	1	
	.000	.000	.000	.000	
Knowledge Retention (Y)	1	.551(**)	.619(**)	.603(**)	.717(**) 1
	.000	.000	.000	.000	.000

KEY: TA=Talent Attraction, TD=Talent Development, TM=Talent Mobilization= and TR=Talent Retention

** Correlation is significant at the 0.01 level (2-tailed). Only statistically significant correlation coefficients were highlighted.

4.7 Hypotheses Tests Results

According to Guetterman (2019) inferential statistics tend to explain why and how certain variables relate giving the researcher concrete ground to make conclusions and recommendations. This study used the regression model where the model summary, variance (ANOVA) and standardized coefficients were applied to depict the relationship between the variables. This was done systematically based on each of the study variables. All the five null hypotheses for the study were tested using regression models to determine the relationship between knowledge retention and each of the independent variables. The R^2 also known as Coefficient of determination, was the statistic used to evaluate model fit. R^2 is 1 minus the ratio of residual variability. The coefficient of determination (R^2) and correlation coefficient (R) show the degree of association or the nature of the relationship between dependent and independent variables. The R^2 value is an indicator of how well the model fits the data. R^2 close to 1.0 indicates that almost all of the variability with variables specified in the model is accounted for while one far from 1.0 indicates otherwise. The level of significance 0.05 was taken as the level of decision criteria where the null hypothesis was rejected if the value was lower than 0.05 and accepted if the value was greater than 0.05.

4.7.1 Regression Analysis on Influence of Talent Attraction on Knowledge Retention

The first hypothesis of this study was H_{01}: Talent attraction has no significant influence on knowledge retention in government ministries in Kenya.

The study adopted a regression model to help in establishing the statistical effect of talent development on knowledge retention in government ministries in Kenya. The model was of the form: $Y = \alpha + \beta_1 X_1 + e$.

The linear regression model with talent attraction as the predictor was found to be significant. The coefficient of determination R square and correlation coefficient R show the degree of association between talent attraction and knowledge retention. Results of regression indicated that $R^2=0.304$ and $R=0.551$ as shown in table 4.28. This indicated a positive relationship between talent attraction and knowledge retention in

government ministries in Kenya. Based on the regression results, the coefficient of determination (R^2) showed that 30.4% of the variations in knowledge retention could be explained by talent attraction in exclusion of the other independent variables.

Table 4.28: Model of Talent Attraction/Knowledge Retention

Model	
R	R^2
0.551	0.304

The independent variable is talent attraction, X_1

Table 4.29 presents ANOVA results for talent attraction which reveal that talent attraction has significant effect on knowledge retention since P-value is .000 which is less than 0.05 level of significance. The F-test statistics of 119.515 at 0.000 (p=0.000<0.05). These findings implied that talent attraction was statistically significant in explaining knowledge retention in government ministries in Kenya. Regression results also revealed that talent attraction has a significant positive effect on knowledge retention. Therefore, the null hypothesis was rejected and the alternate hypothesis accepted. It was concluded that there is a linear relationship between talent attraction and knowledge retention.

Table 4.29: ANOVA Results for Talent Attraction

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	61.646	1	61.646	119.515	0.000(a)
Residual	141.329	274	.516		
Total	202.975	275			

a. Predictors: (Constant), X_1-Talent Attraction

b. Dependent Variable: Y- Knowledge Retention

To test this hypothesis, the beta coefficient was computed and t-test used to assess the influence of talent attraction on knowledge retention at 0.05 significant level. The results indicated that β coefficient was statistically significant since t-value at 0.05 is β =0.559 at p value 0.000<0.05. Table 4.30 shows a positive gradient which reveals

that an increase in talent attraction led to increase in knowledge retention.

The model is : y = 1.330+0.559X_1+e implying that at a significance level of 0.000, talent attraction will impact knowledge retention by up to 55.9%.

Table 4.30: Coefficients for Talent Attraction

Model		Coefficients		T	Sig
		B	Std Error		
1	(Constant)	1.330	.134	9.897	.000
	Talent Attraction (X_1)	.559	.051	10.932	.000

a Constant: Dependent Variable Y. Equation: y = 1.330+0.559X_1+e

Based on the above findings, the null hypothesis was rejected and the alternate hypothesis that talent attraction influences knowledge retention was accepted.

4.7.2 Regression Analysis on Influence of Talent Development on Knowledge Retention

The second hypothesis of the study was: H_{02}: Talent development has no significant influence on knowledge retention in government ministries in Kenya.

The study adopted a regression model to help in establishing the statistical effect of talent development on knowledge retention in government ministries in Kenya. The model was of the form: Y = α + $β_2X_2$ + ε.

The linear regression model with talent development as the predictor was significant. The coefficient of determination R square and correlation coefficient R shows the degree of association between talent development and knowledge retention. The results of the linear regression indicated that R^2= 0.383 and R= 0.619 as shown in table 4.31. As the model depicts, the R^2 is 0.383, an indication that there is a strong relationship between talent development and knowledge retention where a proportion of 38.3% of knowledge retention can be explained by the singular effect of talent development in exclusion of the other independent variables of the current study. This indicates a positive relationship between talent development and knowledge retention.

Table 4.31: Model Summary of Talent Development and Knowledge Retention

Talent development	
R	R Square^2
0.619	0.383

The independent variable is talent development

Table 4.32 shows ANOVA results for talent development which reveal that talent development has a significant effect on knowledge retention since P-value is .000 which is less than 5% level of significance. The F-test results are 68.720 and the critical values are F-test (1,272 degrees of freedom at the P=0.05 level of significance. The results also revealed that talent development has a significant positive effect on knowledge retention since p-value was 0.000 which is less than 0.05 level of significance (p=0.000<0.05). Based on these results, the null hypothesis was rejected and the alternate hypothesis accepted.

Table 4.32: ANOVA Results for Talent Development and Knowledge Retention

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	77.589	1	77.859	168.720	0.000
Residual	125.084	272	.460		
Total	202.672	273			

a. Predictors: (Constant), X_2-Talent Development

b. Dependent Variable: Y- Knowledge Retention

The beta (β) coefficient was computed and t-test used to test the influence of talent development on knowledge retention. This was tested at 0.5 level of significance. The results indicate that t-test found that β coefficient was statistically significant since t-value at 0.5 was 0.565 at p-value was 0.000 which is less than 0.05 (p=0.000<0.05). The null hypothesis (β=0) was rejected and the alternate hypothesis that talent development influences knowledge retention accepted. The model changed to : y =

1.174+0.565X_2+e implying that at a significance level of 0.000, talent development will impact knowledge retention by up to 56.9%.

Table 4.33 shows a positive gradient which reveals that an increase in talent development led to an increase in knowledge retention.

Table 4.33: Coefficients for Talent Development and Knowledge Retention

Model		Coefficients		T	Sig
		B	Std Error		
1	(Constant)	1.174	.126	9.300	.000
	Talent Development, X_2	.565	.044	12.989	.000

a Dependent Variable: Y

Equation: y = 1.174+0.565X_2+e

4.7.3 Regression Analysis on Influence of Talent Mobilization on Knowledge Retention

The third hypothesis of the study was: H_{03}: Talent mobilization has no significant influence on knowledge retention in government ministries in Kenya.

The study adopted a regression model to help in establishing the statistical effect of talent mobilization on knowledge retention in government ministries in Kenya. The model was of the form: Y = α + $β_3X_3$ +e**.**

The linear regression model with talent mobilization as the predictor was significant. The results of the linear regression indicated that R^2= 0.603 and R= 0.619 as shown in table 4.34. As the model depicts, there is a strong relationship between talent mobilization and knowledge retention where a proportion of 36.4% of knowledge retention can be explained by the singular effect of talent mobilization in exclusion of the other independent variables of the study. This is an indication that there is a positive significant relationship between talent mobilization and knowledge retention.

Table 4.34: Model Summary of Talent Mobilization and Knowledge Retention

Model	
R	R Square^2
0.603	0.364

The independent variable is talent mobilization

Table 4.35 shows ANOVA results for talent mobilization which reveal that it has a significant effect on knowledge retention since P-value is .000 which is less than 5% level of significance. The F-test results are 156.741 P-value 0.000 (p=0.000<0.05). Based on these results, the null hypothesis was rejected and the alternate hypothesis that talent mobilization influences knowledge management in government ministries was accepted.

Table 4.35: ANOVA Results for Talent Mobilization and Knowledge Retention

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	73.860	1	73.860	156.741	0.000
Residual	129.115	274	.471		
Total	202.975	275			

a. Predictors: (Constant), X_3-Talent Mobilization

b. Dependent Variable: Y- Knowledge Retention

The beta (β) coefficient was computed and t-test used to test the influence of talent mobilization on knowledge retention. This was tested at 0.05 level of significance. The results indicate test was statistically significant since t-value at 0.5 was 0.045 at p-value was 0.000 level of significance (p=0.000<0.05). The null hypothesis was rejected and the alternate hypothesis that talent mobilization influences knowledge retention accepted. The model changed to:

$y = 1.200 + 0.045X_3 + e$ implying that at a significance level of 0.000, talent mobilization will impact knowledge retention by up to 0.05% in government ministries in Kenya.

Table 4.33 shows a positive gradient which reveals that an increase in talent mobilization led to an increase in knowledge retention. This effect was found to be positive but of low significance. Table 4.36 shows a positive gradient which reveals that an increase in talent mobilization led to increase in knowledge retention.

Table 4.36: Coefficients for Talent Mobilization and Knowledge Retention

Model		Coefficients		T	Sig
		B	Std Error		
1	(Constant)	1.200	.128	9.353	.000
	Talent Mobilization, X_3	.045	.603	12.520	.000

a Dependent Variable: Y

Equation: $y = 1.2 + 0.045X_3 + e$

4.7.4 Regression Analysis on Influence of Talent Retention on Knowledge Retention

The fourth study hypothesis tested was: H_{04}: Talent retention has no significant influence on knowledge retention in government ministries in Kenya.

