

**EFFECT OF HUMAN CAPITAL MANAGEMENT ON EMPLOYEE  
PERFORMANCE IN PUBLIC TEACHING AND REFERRAL HOSPITALS IN  
KENYA: A CASE OF JARAMOGI OGINGA ODINGA TEACHING AND  
REFERRAL HOSPITAL**

**BY**

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**DEPARTMENT OF BUSINESS ADMINISTRATION  
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## **DECLARATION**

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

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## **DEDICATION**

To my dear parents Joseph Trensa Mutiti, Eliza Robi, my brothers and sisters Joash Muniko, Josia Trensa, Nchagwa and others. Thank you so much for your valuable support

## **ACKNOWLEDGEMENT**

First and foremost, I would wish to thank the Almighty God for his love, blessings, favour, gift of a healthy life and the opportunity to be. May all the glory and honor be to his name always. I wish to sincerely thank my supervisors, Dr. Charles Ondoro for his support, guidance, encouragement, patience, availability for consultation at short notices and his understanding may the Almighty God bless you all abundantly and grant you desires of your heart. I am extremely grateful to my Dad Joseph Trensa Mutiti and my uncle Nelson Marwa for encouraging me to pursue further studies in Human Resource Management and for taking the extra burden of undertaking financial responsibilities in support of my studies and their valuable time while pursuing this demanding study.

God bless you all.

## ABSTRACT

Kisumu County Annual Development Plan 2017-2018 reports that, there are 120 public health facilities consisting of one county referral hospital, six sub-county hospitals and 113 primary care facilities. The current health care staffing levels in the county is represented by a “nurse to population ratio” of 1:1697 and a doctor to population ratio of 1:38511. Kisumu County, compared to other counties in Kenya, has topped from 2011-2017 show that inadequate medical services contributes a great deal to Kenya. The county’s health statistics in a population of 984069 look grim. This state of affairs about health and medical services in Kisumu County has been attributed to delayed and underfunding from national government. No links have been made to the management of the medical facilities. Investigations into role of professionalism, efficiency and effectiveness in activities of the public hospitals have not been done. Studies elsewhere and in other contexts close to these areas have focused on medical staff of health institutions. However the studies have not covered in depth human capital management (HCM) and its outcomes of efficiency, effectiveness and work quality by employees. Knowledge is lacking on effect of workforce optimization on employee efficiency, effect workforce optimization on employee effectiveness and workforce optimization on employee work quality with regard to public teaching and referral hospitals one of which is Jaramogi Oginga Odinga Teaching and Referral Hospital in Kenya. The studies have not been specific on workforce optimization (WO) as an element of HCM to gain deeper insights. Knowledge is not evident on effect of WO on employee efficiency (EFY), on employee effectiveness (EFS) and on employee work quality (EWQ). This study sought to determine effect of HCM on employee performance in public teaching and referral hospitals in Kenya. Specifically the study sought to investigate effect of WO on EFY, determine effect of WO on EFS and ascertain effect of WO on EWQ. The study was anchored on Resource Based View Theory and Human Capital Theory. The study adopted a correlation design. Target population was 72 senior administrative officers of Jaramogi Oginga Odinga Teaching and Referral hospital (JOOTRH). Saturated sample was used. It was a census study given that the population is small. Both primary and secondary data was used. Primary data was collected from the respondents using structured questionnaire. Secondary data was gathered relevant documents in the custody of the hospital and government available in libraries and other places. Pilot test data from 7 respondents was used to test reliability of instrument. Reliability of the research instrument was ascertained at Cronbach’s Alpha of .789, .801, .822 and .739 for WO, EFY, EFS and EWQ respectively. Validity was ascertained by exposing instrument to subject, practice and research experts for critique. Regression coefficients were; (B = 0.913,  $p < 0.05$ ), (B = 0.953,  $p < 0.05$ ), (B = 0.374,  $p < 0.05$ ) for WO on EFY, WO on EFS, and WO on EWQ respectively.  $R^2 = .133$ . These results show that WO has a positive significant effect on EFY, EFS and EWQ while HCM as constructed on WO accounts for 13.3% variation in performance of employees of JOOTRH . It is concluded that WO predicts EFY, EFS and EWQ and that HCM as a unit contributes to employee performance. The study recommends enhancement of WO efforts. Study is expected to benefit policy making in government, the sector of health and medical services and the hospitals in particular. Additionally, researchers may base their future research on the study.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