The study adopted a regression model to help in establishing the statistical effect of talent retention on knowledge retention in government ministries in Kenya. The model was of the form: $Y = \alpha + \beta_4 X_4 + e$**.**

The linear regression model with talent retention as the predictor was significant. The coefficient of determination R square and correlation coefficient R depicted the degree of association between talent retention and knowledge retention. The results of the linear regression indicated that $R^2 = 0.514$ and $R = 0.717$ as shown in table 4.37. This indicated that that there is a positive relationship between talent retention and knowledge retention. Based on the regression results, the coefficient of determination (R^2) shows that 51.4% of the variations in knowledge retention in government

ministries in Kenya could be explained by talent retention in exclusion of the other independent variables of the study indicating that talent retention has significant influence on knowledge retention.

Table 4.37: Model for Talent Retention and Knowledge Retention

Model	
R	R Square
0.717	0.514

The independent variable is talent retention

Table 4.38 shows ANOVA results for talent retention which reveal that it has a significant effect on knowledge retention since P-value is .000 which is less than 5% level of significance. The F-test results are 289.892 at P-value 0.000 (p=0.000<0.05). Based on these results, the null hypothesis was rejected and the alternate hypothesis that talent retention influences knowledge retention in government ministries was accepted.

Table 4.38: ANOVA Results for Talent Retention and Knowledge Retention

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	104.348	1	104.348	289.892	0.000
Residual	98.627	274	.360		
Total	202.975	275			

a. Predictors: (Constant), X_4-Talent Retention

b. Dependent variable Y-Knowledge Retention

The beta (β) coefficient was computed and t-test used to test the influence of talent retention on knowledge retention. This was tested at 0.05 level of significance. The

results indicated the test was statistically significant since t-value at 0.5 was 0.737 at p-value of 0.000 level of significance (p=0.000<0.05). The null hypothesis was rejected and the alternate hypothesis that talent mobilization influences knowledge retention accepted. The model changed to:

$y = 0.691 + 0.737X_4 + e$ implying that at a significance level of 0.000, talent retention will impact knowledge retention by up to 73.7% in government ministries in Kenya.

Table 4.39 shows positive gradient where increase in talent retention led to statistically significant increase in knowledge retention.

Table 4.39: Coefficients for Talent Retention and Knowledge Retention

Model		Coefficients		T	Sig
		B	Std Error		
1	(Constant)	.691	.125	5.547	.000
	Talent Retention, X_4	.737	.043	17.026	.000

a Dependent Variable: Y

Equation: $y=0.691+0.737X_4+e$

4.7.5 Multiple Linear Regression Analysis for Independent Variables Pooled Together against the Dependent Variable

Multiple linear regression analysis for all the independent variables (TA, TD, TMo, TR) pooled together against the dependent variable was done as shown in table 4.40. The results of the linear regression indicated the collective value of correlation coefficient as R= 0.735 and R^2 = of 0.541. This implied a positive relationship between all the independent variables pooled together against the dependent variable. Based on the regression model, the coefficient of determination (R^2) of 0.541 shows that 54.1% of the variations in knowledge retention can be explained by all the independent variables combined. The remaining percentage can be explained by other factors thus there is need for further research to establish other factors besides the variables of this study that affect knowledge retention in government ministries in Kenya.

Table 4.40: Overall Model Summary for Pooled Independent Variables and Knowledge Retention

Model	
R	R Square
0.735	0.541

a. Dependent variable: Y-Knowledge Retention

b. Predictors: (Constants) TA (X_1), TD (X_2), TMo (X_3), TR (X_4)

Table 4.41 shows ANOVA results for the pooled independent variables (TA, TD, TM TR) against knowledge retention at a P value 0.000 (0.000<0.05). The results imply that the four variables combined play a significant collective role in knowledge retention in government ministries in Kenya. The F-test statistics were 119.515 at 0.000<0.05 level of significance hence the relationship between talent management practices pooled together and knowledge retention was found to be statistically significant.

Table 4.41: ANOVA for Pooled Independent Variables and the Dependent Variable

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	109.616	4	61.646	119.515	0.000
Residual	9.056	269	.515		
Total	202.672	273			

a. Predictors: (Constant), X_1, X_2, X_3, X_4

b. Dependent Variable: Y-Knowledge Retention

The significance of each of the variables in the model was analyzed through coefficient analysis where the beta values indicated the strength the relationship between each the independent variable and the dependent variable. Table 4.42 presents the results of this regression which indicate that the most significant variable in knowledge retention is talent retention (β=0.515 at p=0.000). This result was significant as the p value was 0.000 which was less than the set level of significance of 0.05(0.000<0.05). This was followed by talent development (β= 0.129 at p=0.062). This result was only significant at higher than the set level of 0.05 (0.062>0.05). Results for talent mobilization β=0.104 at p=0.087 were also significant at a higher than the set level as its p value exceeded the set level of significance (0.087>0.05). Talent attraction followed but also yielded results that were only significant at 0.05 (β=0.051 at p=0.440) as the level of significance was greater than the set level of 0.05 (0.440>0.05).

Table 4.42: Coefficients for X_1, X_2, X_3, and X_4 against Y

Model		Coefficients		T	Sig
		B	**Standard Error**		
1	(Constant)	.540	.130	4.159	.000
	Talent Attraction	.051	.066	0.773	.440
	Talent Development	.129	.069	1.872	.062
	Talent Mobilization	.104	.061	1.718	.087
	Talent Retention	.515	.071	7.284	.000

a. Constants V X_1, X_2, X_3, X_4 b. Dependent Variable: Y.

The resulting multiple regression equation is:

$$Y = 0.540 + 0.051X_1 + 0.129X_2 + 0.104X_3 + 0.515X_4 + e$$

Where:

Y: Knowledge Retention= 0.540 + 0.051 Talent Attraction + 0.129 Talent Development + 0.104 Talent Mobilization + 0.515 Talent Retention + error. The Y intercept is 0.540 which is the predicted value of the effectiveness of knowledge

retention when all the independent variables are combined. This implies that without the input of the independent variables the effectiveness of knowledge retention would be lower than 54%.

4.8. Regression Analysis on Moderating Effect of Top Management Commitment on the Influence of Talent Management Practices on Knowledge Retention

The fifth hypothesis H_05: Top management commitment has no significant moderating effect on the influence of talent management practices on knowledge retention in government ministries in Kenya.

The talent management practices considered in this study were talent attraction, talent development, talent mobilization and talent retention while the independent variable was knowledge retention. Regression analysis was done for the moderating effect of TMC on the relationship of each of the independent variables on the dependent variable. Moderated Multiple Regression Model (MMR) was used to test the moderating effect of top management commitment on the relationship between talent management practices and knowledge retention. Using MMR to estimate the effect of a moderator variable z on the x,y relationship involves a regression equation that involves Y as the dependent variable and X and Z as independent variables. Variable Z is a moderator of the relationship between dependent variable (Y) and independent variables (X). The regression results for each of the variables are interpreted and presented in this section.

4.8.1 Regression Analysis Results for the Moderating Effect of TMC on Influence of Talent Attraction on Knowledge Retention

The linear regression model for the moderating effect of TMC on influence of talent attraction on knowledge retention was significant. The results of the regression after moderation indicated that $R^2=0.712$ which was higher than $R^2=0.304$ for influence of talent attraction on knowledge retention before moderation. The difference of 0.408 (40.8%) implied a significant positive moderating effect of TMC on the relationship between talent attraction and knowledge retention in government ministries in Kenya. These findings implied that top management commitment significantly moderates the

influence of talent attraction on knowledge retention in government ministries in Kenya. The results are presented in table 4.43.

Table 4.43: Moderating Effect of TMC on Talent Attraction and Knowledge Retention

Model	
R	R Square
0.712	0.507

The independent variable is Talent Attraction

Table 4.44 shows ANOVA results for moderating effect of TMC on influence of talent attraction on knowledge retention in government ministries in Kenya. The F-test statistics were 281.474 at 0.000 level of significance (p=0.000<0.05). It was therefore concluded that TMC has a significant moderating effect on influence of talent attraction on knowledge retention in government ministries in Kenya. The null hypothesis was rejected and the alternate on accepted.

Table 4.44: ANOVA Results for Moderating Effect of TMC on Influence of Talent Attraction

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	102.853	1	102.853	281.474	0.000
Residual	100.122	274	.365		
Total	202.975	275			

a. Predictors: (Constant), X_1Z Talent Attraction*TMC
b. Dependent variable Y-Knowledge Retention

Table 4.45 presents the coefficient results for moderating effect of TMC on influence of talent attraction on knowledge retention. The beta (β) coefficient was computed and t-test used to test the moderating effect of TMC on influence of talent attraction on

knowledge retention. This was tested at 0.05 level of significance. The results indicated the test was statistically significant since β -value at 0.000 was 1.617 level of significance (p=0.000<0.05), while X_1 was 0.142. The null hypothesis was rejected and the alternate hypothesis that talent management commitment moderates influence of talent attraction on knowledge retention accepted. The model changed to:

$y = 1.617 + 0.142X_1 + e$ implying that at a significance level of 0.000, moderated talent attraction will impact knowledge retention by 14.2 % in government ministries in Kenya.

Table 4.45: Coefficients for Moderating Effect of TMC on Talent Attraction

Model		Coefficients		T	Sig
		B	Std Error		
1	(Constant)	1.617	.075	21.502	.000
	Talent Attraction	.142	.008	16.777	.000

a Dependent Variable: Y (Knowledge Retention)

b Talent Attraction*TMC

Equation: $Y=1.617+0.142X_1Z+e$

4.8.2 Regression Analysis for the Moderating Effect of TMC on Influence of Talent Development on Knowledge Retention

The study established that the linear regression model for the moderating effect of TMC on talent development was significant. The results of the regression after moderation indicated that $R^2= 0.505$ which was higher than $R^2= 0.383$ for influence of talent development on knowledge retention before moderation. The difference of 0.122 (12.2%) implied a significant positive moderating effect of TMC on the relationship between talent development and knowledge retention in government ministries in Kenya. The results are presented in table 4.48. Although the results indicated that TMC had a moderating effect on the relationship between talent development and knowledge retention, various parameters that enhance effectiveness of top

management commitment should be looked into in order to increase the correlation coefficient.

Table 4.46: Model for Moderating Effect of TMC Influence on Talent Development

Model	
R	R Square
0.711	0.505

The independent variable is Talent Development*TMC (X_2Z)

Table 4.47 depicts ANOVA results for moderating effect of TMC on talent development and knowledge retention. The F-test statistics were 272.472 at 0.000 level of significance which was less than set level at 0.05. The test also revealed that moderated talent development had a significant positive effect on knowledge retention since P-value was less than the 0.05 set level of significance (p=0.000<0.05). It was concluded that TMC has a significant moderating effect on the influence of talent development on knowledge retention in government ministries in Kenya.

Table 4.47: ANOVA Results for Moderating Effect of TMC on Talent Development (X_2Z)

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	102.345	1	102.345	272.472	0.000
Residual	100.327	272	.369		
Total	202.672	273			

a. Predictors: (Constant), X_2Z Talent Development and TMC

b. Dependent variable Y (Knowledge Retention)

The beta (β) coefficient was computed and t-test used to test the moderating effect of TMC on influence of talent development on knowledge retention. This was tested at 0.05 level of significance. The results indicated the test was statistically significant since β -value at 0.000 was 1.669 at p-value of 0.000 level of significance (p=0.000<0.05) while X_2 was 0.121. The null hypothesis was therefore rejected and the alternate hypothesis that talent mobilization moderates influence of talent development on knowledge retention accepted.

The model changed to:

y = 0.669 + 0.121X_2 + e implying that at a significance level of 0.000, talent development will impact knowledge retention by up to 12.1 % in government ministries in Kenya.

Table 4.48 shows positive gradient where increase in moderated talent development led to statistically significant increase in knowledge retention.

Table 4.48: Coefficients for Moderating Effect of TMC on Influence of Talent Development on Knowledge Retention

Model		Coefficients		T	Sig
		B	Std Error		
1	(Constant)	1.669	.073	22.790	.000
	Talent Development	.121	.007	16.657	.000

a Independent Variable: talent development. b Dependent Variable: Y

Equation: Y=1.669+0.123X_2Z+e

4.8.3 Regression Analysis Results for the Moderating Effect of TMC on Influence of Talent Mobilization on Knowledge Retention

The results of the linear regression for the moderating effect of TMC on influence of talent mobilization on knowledge retention was significant. The results of the regression after moderation indicated that R^2= 0.505 which was higher than R^2= 0.364

for influence of talent mobilization on knowledge retention before moderation. The difference of 0.141 (14.1%) implied a significant positive moderating effect of TMC on the relationship between talent mobilization and knowledge retention in government ministries in Kenya. The results are presented in table 4.49. The results indicated there is need to improve TMC in order to enhance its moderating effect on the influence of talent mobilization on knowledge retention and increase the correlation coefficient.

Table 4.49: Model for Moderating Effect of TMC on Influence of Talent Mobilization and Knowledge Retention

Model	
R	R Square
0.711	0.505

Independent variable: talent mobilization*TMC (X$_3$Z)

Table 4.50 shows ANOVA results for the effect of TMC on the relationship between talent mobilization and knowledge retention which reveal that TMC had a significant effect on the relationship between the two variables. F-test statistics were 279.383 at p=0.000 which was less than 0.05(p=0.000<0.05) level of significance. It was therefore concluded that TMC moderates the relationship between talent mobilization and knowledge retention.

The results also revealed that TMC had a significant moderating effect on the influence of talent mobilization on knowledge retention.

Table 4.50: ANOVA Results for Moderating Effect of TMC on Talent Mobilization (X_3Z)

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	102.475	1	102.475	279.383	0.000
Residual	100.500	274	.367		
Total	202.975	275			

a. Predictors: (Constant), Talent Mobilization and TMC

b. Dependent variable Y-Knowledge Retention

The beta (β) coefficient was computed and t-test used to test the moderating influence of TMC on influence of talent mobilization on knowledge retention. This was tested at 0.05 level of significance. The results indicated the test was statistically significant since β -value at 0.000 was 1.658 at p-value of 0.000 level of significance (p=0.000<0.05) while X_3 was. The null hypothesis was rejected and the alternate hypothesis that talent management commitment moderates influence of talent mobilization on knowledge retention accepted. The model changed to:

y = 0.658 + 0.125X_3 + e implying that at a significance level of 0.000, moderated talent mobilization will impact knowledge retention by up to 12.5. % in government ministries in Kenya.

Table 4.51: Coefficients for Moderating Effect of TMC on Talent Mobilization

Model		Coefficients		T	Sig
		B	Std Error		
1	(Constant)	1.658	.073	22.618	.000
	Talent Mobilization	.125	.007	16.715	.000

a Dependent Variable: Y Knowledge Retention

b Talent Mobilization*TMC

Equation: Y=1.658+0.125X3Z+e

4.8.4 Regression Analysis Results for the Moderating Effect of TMC on Influence of Talent Retention on Knowledge Retention

The linear regression model for the moderating effect of TMC on the influence of talent retention on knowledge retention indicated that the effect of moderation was positive but small. After moderation R^2 for talent retention changed to 0.591 which was only slightly higher than $R^2 = 0.514$ before moderation. The difference of 0.077 (8%) implied a small or less significant but positive moderating effect of TMC on the influence of talent retention on knowledge retention in government ministries in Kenya. The results are presented in table 4.52.

Table 4.52: Model for Moderating Effect of TMC on Talent Retention and Knowledge Retention

Model	
R	R Square
0.769	0.591

Independent variable: Talent Retention

Table 4.53 shows ANOVA results for the effect of TMC on the influence of talent retention on knowledge retention which reveal that TMC has a significant effect on the relationship between the two variables. F-test statistics were 396.012 at 0.000 which is less than the 0.05 level of significance (p=0.000<0.05). It was concluded that TMC moderates the relationship between talent retention and knowledge retention. The results also revealed that TMC effect on the influence of talent retention on knowledge retention was statistically significant.

Table 4.53: ANOVA Results for Moderating Effect of TMC on Talent Retention (X_4Z)

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	119.969	1	104.348	396.012	0.000
Residual	83.006	274	.360		
Total	202.975	275			

a. Predictors: (Constant), X_4Z Talent Retention*TMC

b. Dependent variable Y (Knowledge Retention)

The beta (β) coefficient was computed and t-test used to test the moderating effect of TMC on influence of talent retention on knowledge retention. This was tested at 0.05 level of significance. The results indicated the test was statistically significant since β -value at 0.000 was 1.498 level of significance (p=0.000<0.05), while X_4 was 0.141. The null hypothesis was rejected and the alternate hypothesis that talent management commitment moderates influence of talent retention on knowledge retention accepted. The model changed to:

y = 1.498 + 0.141X_4 + e implying that at a significance level of 0.000, moderated talent retention will impact knowledge retention by up to 14.1. % in government ministries in Kenya.

Table 4.54: Coefficients for Moderating Effect of TMC on Influence of Talent Retention on Knowledge Retention

Model		Coefficients		T	Sig
		B	Std Error		
1	(Constant)	1.498	.070	21.444	.000
	Talent Retention	.141	.007	19.900	.000

a Dependent Variable: Knowledge retention

b Talent Retention*TMC

Equation: Y=1.498+0.141X_4Z+e

4.8.5 Moderated Multiple Regression (MMR) Model

The results of the linear regression of pooled independent variables moderated by TMC in table 4.55 indicate $R^2= 0.595$ and $R= 0.772$. This was an indication that the independent variables pooled together when moderated by top management commitment could explain 59.5% of variations in knowledge retention.

The results indicated that there was a strong positive effect of the moderating variable, TMC (Z), on the influence of the independent variables, talent attraction (X_1), talent development (X_2), talent mobilization (X_3) and talent retention (X_4) pooled together, on the dependent variable, knowledge retention (Y).

Table 4.55: Overall Model Summary on Moderating Effect of TMC on Independent Variables Pooled Together

Indicator	Coefficient
R	0.772
R Square	0.595

Predictors: X_1Z, X_2Z, X_3Z, X

The ANOVA Results for the effect of top management commitment on the independent variables of the study pooled together in table 4.58 indicated an F statistic of 98.892 at p=0.000. The p-value was 0.000 which is less than 0.05 (p=0.000<0.05) thus the null hypothesis was rejected and the alternate hypothesis that top management commitment has significant moderating effect on the influence of the pooled independent variables on knowledge retention in government ministries in Kenya was accepted.