EFS	Employee Effectiveness
EFY	Employee Efficiency
EWQ	Employee Work Quality
GOK	Government of Kenya
HCM	Human Capital Management
HCT	Human Capital Theory
IT	Information Technology
JOOTRH	Jaramogi Oginga Odinga Teaching and Referral Hospital
NSSF	National Security Fund
NSTL	National Science and Technology Library
RBV	Resource Based View
RBV	Resource Based View
WO	Workforce Optimization
WHO	World Health Organization

## OPERATIONAL DEFINITION OF TERMS

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

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

**Performance appraisal and recognition** – The formal system used by public hospitals to periodically evaluate its employee performance.

**Training and development**- In this study, training and development was used to refer to the formal activities designed by public universities to help its employees acquire the necessary skills and knowledge to perform current or future jobs as provided for in the relevant policies.

**Employee Effectiveness:** The degrees to which objectives are achieved and the extent to which targeted problems are solved by employees within an organization

**Employee Efficiency:** The rate at which resources are utilized by employees to realize results.

**Employee Performance:** Ability of an employee to accomplish his or mission based on the expectations of an organization.

**Workforce Optimization:** Refers to decisions and activities that integrate employee efforts with automation improving communication between managers and employees, monitoring performance analytics, matching skills and tasks, scheduling tasks and assignments, deploying tools to drive results and, automating time and attendance

# **CHAPTER ONE**

## **INTRODUCTION**

This chapter presents the background to the study, statement of the problem, research objectives, research questions, scope of the study, justification of the study, conceptual framework as well as highlighting the contextual framework of the study, which is public teaching and referral hospitals in Kenya.

### **1.1 Background to the Study**

Human capital management (HCM) is a business philosophy that emphasizes the enhancement of employees while viewing them as a quantifiable asset whose future value can be increased through investment (Griffin and Moorhead, 2014). Employees are perceived as assets that can be provided with clear performance expectations, against which they can be rated and rewarded based on their progress over time. The concept of human capital management is getting wider attention globally with increasing globalization and the saturation of the job market due to the recent downturn in the various economies of the world. Human capital management (HCM) is a set of practices related to people resource management. These practices are focused on the organizational need to provide specific competencies and are implemented in three categories: workforce acquisition, workforce management and workforce optimization.

Human capital management (HCM) is concerned with obtaining, analysing and reporting on data that informs the direction of value-adding people management, strategic investment and operational decisions at corporate level and at the level of front line management. The defining characteristic of HCM is this use of metrics to guide an approach to managing people that regards them as assets and emphasizes that competitive advantage is achieved by strategic investments in those assets through employee engagement and retention, talent management and learning and development programmes (Gross, 2015). Human capital management involves providing employees with the tools and training needed to accomplish stated performance goals, as well as metrics for monitoring and assessing the progress made toward these goals.

HCM involves the systematic analysis, measurement and evaluation of how people policies and practices create value. HCM is an approach to people management that treats it as a high level strategic issue rather than an operational matter to be left to the HR people. HCM has been under-exploited as a way of gaining competitive edge. An organization's success is the product of its people's competence. That link between people and performance should be made visible and available to all stakeholders.'

Nalbantian et al (2004) emphasize the measurement aspect of HCM. They define human capital as the stock of accumulated knowledge, skills, experience, creativity and other relevant workforce attributes and suggest that human capital management involves putting into place the metrics to measure the value of these attributes and using that knowledge to effectively manage the organization. HCM is defined by Kearns (2005b) as The total development of human potential expressed as organizational value. He believes that HCM is about creating value through people and that it is a people development philosophy, but the only development that means anything is that which is translated into value.