Table 4.56: ANOVA Results for Overall Effect of TMC on the Influence of Pooled Independent Variables

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	120.636	4	30.159	98.892	0.000
Residual	82.037	269	.305		
Total	202.672	273			

a. Predictors: X_1Z, X_2Z, X_3Z, X_4Z b. Dependent Variable Y

The beta (β) coefficient was computed and t-test used to test the moderating influence of TMC on the influence of the independent variables pooled together on knowledge retention at 0.05 level of significance. The results for talent attraction in the pooled model indicated that though positive, the results were not statistically significant since t-value was 0.030 at 0.125 significance level which was greater than the set level of significance of 0.05 ($p=0.125>0.05$) hence the results were considered insignificant at 0.05 level. Influence of talent development was 0.011 at 0.225 level of significance ($p=0.225>0.05$), talent mobilization was 0.012 at 0.299 ($0.299>0.05$) while talent retention was 0.116 at 0.000 ($p=0.000<0.05$). The results are presented in table 4.57. There was evidence of positive though little moderating effect of TMC on the influence of the independent variables pooled together on the dependent variable thus the null hypothesis was rejected and the alternate hypothesis that talent management commitment moderates influence of pooled independent variables on knowledge retention was accepted. The model changed to:

$$Y = 1.472 + 0.030X_1Z + 0.011X_2Z + 0.012X_3Z + 0.116X_4Z + e.$$

Overall, these findings imply that when moderated by top management commitment, talent attraction, talent development, and talent mobilization will have positive but insignificant influence on knowledge retention while talent retention will have moderately significant influence on knowledge retention in government ministries in Kenya.

Table 4.57: Coefficients for Moderating Effect of TMC on Influence of Pooled Independent Variables (TA, TD, TM, TR) on Knowledge Retention

Variable	Beta	Std. Error	T	Sig.
Constant	1.472	0.072	20.532	0.000
Talent Attraction (X_1Z)	0.030	0.020	1.539	0.125
Talent Development (X_2Z)	0.011	0.020	0.540	0.225
Talent Mobilization (X_3Z)	0.012	0.018	0.677	0.499
Talent Retention (X_4Z)	0.116	0.021	5.465	0.000

a. Constant: Dependent variable (Y)

b. Independent variables*Moderating variable (X_1Z, X_2Z, X_3Z, X_4Z)

Full Model: $Y = 1.472 + 0.030X_1Z + 0.011X_2Z + 0.012X_3Z + 0.116X_4Z + e$.

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of the major findings from the study as per the research objectives, from where a summary, conclusions and recommendations were drawn. The main purpose of the study was to assess the influence of talent management practices on knowledge retention in government ministries in Kenya with the moderating effect of top management commitment. There were five specific objectives which were to establish the influence of talent attraction on knowledge retention, to determine the influence of talent development on knowledge retention, to establish the influence of talent mobilization on knowledge retention and to assess the influence of talent retention on knowledge retention in government ministries in Kenya. There fifth objective was to assess the moderating effect of top management commitment on the influence of talent management practices on knowledge retention in government ministries in Kenya. The summary, conclusions and recommendations were aligned to the specific objectives of the study based on results of the descriptive and inferential statistical analyses.

5.2 Summary of Major Findings

The study was founded on various theories which support the contribution of talent management practices on knowledge retention. Knowledge management is based on theories like strategic management theory and continuity management. Strategic management theory views humans and knowledge as strategic resources that should be harnessed protected and used for competitive advantage. Continuity management advocates for sustainability to which top management ought to be committed for effective talent management for knowledge retention. General administrative management theory underscores the need for managers to perform specific functions of planning, organizing, staffing, directing and control which are crucial in both talent management and knowledge retention. Knowledge economy theory views knowledge as a scarce economic resource. The theory advocates that in the modern complex

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world, characterized by scarcity of resources, available resources ought to be used in the most efficient way hence its relevance in this study with knowledge retention as the dependent variable. Resource based theory advocates for the need to view knowledge and human capital as strategic resources which are unique and difficult to imitate so that the organization can leverage them for competitive advantage over competitors.

The emergence of knowledge-based economies, globalization, and new technology has amplified the need to effectively manage human capital, the resource that is considered to be a knowledge asset. The human capital theory advocates for protection of core competencies of employees by investing in continuous learning and development programs as it views a worthwhile investment since knowledge resides in people hence its relevance as one independent variable of the study was talent development. SET theory that advocates for social and economic exchanges between the employer and employee at the workplace where the latter are rewarded for their skills, knowledge and efforts while the former leverages on the services of the employees was found relevant as both employees and employers have expectations to be met by the other party in the employment relationship. Several empirical studies were reviewed to give insights on the various variables of the study where some findings concurred with those of some of the empirical studies and others were inconsistent.

5.2.1 Findings on Influence of Talent Attraction on Knowledge Retention

The first specific objective of the study was to establish the influence of talent attraction on knowledge retention in government ministries in Kenya. The aspects of talent attraction considered were: policy on talent attraction, sponsorship for training and career development, equal employment opportunities, employee welfare scheme, employee involvement in decision making and offer of internship opportunities to college and university students. According to study findings, there is a linear relationship between talent attraction and knowledge retention. Pearson Correlation between talent attraction and knowledge retention was strong and positive with a value of R=0.551 at a p value of 0.000 hence it was statistically significant. This implied that

talent attraction and knowledge retention changed in the same direction and the relationship was strong and statistically significant at a p value of 0.000. Correlation results indicated that an increase of 0.551 units in talent attraction led to a proportional increase in knowledge retention.

Regression analysis also indicated that influence of talent attraction on knowledge retention was statistically significant p-value 0.000, β =0.559 at p value 0.000<0.05. This indicated that an increase in talent attraction led proportional increase in knowledge retention. The model is : $y = 1.330+0.559X_1+e$ implying that at a significance level of 0.000, talent attraction will impact knowledge retention by up to 55.9%.

These findings were consistent with those of a research by Horwitz, Heng and Quazi (2003) who found out that talent attraction leads to knowledge retention since employees who were attracted and motivated intended to stay with the organization longer thus their knowledge would be retained. The findings also concurred with those of Rudsada (2016) who conducted a study on talent management in Thai hospitality industry and found out that organizations that put more emphasis on attracting talent contribute to effective work and retain the best talent and the knowledge and skills they possess.

The findings were also consistent with those of Schichtle (2011) who opined that competitive knowledge often comes with new hires as they have information in many areas of industry and competitor procedures which may not otherwise be readily available. However, most of the respondents appeared to be of the opinion that the government was not doing enough to attract talent. This is consistent with the views of Kibui and Kanyiri (2014) who posited that attracting and retaining young educated workforce is one of the most critical human resource problems facing managers in the public sector in Kenya. Overall the findings of the study revealed that talent attraction has a significant effect on knowledge retention.

5.2.2 Findings on the Influence of Talent Development on Knowledge Retention

The second specific objective of the study was to determine the influence of talent

development on knowledge retention in government ministries in Kenya. The items on talent development the study considered were: progress and development policy, encouragement of employees to improve their skills, employee needs assessment, mentoring and coaching of employees, sensitization of heads of departments on need for nurturing talent, rewards for employees on successful completion of training, and partnering with academic institutions in training employees on specific skills.

According to the findings of the study, there is a linear relationship between talent development and knowledge retention in government ministries in Kenya. It also revealed that talent development significantly affects knowledge retention since an increase in talent development leads to increase in knowledge retention. Pearson Correlation between talent development and knowledge retention was strong with a value of R=0.619 which implied a positive correlation with the two variables changing positively by increasing in the same direction. Results indicated that an increase of 0.619 units in talent development led to a proportional increase in knowledge retention. Regression analysis also indicated that influence of talent development on knowledge retention was statistically significant p-value 0.000, β =0.565 at p value 0.000<0.05. The model is : $y = 1.174 + 0.565X_2 + e$ implying that at a significance level of 0.000, talent attraction will impact knowledge retention by 56.5%.

This is consistent with the findings of Waleed (2011) that an organization that invests in training of its employees remains competitive. The findings were also in agreement with those of Ng'ethe (2012) in a study on determinants of academic staff retention in public universities in Kenya that found out that training and research impart stocks of knowledge in staff which is hard to replace when they leave. Findings also concurred with the views of Pena (2013) that an effective method of softening the blow when experienced workers leave is having them mentor and train other employees thus pass on their knowledge and retain it within the organization. Mentoring programs provide an effective way to transfer knowledge, skills and the wisdom gained from years of experience (Davenport & Prusak, 2014). The findings were also consistent with the conclusions of Tandem HR (2010) that top management and HR managers need to work together to identify, develop and assess potential leaders within a company to ensure that when founders turn organizations over to the next generation, transition

will be smooth. The findings of this study also concurred with those of CIPD (2010) study on learning and talent development which indicated that senior managers and the HR department ought to ensure that courses are delivered and that planning of the whole learning process is effectively.

5.2.3 Findings on Influence of Talent Mobilization on Knowledge Retention

The third specific objective of the study was to establish the influence of talent mobilization on knowledge retention in government ministries in Kenya. The aspects of talent mobilization considered for this study were: policy on employee mobilization, field visits by employees, appointment of employees to act in senior positions, overseas assignments or deployment to other branches and departments, employee awareness of possible mobility paths and employees given opportunity to work on tasks outside their normal work domain.

According to the findings of this study, there is a linear relationship between talent mobilization and knowledge retention in government ministries in Kenya. Pearson Correlation results for talent mobilization and knowledge retention indicated a strong relationship between the two variables with a value of R=0.603 at a p value of 0.000. This implied that an increase of 0.603 units in talent mobilization led to a proportional increase in knowledge retention in government ministries in Kenya. Regression analysis indicated that influence of talent mobilization on knowledge retention was positive but statistically insignificant though low at p-value 0.000, β =0.045 at p value 0.000<0.05. The model is : $y = 1.200 + 0.045X_3 + e$ implying that at a significance level of 0.000, talent attraction will impact knowledge retention by only 5%.

These findings concur with the findings of Harrison (2013) that organizations that mobilize talent benefit from a deep pool of talented employees who are more productive, engaged and capable of taking on new challenges, assuming higher levels of responsibility and meeting increased demands to drive business growth. Madsen et al (2003) as quoted by Gonzalez et al (2017) were also of the view that there is beneficial relationship between knowledge inflows and knowledge retention through various practices which include personnel mobility and job rotation among others. The study findings also confirm the findings from Lee Hecht Harrison's 2015 Talent

Mobility Research which revealed that 75% of organizations recognize talent mobility as important to an effective talent management strategy.

5.2.4 Findings on the Influence of Talent Retention on Knowledge Retention

The fourth specific objective of the study was to evaluate the influence of talent retention on knowledge retention in government ministries in Kenya. The strategies for talent retention that were considered in this study included: good working relations among employees, sensitization of heads of departments on need for talent retention, respect for employee views and initiative, long service awards, bonding of employees after sponsored training, staff welfare program, security of tenure and attractive pension scheme. According to the findings of the study, there is a linear relationship between talent retention and knowledge retention in government ministries in Kenya. The study also revealed that talent retention significantly affects knowledge retention since an increase in talent retention leads to increase in knowledge retention. Results of correlation between talent retention and knowledge retention also indicated a strong, positive and statistically significant relationship with a value of R=0.717 at a p value of 0.000. Results indicated that an increase of 0.717 units in talent retention led to a proportional increase in knowledge retention. Regression analysis also indicated that influence of talent retention on knowledge retention was positive and statistically significant p-value 0.000, β =0.737 at p value 0.000<0.05. The model is: $y = 0.691 + 0.737X_4 + e$ implying that at a significance level of 0.000, talent attraction will impact knowledge retention by 73.7%.

These findings concurred with those of Gerber (2014) who found out that a phased retirement program benefits employers as they help retain older workers with more knowledge longer, allowing them time to train the younger ones thus enhancing retention of knowledge in the concerned organizations. The findings on the strategies used to retain talent are consistent with those of Cummings-White and Diala (2013) who found out that offer of part-time and flexible working are important for retaining valuable staff beyond conventional retirement thus enhancing knowledge retention. The findings also concur with those of Higo and Klassen (2015) who found out that workers in Japan and South Korea remain in the labor force longer than those in other

developed countries thus enhance knowledge retention in their institutions. The findings were also consistent with the findings by Chitsaz-Isfahani and Boustani (2014) that staffs prefer business environments in which they will develop, renovate themselves, learn continuously and where their ideas are supported and encouraged.

5.2.5 Findings on Moderating Effect of TMC on the Influence of Individual Variables on Knowledge Retention

The fifth objective of the study was to assess the moderating effect of top management commitment on the influence of talent management practices on knowledge retention.

It was important to understand the influence of talent management practices on knowledge retention and to establish whether TMC moderated that relationship. The TMC aspects that were considered included availability and implementation of talent management and knowledge retention policy, budget for talent management and knowledge retention activities, employee awards, delegation of authority to heads of departments, facilitation of rotation of employees, seminars and workshops for employees and consultation with senior and mid-level managers.

When Top Management Commitment was introduced in the regression model as the moderating variable the coefficient of multiple determination (R^2 value) was significantly different for individual independent variables. R^2 before moderation for talent attraction R^2=30.4% changed to R^2 =50.7% after moderation. It changed positively and significantly by 20.3% which was an indication that TMC had a significant moderating effect on the relationship between talent attraction and knowledge retention. R^2 for talent development before moderation was R^2=38.3% which changed to R^2 =50.5% after moderation. It changed by 28.2% indicating TMC had a significant and positive moderating effect on the relationship between talent development and knowledge retention.

Similarly, R^2 before moderation for talent mobilization R^2=36.4% changed to R^2 =50.5% after moderation which was an increase by 26.1%. This increase was an indication of significant positive moderating effect of TMC on the influence of talent mobilization on knowledge retention. The R^2 before moderation for talent retention

R^2=51.4% changed to R^2 =59.1% after moderation which was an indication that TMC moderated this relationship. This was a change by 7.7% which was less significant as compared to the percentage change for the other variables but it was also an indication that talent retention was positively moderated by TMC though the moderating effect was not significant.

The findings thus confirmed the findings by Dewah and Mutula (2014) who established that the challenges for managing knowledge assets in public sector organizations include limited commitment from senior management among other factors. The findings were also consistent with those of Tymon et al (2010) who found out that offering management support creates long-term motivation leading to the willingness of employees to contribute and stay in the organization. The findings also concurred with those of Yousaf (2013) that senior management commitment is paramount for any initiative to be successful. Zakuan et al (2012) are also of the view that the result of any critical decision made in an organization is highly dependent on top management support and commitment which is confirmed by the findings of this study. The findings were also consistent with those of a study by Waiganjo (2012) which revealed that there was an increase in the extent to which information was shared with all employees, and that top and senior managers were active in the process of information sharing.

5.2.6 Findings of Moderated Multiple Regression (MMR) Model

When the independent variables were pooled and moderated by top management commitment R^2 was 0.595 implying that pooled independent variables moderated by TMC could explain 59.5% of variations in knowledge retention. The results indicated that there was a strong relationship between the interactions of the moderating variable, TMC (Z), and the independent variables of the study which included talent attraction (X_1), talent development (X_2), talent mobilization (X_3), talent retention (X_4) and the dependent variable, knowledge retention (Y), pooled together. The resulting multiple regression equation before moderation was:

$$Y = 0.540 + 0.051X_1 + 0.129X_2 + 0.104X_3 + 0.515X_4 + e$$

The model changed to: $Y = 1.472 + 0.030X_1Z + 0.011X_2Z + 0.012X_3Z + 0.116X_4Z + e$ after moderation by TMC (Z).

The resulting multiple regression equation is:

$$Y = 0.540 + 0.051X_1 + 0.129X_2 + 0.104X_3 + 0.515X_4 + e$$

Overall, these findings imply that when moderated by top management commitment, talent attraction, talent development, and talent mobilization pooled will have positive but insignificant influence on knowledge retention while talent retention will have significant influence on knowledge retention in government ministries in Kenya.

5.3 Conclusions

On the strength of the study findings, it was concluded that talent management practices specifically talent attraction, talent development, talent mobilization and talent retention are common in government ministries in Kenya. The study concluded that there is significant positive influence of talent management practices on knowledge retention in government ministries in Kenya. Where there were neutral or disagree or strongly disagree responses on any of the items, it was concluded that there was need for sensitization and enhancement of communication about the said practice to the satisfaction of the employees.

The first variable of the study, talent attraction, was found to be statistically significant in explaining knowledge retention in government ministries in Kenya. Several talent attraction strategies used for knowledge retention were found to be effective. It confirmed that there was policy on talent attraction, employees are sponsored for training and career development, ministries are equal opportunity employers, ministries have employee welfare scheme, employees are involved in making important decisions and college and university students are offered internship opportunities as a way of attracting them. It was concluded that talent attraction significantly influences knowledge retention since increase unit in talent attraction led to increase in knowledge retention.

Talent development was also found to be statistically significant in explaining

knowledge retention in government ministries in Kenya. The study findings indicated that a positive linear relationship exists between talent development and knowledge retention in government ministries in Kenya. The study concluded that several talent development strategies used for knowledge retention were effective. It confirmed there was policy on talent development, employees are encouraged to improve their knowledge and skills, HR department undertakes employee needs analysis to guide them on development paths, employees are coached and mentored, HoDs are sensitized on the need for nurturing talent, employees are rewarded upon completion of training and ministries partner with academic institutions in training employees on specific skills.

It was therefore concluded that talent development significantly affects knowledge retention since an increase in talent development led to increase in knowledge retention. There is therefore need for government ministries to emphasize on talent development through organized programs for the same. Training and development should therefore be about career growth and creating opportunities to learn new things in the work environment and should be guided by polices. It was concluded that Government ministries will do a better retention job by spending more resources on training and development of employees to win their loyalty. It was evident that learning and development practice was embraced to some extent as ministries were said to have programs and budget for the same. However it was concluded that the practice should be broadened to be all inclusive to satisfy all employees to enhance knowledge retention from all not just specific categories.

The third variable of the study was talent mobilization and it was found to be statistically significant in explaining knowledge retention. The findings indicated a positive linear relationship between talent mobilization and knowledge retention in government ministries in Kenya. The study confirmed that several talent mobilization strategies used for knowledge retention were effective. It confirmed there was policy on talent mobilization, field visits were common in the ministries, HoDs were aware of the need to appoint employees to act in positions, employees were appointed to act in senior positions, employees were sent on overseas trips, and employees were aware of the possible mobility paths in their careers.

It was therefore concluded that talent mobilization significantly influences knowledge retention since an increase in talent retention led to proportional increase in knowledge retention. The findings also indicated that talent mobilization was statistically significant in explaining knowledge retention. It was therefore concluded that for government ministries to increase knowledge retention, talent mobilization needs to be sustained and enhanced.

On the fourth variable of the study regression analysis results depicted that talent retention was statistically significant in explaining knowledge retention. As evident from the results, there is a linear relationship between talent retention and knowledge retention. The study found talent retention to be statistically significant in explaining knowledge retention. Talent retention strategies used for knowledge retention were found to be effective. It confirmed there were good working relations among employees, HoDs were sensitized on the need for talent retention, employee views and initiatives were respected, there were long service awards for employees, employees were bonded to remain in their ministries after sponsored training, there was guarantee on security of tenure as well as a pension scheme. However, talent retention needs to be enhanced in the face of exiting baby boomers and younger generations of employees whose mobility rate is high. It was therefore concluded that for government ministries to succeed in their knowledge retention efforts, they ought to enhance talent retention. In comparison to the other independent variables, talent retention had the most significant positive relationship with knowledge retention, followed by talent development, talent mobilization and talent attraction in a descending order of significance. The bigger R value for talent retention indicated that the variable had the strongest association with knowledge retention among the other variables of the study which had smaller R value. This led to the conclusion that talent retention has the most significant influence on knowledge retention among the independent variables used in the study.