Human capital is not solely the people in organizations it is what those people bring and contribute to organizational success. Human capital is the collective value of the capabilities, knowledge, skills, life experiences, and motivation of an organizational workforce. Sometimes human capital is called intellectual capital to reflect the thinking, knowledge, creativity, and decision making that people in organizations contribute. For example, firms with high intellectual capital may have technical and research employees who create new biomedical devices, formulate products that can be patented, or develop new software for specialized uses. All these organizational contributions illustrate the potential value of human capital. Becker(2015) expanded the view of human capital by emphasizing that countries managing human capital better are more likely to have better economic results.'

Workforce optimization (WO) is a business strategy that integrates automation, data visibility, compliance on legislation and solving business processes related to staff (Becker, 2015). It consists of a series of strategies that are geared towards employee efficiency. Companies implement these strategies by monitoring a specific positions activity and then assigning appropriate number of employees to meet the forecasted

activity. Industries that commonly adopt workforce optimization practices range through service to manufacturing. Workforce optimization therefore entails scheduling and task assignments, assigning tasks and matching skills, improving communication between managers and employees, monitoring performance analytics along processes, deployment of tools to drive results, automating time and attendance and establishing thresholds for candidates skill sets. According to Gross (2015), workforce optimization results into improved compliance, improved productivity among workers, better customer satisfaction, improved efficiency and savings in costs that enhance revenues.

Employee Performance means the efficiency with which an employee applies resources and the effectiveness with which targets are met as a result (Griffin and Moorhead, 2014). It also includes the quality of output of an employee. Effectiveness is the level of results from the actions of employees and managers. It is a qualitative characteristic that indicates the extent to which targeted problems are addressed and the degree to which preset goals and objectives are achieved by employees. Efficiency on the other hand is about how well resources are applied. Efficient employees and managers complete tasks in the least amount of time possible with the least amount of resources possible by utilizing certain time-saving strategies. Inefficient employees and managers take the long road. Efficiency increases productivity and saves both time and money (Gross, 2015). Work quality is the value of work delivered by an individual, team or organization. This can include the quality of task completion, interactions and deliverables. Work quality is a common consideration in managing the performance of programs, projects, vendors and individuals. When an employee's work quality is low, usually we assume that the employee was not trained properly.

Field results reveal that studies have been conducted around the subject of human capital management and employee engagement have been conducted. Studies conducted by Ravi *et al.*, (2013) Bassiet *al.*, (2007; Bontis and Serenko (2007) and Odhonet *al.*, (2014) addresses issues of human capital management and organizational performance. Mishra *et al.*, (2014), Hayes (2002), Munjuri *et al.*, (2015) and Nzuve and Bundi (2012) have evidence on this subject. Most of the studies focused on investment and mortgage banks, insurance firms, commercial banks and

IT services industry. None of these studies address workforce optimization as a key component of human capital management. Knowledge is therefore lacking on effect of workforce optimization on employee performance, specifically employee efficiency, in public teaching and referral hospitals in Kenya.

More evidence around this subject is available from Wanjala (2015), Oluoch (2007) and Razia (2017) Mwema and Gachunga (2014), (Mollelet *al* 2017), Nadeemet *al* (2013), who focused on performance appraisal and employee performance in County Governments, Banking Industry, and Ministry of Energy and Health sector. The evidence doesn't point out how workforce optimization plays a role. There is lack of evidence on effect of workforce optimization on employee effectiveness in public teaching and referral hospitals.

Additionally, more evidence has been adduced around the area of workforce optimization. Agloba (2012), Womoh et al (2013), Makhamara and Simiyu (2016), Ria (2012) and Ihaenacho and Ebitu (2016), also conducted studies around the concept of human capital management practices focusing on occupational health and safety and employee performance or organizational performance. These studies covered industrial safety/health strategies and productivity, together with relationships among employees, customers and management and how it affects turnover, assessed the effectiveness of these measures in reducing accidents and death; and evaluated impact of accidents and work-related illnesses on then employee safety at work and performance. The studies fell short of covering workforce optimization and employee work quality. Knowledge is lacking on this area in public teaching and referral hospitals.

Knowledge on workforce optimization and its effect on employee performance in terms of employee efficiency, employee effectiveness and employee work quality is important as it can help unravel the challenges faced by various organizations such as public health organizations in Kenya.