Based on the results of the regression analysis for moderating effect of top management commitment, it was established that TMC had a significant moderating effect on the relationship between individual talent management practices and knowledge retention in government ministries in Kenya. The study established that

several top management commitment strategies put in place in government ministries in Kenya affected the influence of talent management practices on knowledge retention. Study findings indicated that top management had come up with effective talent management and knowledge retention policies, facilitated implementation of the policies, had a budget for talent management and knowledge retention, honored the best employee, delegated authority to HoDs, facilitated rotation of employees, organized seminars and workshops for employees and consulted with senior and middle level managers on important issues. Overall, it was concluded that top management commitment is imperative for effective talent management and knowledge retention.

The study established that several knowledge retention strategies were employed in government ministries in Kenya. It confirmed that employees are sensitized on the need for talent retention, ministries record and store minutes of meetings, ministries retain resourceful employees past retirement age, ministries encourage mentorship across different generations of employees, ministries facilitate knowledge sharing, work teams composed of employees of different generations are encouraged, there are exit interviews for departing employees, there are resource centers where important records and reference materials are kept and old work records are archived for future reference and preservation. On the strength of these findings, it was concluded there was ample evidence that government ministries engage in knowledge retention and have given it preference. However, it was concluded that other talent management practices that influence knowledge retention need to be investigated as the overall model indicated the influence of TM practices was at 59.5% meaning other factors at account for the 40.5% difference. It was concluded that the talent management practices included in this study had significant individual and collective influence on knowledge retention in government ministries in Kenya.

5.4 Contribution of the Study to Theory and New Knowledge

This study has contributed towards creation of knowledge and its dissemination in the areas of strategic HRM and knowledge retention by providing empirical evidence of influence of talent management practices on knowledge retention in government

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ministries in Kenya. The study has developed a conceptual framework that has integrated specific talent management practices (TA, TD, TMo and TR), and knowledge retention (KR) with the moderating effect of top management commitment (TMC). The findings of the study have provided insights on the interactions among these variables in a manner which it has not been previously done. The findings of this study validated the relevance of the various theories relating to talent management and knowledge retention. The theories included in the study relate to knowledge management and talent management which are topical areas of study in contemporary research in social sciences and other fields. Strategic management theories were found relevant to TM practices investigated in the study and KR as well as top management commitment. Hertzberg's theory of motivation has also been validated by the study as it proved to be appropriate for all the variables of the study. The study has also managed to integrate strategic HRM with organizational strategy. Knowledge economy theory proved to be relevant as it is concerned with creation and distribution of knowledge within an organization and the current study is on knowledge retention. Human capital theory was found to be relevant in talent development and knowledge retention, RBV theory of the firm which views knowledge and people as a crucial resources which ought to be retained was also established to be relevant in this study. SET was relevant as it advocates for talent attraction, talent development and talent mobilization as platforms of exchange of employee knowledge and skills or competences for social and economic gains from their employers, and the employer benefits from employee loyalty, retention of the employees and the knowledge they possess. Top management commitment is also a form of social exchange as employees who enjoy support of top management feel valued and are motivated to perform optimally. Failure or success of the organization is the responsibility of top management hence they value a motivated and loyal workforce who contribute to the achievement of organizational goals.

5.5 Recommendations

From the findings of this study and due to prevalent and inevitable employee and knowledge retention challenges through various forms of employee separation or job movement, it is recommended that government ministries in Kenya endeavor to retain

knowledge that is at risk of being lost to remain competitive. The study has established that the majority of employees in government ministries in Kenya are in the middle age and aging cohorts hence it is recommended that there is need for ministries to purposefully attract, develop, mobilize and retain younger talents.

Since talent attraction was found to have positive and significant influence on knowledge retention in government ministries in Kenya, it is recommended that there is need for the ministries to enhance this practice to ensure they attract the relevant knowledge and retain it.

Training and development was also found to have positive and significant influence on knowledge retention therefore the study recommends that the practice be enhanced. It is recommended that ministries invest in training and development. Further, it is recommended that ministries need to put in place programs that consider the specific training needs of the various generations in order to equip them to be more resourceful. From the study findings majority of respondents disagreed there were rewards for employees on successful completion of training and development. Rewards are a powerful motivator hence it is recommended that government ministries consider rewarding such employees in order to make them remain. Attractive pay packages, rewards for long service and various awards can attract and retain qualified employees as well as motivate incumbent ones to be loyal. The study found talent mobilization to have positive and significant influence on knowledge retention hence it is recommended that this practice be enhanced to further strengthen its influence. Talent retention was found to have the strongest positive and statistically significant influence on knowledge retention in government ministries among all the investigated variables. It is therefore recommended that the ministries endeavor put in place measures meant to make remain their employees.

Top management commitment was found to have positive significant moderating effect on the influence of talent attraction, talent development, talent mobilization and talent retention on knowledge retention in government ministries in Kenya. The study therefore recommends the need for management to appreciate their role and establish ways of further strengthening it for effective talent management and knowledge

retention.

It is recommended that Kenyan government ministries formulate and enact policies that promote talent management which will in turn promote knowledge retention for competitive advantage. In the light of this study findings, it is also recommended that policy makers in government ministries and other public sector organizations clearly communicate such policies as some respondents did not seem aware of them. It is also recommended that government ministries endeavor to establish other factors, besides the ones included in this study that influence knowledge retention.

From the overall findings of the study, talent management practices affect knowledge retention positively therefore it is recommended that the public sector embraces talent management practices as a crucial knowledge retention strategy. For a ministry to be effective in knowledge retention it is recommended that they ought to be deliberate about it and enhance their talent management practices. It is also recommended that government ministries incorporate Herzberg's motivation theory into their talent management and knowledge retention policies to accelerate knowledge retention by ensuring employees there are motivators and hygiene factors that are proved to effective in achievement of goals and objectives.

5.6 Areas for Further Research

This study has been conducted in the public sector specifically government ministries hence it is suggested that a similar study be conducted in state corporations and agencies and even in the private sector. The current study was limited to seven national government ministries in Kenya so can be replicated in different ministries not included. A study could also be conducted in the county government ministries as this study was limited to national government ministries. This study focused on talent management yet HRM is broad thus aspects of HR can be explored in relation to KR. Further study could also be conducted in specific departments in government ministries to assess if they are influenced the same way or differently by the talent management practices considered in this study. Similar studies could also be carried out in government ministries using other talent management parameters not used in this study that could influence knowledge retention. It is also suggested that the

moderating variable be substituted to establish their influence. A comparative study involving county and national government ministries could also be carried out to assess if the situation is similar in both tiers of government. Exclusive studies could also be conducted to establish how to enhance knowledge retention from younger generations; the Millennial Generation and Generation Z who have a wealth of knowledge and switch jobs more often than other generations. Five study hypotheses related to the study objectives were tested and therefore can be used for future studies on talent management practices and knowledge retention.

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APPENDICES

Appendix I: JKUAT Introduction Letter

JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY
P.O. BOX 62000-00200 NAIROBI, KENYA. TELEPHONE: (020) – 221306

Nairobi CBD Campus

Entrepreneurship & Procurement Department

Date: 13th December, 2017

Ref:JKU/6/3/17a

To Whom It May Concern;
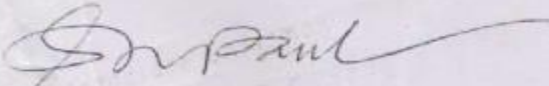
SUBJECT: LOISE W. MUNGAI – H41-C004-0311/2007

This is to introduce to you **Ms. Loise Mungai** who is a student pursuing PhD in Human Resource Management at Jomo Kenyatta University of Agriculture and Technology, Nairobi CBD Campus. The student is currently undertaking a research thesis entitled: **Talent Management Practices and Knowledge Retention in Government Ministries in Kenya-** in partial fulfillment of the requirement for the degree programme.

The purpose of this letter is to request you to give the student the necessary support and assistance to enable her to obtain necessary data for the thesis. Please note that the information given is purely for academic purpose and will be treated with strict confidence.

Do not hesitate to contact the undersigned for any more information.

Yours faithfully,

Samson Nyang'au (Ph.D)
Ag.ASSOCIATE CHAIRPERSON, EPD

JKUAT is ISO 9001:2008 and 14001:2004 Certified.
Setting Trends in Higher Education, Research and Innovation

Appendix II: NACOSTI Research Authorization

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: 020 400 7000,
0713 788787,0735404245
Fax: +254-20-318245,318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/18/30243/20699**   Date: **5th January, 2018**

Loise Wachuka Mungai
Jomo Kenyatta University of
Agriculture and Technology
P.O. Box 62000-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Talent management practices and knowledge retention in Government Ministries in Kenya,"* I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **5th January, 2019.**

You are advised to report to **the Principal Secretaries of selected Ministries, the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The Principal Secretaries
Selected Ministries.

National Commission for Science, Technology and Innovation is ISO9001: 2008 Certified

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Appendix III: Ministry of Education Authorization

Republic of Kenya
MINISTY OF EDUCATION
STATE DEPARTMENT OF BASIC EDUCATION

Telegrams: "SCHOOLING", Nairobi
Telephone: Nairobi 020 2453699
Email: rcenairobi@gmail.com
     cdennirobi@gmail.com

When replying please quote

REGIONAL COORDINATOR OF EDUCATION
NAIROBI REGION
NYAYO HOUSE
P.O. Box 74629 – 00200
NAIROBI

Ref: **RCE/NRB/GEN/1 VOL. I**

DATE: **2nd February, 2018**

Loise Wachuka Mungai
Jomo Kenyatta University of
Agriculture & Technology
P O Box 62000-00200
NAIROBI

RE: **RESEARCH AUTHORIZATION**

We are in receipt of a letter from the National Commission for Science, Technology and Innovation regarding research authorization in Nairobi County on "**Talent management practices and knowledge retention in Government Ministries in Kenya**".

This office has no objection and authority is hereby granted for a period ending **5th January, 2019** as indicated in the request letter.

Kindly inform the Sub County Director of Education of the Sub County you intend to visit.