Health with its socio-economic underpinnings remains one of the major global challenges and an important obstacle to human capital development. Important international milestones in the struggle for health include the Alma Ata Declaration



on Primary Health Care, Roll Back Malaria, the Abuja and Maputo Declarations, Millennium Summit and many others. These milestones provided the platform for health sector planning and development in the country and as an international yardstick for which progress is assessed (GOK, 2014). According to Kisumu County Annual Development Plan 2017-2018, (CGS, 2018), there are 149 health facilities, 120 of which are public facilities. The 120 public facilities consist of one county referral hospital, six sub-county hospitals and 113 primary care facilities. In addition to the health facilities, health services in the county are also provided by the current 187 existing Community Health Units. The current health care staffing levels in the county is represented by a “nurse to population ratio” of 1:1697 and a “doctor to population ratio” of 1:38511.

1.9.2 Morbidity and mortality Routine data collected at health facilities in the county indicates that the major causes of morbidity in the county are: Malaria (54%) respiratory tract infections (15%) and diarrheal diseases (4%). These 3 preventable illnesses are also the main causes of childhood morbidity in the county. It is important to note that the burden of non-communicable conditions in the county such as cardiovascular diseases, diabetes, cancers, mental health, etc. has not been quantified. The current child mortality rates for the county (NNMR 39/1000 live births, IMR 111/1000 live births, U5MR 159/1000 live births) are among the highest in the county. Majority of these deaths are due to preventable and treatable illnesses. Of importance also is the fact that majority of these childhood deaths are due to an underlying factor of HIV/AIDS and malnutrition.

Review of Kenya’s statistics reveal that Kisumu County has maintained its top ranking as from 2011-2017 as a county where you are more likely to die with medical services contributing a great deal, (Otieno and Mutisya, 2018, March, 25). The county’s health statistics in a population of 984069 look grim (M.o.H, 2017). Table 1.1 reveals the summary. Report on operational status the health sector is a major challenge. There is general acute shortage of staff across the hospitals in Kisumu County and prioritisation in the medical sector is close to impossible since all services rendered are critical. Jaramogi Oginga Odinga Teaching and Referral Hospital experience frequent salary delays. The hospital has a morgue whose capacity is of 24 bodies but often overstretched sometimes upto 80 bodies. It lacks a cold room. The intensive care unit (ICU), with a five-bed capacity is equipped but it is not functioning. The hospital, according to health officials in the county, has five consultants, four medical officers,

six clinical officers and three anesthetists. The orthopaedic technology unit at the facility, according to the health report, does not get adequate tools it requires to make crutches and other equipment.

## **1.2. Statement of the Problem**

Kisumu County Annual Development Plan 2017-2018 reports that, there are 120 public facilities consisting of one county referral hospital, six sub-county hospitals and 113 primary care facilities. In addition to the health facilities, health services in the county are also provided by the current 187 existing Community Health Units. The current health care staffing levels in the county is represented by a “nurse to population ratio” of 1:1697 and a doctor to population ratio of 1:38511. Morbidity and mortality are high. Majority of these deaths are due to preventable and treatable illnesses. Of importance also is the fact that majority of these childhood deaths are due to an underlying factor of HIV/AIDS and malnutrition. Kisumu County, compared to other counties in Kenya, has topped from 2011-2017 show that inadequate medical services contributes a great deal to Kenya. The county’s health statistics in a population of 984069 look grim (M.o.H, 2017). This state of affairs about health and medical services in Kisumu County has been attributed to delayed and underfunding from national government. No links have been made to the management of the medical facilities. Investigations into role of professionalism, efficiency and effectiveness in activities of the public hospitals have not been done. Studies elsewhere and in other contexts close to these areas have focused on medical staff of health institutions. However the studies have not covered in depth Human Capital Management (HCM) and its outcomes of efficiency, effectiveness and work quality by employees. Knowledge is lacking on effect of workforce optimization on employee efficiency, effect workforce optimization on employee effectiveness and workforce optimization on employee work quality with regard to public teaching and referral hospitals one of which is Jaramogi Oginga Odinga Teaching and Referral Hospital in Kenya.