RHODA MWEI
FOR: REGIONAL COORDINATOR OF EDUCATION
NAIROBI

C.C

Director General/CEO
Nation Commission for Science, Technology and Innovation
NAIROBI

Appendix IV: Questionnaire

An academic research study entitled **Influence of Talent Management Practices on Knowledge Retention in government ministries in Kenya** is being carried out. The purpose of this instrument is to collect data which will then be analyzed and a research report written. The information you provide will be highly appreciated and treated as confidential hence only used for academic purposes. Kindly respond to all questions.

PART A: Background Information

1. Name of Ministry ………………………………………………………….

2. Gender: Male   [ ]   Female   [ ]

3. Age:

  30 years and below   [ ]

   31-40   [ ]
   41-50   [ ]
   51-60   [ ]
   61 and above   [ ]

4. Number of years worked in this ministry:

    Less than 1 year   [ ]
     1-5 years   [ ]
     6-10   [ ]
    11-15   [ ]
    16-20   [ ]
    21 years and above

5. Job group:

 Support staff   {A-H}   [ ]

 Middle level manager {J-N} [ ]

 Senior manager {P-S}   [ ]

6. Education Level:

  Primary   [ ] Secondary [ ] College   [ ]

  University [ ] Other (Specify) ………………………..

PART B: Talent Attraction

1. Are efforts made to attract highly qualified employees to this ministry?

Yes   [ ]   No   [ ]

2. Please indicate on the scale provided below by ticking the extent to which you agree with the following statements.

Scale: 5= Strongly Agree, 4= Agree, 3= Neutral, 2= Disagree, 1= Strongly Disagree

	STATEMENT	5	4	3	2	1
1	There is a policy on attracting knowledgeable and skilled employees in all generations in this ministry					
2	Employees are sponsored for training and career development in this ministry					
3	This ministry is an Equal Opportunity Employer					
4	This ministry has an elaborate employee welfare scheme					
5	Employees are involved in making important decisions in this ministry					
6	This ministry offers internship opportunities to college and university students					

PART C: Talent Development

1. Is there a policy on talent development in your ministry? Yes   [ ] No   [ ]

2. Indicate available opportunities for employees to develop themselves in this ministry

  Time off for training   [ ]

Sponsorship for training   [   ]

Seminars/workshops   [   ]   Others

……………….

3. Please indicate on the scale provided below by ticking the extent to which you

     agree

     with the statements that follow.

Scale: 5= Strongly Agree, 4= Agree, 3= Neutral, 2= Disagree, 1= Strongly Disagree

	STATEMENT	5	4	3	2	1
1	Progress and career development policy is clearly outlined and known to all employees in this ministry					
2	Employees are encouraged to improve their knowledge and skills					
3	The HR department frequently undertakes employee needs analysis to guide them on development paths in this ministry					
4	Employees ministry are mentored and coached to develop their skill					
5	Heads of departments in this ministry are sensitized on the need for nurturing talent					
6	Employees in this ministry are rewarded upon completion of training					
7	This ministry partners with academic institutions in training employees on specific skills					

PART D: Talent Mobilization

1. Are efforts made to enable employees work in different capacities   in this ministry?

Yes   [ ]   No   [ ]

2. If yes in (1) above, indicate ways in which employees are mobilized in this ministry.

	Overseas assignments	[ ]
	Assignment to different projects	[ ]
	Transfers to different departments	[ ]

3. Please indicate by ticking on the scale provided below the extent to which you agree with the following statements

Scale: 5= Strongly Agree, 4= Agree, 3= Neutral, 2= Disagree, 1= Strongly Disagree

	STATEMENT	5	4	3	2	1
1	There is a policy on employee mobilization in this ministry					
2	Field visits by employees are common in this ministry					
3	Heads of departments are sensitized on the need for appointing employees to act in various positions in this ministry					
4	Employees are appointed to act in senior positions in this ministry					
5	Employees are sent on overseas assignments or deployed to other branches and departments from time to time in this ministry					
6	Employees are aware of possible mobility paths in their career in this ministry					
7	Employees are given opportunity to handle tasks and responsibilities that are outside their domain in this ministry.					

PART E: Talent Retention

1. Are there high numbers of employees leaving this ministry?

Yes   [ ]   No [ ]

2. Indicate the efforts made to retain employees in this ministry

Award of contracts to retirees [ ]

Flexible work arrangements   [ ]

Part time work for retirees   [ ]

Overtime incentives   [   ]

Others (specify) ……………………………………………………….

3. Please indicate by ticking on the scale provided below the extent to which you agree with the statements that follow.

Scale: 5= Strongly Agree, 4= Agree, 3= Neutral, 2= Disagree, 1= Strongly Disagree

	STATEMENT	5	4	3	2	1
1	There are good working relations among employees in this					
2	Heads of departments are sensitized on the need for talent retention in this ministry					
3	Employee views and initiative are respected in this ministry					
4	There are long service employee awards in this ministry					
5	After sponsorship for training, employees are bonded to continue working in this ministry					
6	There is an attractive employee welfare program in this ministry					
7	Employees are guaranteed of security of tenure in this ministry					
8	This ministry has an attractive pension scheme					

PART F: Top Management Commitment

1. In your opinion, is top management concerned with talent management and knowledge retention in this ministry?

   Yes   [   ]   No   [   ]

2. Please indicate by ticking on the scale provided below the extent to which you agree with the statements that follow. Scale: 5= Strongly Agree, 4= Agree, 3= Neutral, 2= Disagree, 1= Strongly Disagree

	STATEMENT	5	4	3	2	1
1	Top management has come up with effective talent management and knowledge retention policies in this ministry					
2	Top management has facilitated implementation of talent management and knowledge retention policies in this ministry					
3	The ministry has a budget for talent management and knowledge retention activities					
4	Top management honors the best employee with an employees of the year award in this ministry					
5	Top management delegates authority to heads of departments in this ministry					
6	Top management facilitates rotation of employees in the various departments in this ministry					
7	Top management organizes seminars and workshops for employees in this ministry					
8	Top management consults with senior and middle level managers in this on important issues in this ministry					

PART G: Knowledge Retention

1. Are there efforts made to retain knowledge in this ministry?

Yes   [ ]   No   [ ]

2. Please indicate by ticking on the scale provided below the extent to which you agree with the statements that follow.

Scale: 5= Strongly Agree, 4= Agree, 3= Neutral, 2= Disagree, 1= Strongly Disagree

	Statement	5	4	3	2	1
1	All employees in this ministry are sensitized on the need for knowledge retention					
2	This ministry records and stores minutes of meetings					

3	This ministry retains resourceful employees past retirement age					
4	This ministry facilitates knowledge sharing among employees					
5	This ministry encourages mentorship across different generations of employees					
6	This ministry encourages work teams composed of employees of different generations					
7	This ministry conducts exit interviews for leaving employees and keeps records results of the interview					
8	There is a resource center where all important records and reference materials are kept in this ministry					
9	Old work records are archived for future reference and preservation in this ministry					

Thank you for your time and cooperation.

Appendix V: List of Government Ministries in Kenya

1. Ministry of Interior and Coordination of National Government.

2. Ministry of Devolution and ASAL Areas.

3. Ministry of Education.

4. The National Treasury and Ministry of Planning.

5. Ministry of Defence.

6. Ministry of Health.

7. Ministry of Foreign Affairs & International Trade.

8. Ministry of Transport and Infrastructure.

9. Ministry of Information, Communication and Technology.

10. Ministry of Environment and Forestry.

11. Ministry of Lands.

12. Ministry of Labour & Social Affairs.

13. Ministry of Sports and Heritage.

14. Ministry of Agriculture and Irrigation.

15. Ministry of Energy.

16. Ministry of Industrialization and Enterprise Development.

17. Ministry of Petroleum and Mining.

18. Ministry of Water & Sanitation.

19. Ministry of Public Service, Youth & Gender Affairs.

20. Ministry of Tourism and Wildlife

21. Ministry of East African Community (EAC) and Northern Corridor Development.

SOURCE: Ministry of Devolution (2017)

Appendix VI: Multiple Regression Model

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$

Where: Y   =   dependent variable - knowledge retention

   X_1 =   independent variable – talent attraction

   X_2 =   independent variable – talent development

   X_3 =   independent variable – talent mobilization

   X_4 =   independent variable – talent retention

   β_1 =   regression coefficients for X_1

   β_2 =   regression coefficients for X_2

   β_3 =   regression coefficients for X_3

   β_4 =   regression coefficients for X_4

   e   =   error term

To measure the moderating effect of top management commitment the following model was used:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + Z(\beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4) + e \ldots\ldots \text{MMR}$$

Model

Where:

β_0 = constant or intercept

Z = Top Management Commitment

$X_i Z$ = Interaction term of top management commitment with each of the independent variables (X_1, X_2, X_3, X_4).

e = error term.

Appendix VII: KMO and Bartlett Tests

Table 4.15: Results of KMO and Bartlett's Test for Talent Attraction

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.352
Bartlett's Chi- Square	51.842
Bartlett's df	28
Bartlett's Sig.	0.000

Table 4.16: Results of KMO and Bartlett's Test for Talent Development

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.554
Bartlett's Chi- Square	61.804
Bartlett's df	28
Bartlett's Sig.	0.000

Table 4.17: Results of KMO and Bartlett's Test for Talent Mobilization

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.524
Bartlett's Chi- Square	20.685
Bartlett's df	21
Bartlett's Sig.	0.001

Table 4.18: Results of KMO and Bartlett's Test for Talent Retention

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.305
Bartlett's Chi- Square	54.162
Bartlett's df	28
Bartlett's Sig.	0.002

Table 4.19: Results of KMO and Bartlett's Test for Top Management Commitment

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.554
Bartlett's Chi- Square	61.804
Bartlett's df	21
Bartlett's Sig.	0.001

Table 4.20: KMO and Bartlett's Test for Knowledge Retention

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.227
Bartlett's Chi- Square	63.308
Bartlett's df	36
Bartlett's Sig.	0.003

Appendix VIII: Regression Analysis for Talent Attraction and Knowledge Retention

Model Summary of Talent Attraction/Knowledge Retention

Model

R	R²
0.551	0.304

The independent variable is talent attraction, X1

ANOVA Results for Talent Attraction

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	61.646	1	61.646	119.515	0.000(a)
Residual	141.329	274	.516		
Total	202.975	275			

a. Predictors: (Constant), X1-Talent Attraction

b. Dependent Variable: Y- Knowledge Retention

Coefficients for Talent Attraction

Model		Coefficients		t	Sig
		B	Std Error		
1	(Constant)	1.330	.134	9.897	.000
	Talent Attraction, X1	.559	.051	10.932	.000

a Constant: Dependent Variable Y

Equation: $y = 1.330 + 0.559X_1 + e$

Appendix IX: Regression Analysis for Talent Development and Knowledge Retention

Model Summary of Talent Development/Knowledge Retention

Talent Development

R	R Square
0.619	0.383

The independent variable is talent development

ANOVA Results for Talent Development

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	77.589	1	77.859	168.720	0.000
Residual	125.084	272	.460		
Total	202.672	273			

a. Predictors: (Constant), X_2-Talent Development

b. Dependent Variable: Y- Knowledge Retention

Coefficients for Talent Development

Model		Coefficients		T	Sig
		B	Std Error		
1	(Constant)	1.174	.126	9.300	.000
	Talent Development, X_2	.565	.044	12.989	.000

a Dependent Variable: Y

Equation: $y = 1.174 + 0.565X_2 + e$

Appendix X: Regression Analysis for Talent Mobilization and Knowledge Retention

Model Summary of Talent Mobilization/Knowledge Retention

Model	
R	R Square
0.603	0.364

The independent variable is talent mobilization

ANOVA Results for Talent Mobilization

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	73.860	1	73.860	156.741	0.000
Residual	129.115	274	.471		
Total	202.975	275			

a. Predictors: (Constant), X_3-Talent Mobilization

b. Dependent Variable: Y- Knowledge Retention

Coefficients for Talent Mobilization

Model		Coefficients		T	Sig
		B	Std Error		
1	(Constant)	1.200	.128	9.353	.000
	Talent Mobilization, X_3	.045	.603	12.520	.000

a Dependent Variable: Y

Equation: $y = 1.2 + 0.045X_3 + e$

Appendix XI: Regression Analysis for Talent Retention and Knowledge Retention

Model Summary for Talent Retention/Knowledge Retention

Model	
R	R Square
0.717	0.514

The independent variable is talent retention

ANOVA Results for Talent Retention

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	104.348	1	104.348	289.892	0.000
Residual	98.627	274	.360		
Total	202.975	275			

a. Predictors: (Constant), X_4-Talent Retention
b. Dependent variable Y-Knowledge Retention

Coefficients for Talent Retention

Model		Coefficients		T	Sig
		B	Std Error		
1	(Constant)	.691	.125	5.547	.000
	Talent Retention, X4	.737	.043	17.026	.000

a Dependent Variable: Y

Equation: $y = 0.691 + 0.737X_4 + e$

Appendix XII: Multiple Regression Analysis

Overall Model Summary for Pooled Independent Variables

Model

R	R²
0.735	0.541

a. Predictors: (Constant), X_1, X_2, X_3, X_4

ANOVA for Pooled Independent Variables and the Dependent Variable

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	109.616	4	61.646	119.515	0.000
Residual	9.056	269	.515		
Total	202.672	273			

a. Predictors: (Constant), X_1, X_2, X_3, X_4

b. Dependent Variable: Y-Knowledge Retention

Coefficients for X_1, X_2, X_3, X_4 against Y

Model		Coefficients B	Std Error	T	Sig
1	(Constant)	.540	.130	4.159	.000
	Talent Attraction, X_1	.051	.066	0.773	.000
	Talent Development X_2	.129	.069	1.872	.000
	Talent Mobilization X_3	.104	.061	1.718	.000
	Talent Retention X_4	.515	.071	7.284	.000

a Dependent Variable: Y

Multiple Regression Equation: $Y = 0.54 + 0.051 X_1 + 0.129 X_2 + 0.104 X_3 + 0.515 X_4 + e$

Appendix XIII: Moderated Multiple Regression (MMR) Model

$Y = \beta o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta o Z + \beta_1 Z X_1 Z + \beta_2 Z X_2 Z + \beta_3 Z X_3 Z + \beta 4 Z X_4 Z + e$

Where: Y   =   dependent variable - knowledge retention

     X_1 =   independent variable – talent attraction

     X_2 =   independent variable – talent development

     X_3 =   independent variable – talent mobilization

     X_4 =   independent variable – talent retention

     βo =   constant or intercept

     β_1 =   regression coefficients for X_1

     β_2 =   regression coefficients for X_2

     β_3 =   regression coefficients for X_3

     β_4 =   regression coefficients for X_4

     Z   =   moderating variable – top management commitment

     XiZ   =   Interaction term of top management commitment with each of the independent variables:

     $X_1 Z$ =   Interaction term of top management commitment with talent attraction

     $X_2 Z$ =   Interaction term of top management commitment with talent development

     $X_3 Z$ =   Interaction term of top management commitment with talent mobilization

     $X_4 Z$ =   Interaction term of top management commitment with talent retention

     e   =   error term

Appendix XIV: Regression for Effect of Top Management Commitment on Talent Management Practices and Knowledge Retention

Overall Model Summary

Indicator	Coefficient
R	0.772
R Square	0.595

a. Predictors: X_1Z, X_2Z, X_3Z, X_4Z

ANOVA Results for Overall Effect of TMC

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	120.636	4	30.159	98.892	0.000
Residual	82.037	269	.305		
Total	202.672	273			

a. Predictors: X_1Z, X_2Z, X_3Z, X_4Z

b. Dependent Variable Y

Coefficients for Moderating Effect of TMC

Dependent Variable	Predictor Variable(s)	Standardized Coefficients Beta	R^2	F	Sig
Knowledge Retention	X_1Z	.507	.712	281.474	.000
	X_2Z	.505	.711	277.472	.000
	X_3Z	.505	.711	279.383	.000
	X_4Z	.591	.769	396.012	.000

X_1Z - interaction term between talent attraction and top management commitment

X_2Z - interaction term between talent development and top management commitment

X_3Z - interaction term between talent mobilization and top management commitment

X_4Z - interaction term between talent retention and top management commitment

Appendix XV: Model for Effect of Moderating Variable on Independent Variables

Regression Results for Independent Variables* Moderating Variable

Variable	Beta	Std. Error	T	Sig.
Constant	1.472	0.072	20.532	0.000
Talent Attraction X_1Z	0.030	0.020	1.539	0.125
Talent Development X_2Z	0.011	0.020	0.540	0.225
Talent Mobilization X_3Z	0.012	0.018	0.677	0.499
Talent Retention X_4Z	0.116	0.021	5.465	0.000

a. Constant: Dependent variable (Y)

b. Independent variables*Moderating variable (X_1Z, X_2Z, X_3Z, X_4Z)

Model: $Y = 1.472 + 0.030X_1Z + 0.011X_2Z + 0.012X_3Z + 0.116 X_4Z + e$.

Appendix XVI: Correlation Analysis Results

Pearson Correlation Analysis Results among Talent Management Practices (X_1, X_2, X_3, X_4 and Knowledge Retention (Y)

	Y	X_1	X_2	X_3	X_4
Pearson Correlation Sig.(2-tailed) For:	1				
TA (X_1)	.551(**)	1			
	.000				
TD (X_2)	.619(**)	.752(**)	1		
	.000	.000			
TM (X_3)	.603(**)	.565(**)	.706(**)	1	
	.000	.000	.000		
TR (X_4)	.717(**)	.663(**)	.722(**)	1	
	.000	.000	.000	.000	
Knowledge Retention (Y)	1	.551(**)	.619(**)	.603(**)	.717(**) 1
	.000	.000	.000	.000	.000

** Correlation is significant at the 0.01 level (2-tailed). Only statistically significant correlation coefficients were highlighted.

Appendix XVII: Tests of Normality Results

Test of Normality on Knowledge Retention/Talent Attraction

	Shapiro-Wilk Test		
	Statistic	df	Sig.
X_1	.966	276	.463

Test of Normality on Knowledge Retention/Talent Development

	Shapiro-Wilk Test		
	Statistic	Df	Sig.
X_2	.974	274	.387

Test of Normality on Knowledge Retention/Talent Mobilization

	Shapiro-Wilk Test		
	Statistic	Df	Sig.
X_3	.982	276	.384

Test of Normality on Knowledge Retention/Talent Retention

	Shapiro-Wilk Test		
	Statistic	Df	Sig.
X_4	.987	276	.608

Test of Normality on Knowledge Retention/Top Management Commitment

	Shapiro-Wilk		
	Statistic	Df	Sig.
Z	.988	276	.615

Appendix XIII: Sample Size Determination

The sample size was calculated as follows:

$$N = \frac{Z^2 \, p \, q}{d^2}$$

N = the desired sample size (if target population is greater than 10,000)

Z = the standard normal deviate at the required confidence level.

P = the proportion of the target population estimated to have the characteristics

being measured.

q = 1- p

d = the level of statistical significance set.

$$N = \frac{(1.96)^2 \, (.50) \, (.50)}{(.05)^2} = 384$$

N= 384 (as population of employees in government ministries >10,000).

The sample size (384) was then divided by the number of selected ministries.

384/7 = 54.85 which was rounded off to 55.

55 questionnaires per ministry.