## **1.3 Research Objectives**

The main objective of the study was to establish effect of human capital management on employee performance in public teaching and referral hospitals in Kenya, focusing

on Jaramogi Oginga Odinga Teaching and Referral Hospital. Specific objectives were:

1. To investigate the effect of workforce optimization on employee efficiency in Jaramogi Oginga Odinga Teaching and Referral Hospital
2. To determine effect of workforce optimization on employee effectiveness in Jaramogi Oginga Odinga Teaching and Referral Hospital
3. To ascertain effect of workforce optimization on employee work quality in Jaramogi Oginga Odinga Teaching and Referral Hospital

#### **1.4 Research Hypotheses**

The study was guided by the following hypotheses

H<sub>01</sub> There is no significant effect of workforce optimization on employee efficiency in Jaramogi Oginga Odinga Teaching and Referral Hospital

H<sub>02</sub> There is no significant effect of workforce optimization on employee effectiveness in Jaramogi Oginga Odinga Teaching and Referral Hospital

H<sub>03</sub> There is no significant effect of workforce optimization on employee work quality in Jaramogi Oginga Odinga Teaching and Referral Hospital

#### **1.5 Scope of the Study**

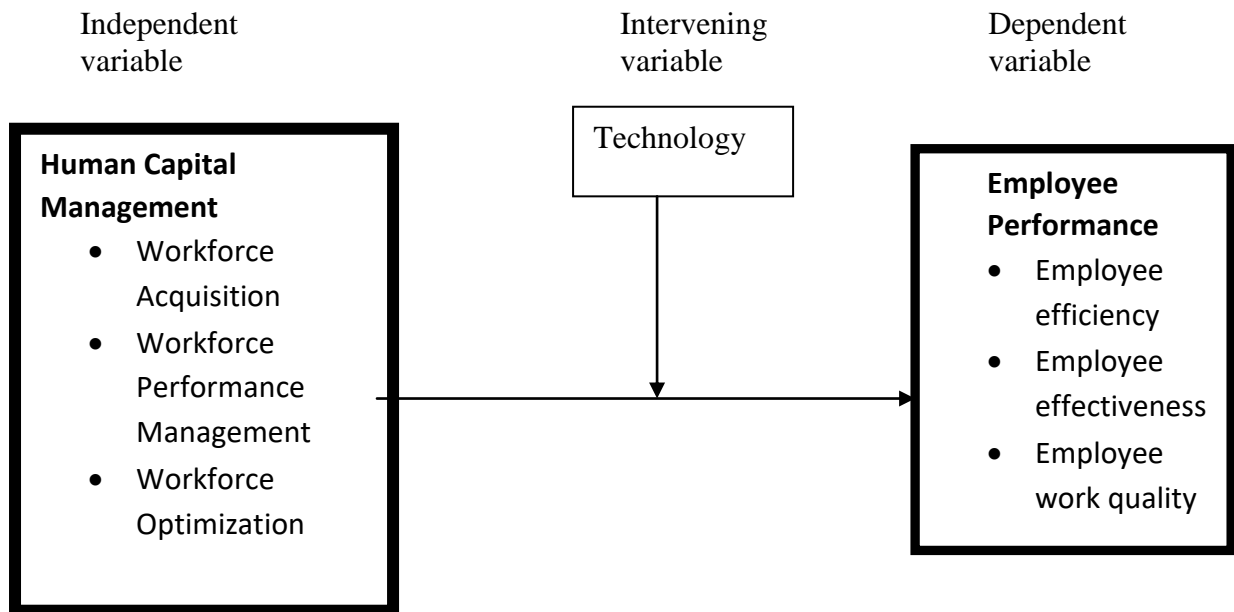
The study was conducted in Jaramogi Oginga Odinga Teaching and Referral Hospital. The hospital is in Kisumu County. It is one of the Public Teaching and Referral Hospitals in Kenya. The study was concerned with the three objectives above and seeks to test the research hypotheses related to the objectives as stipulated. The study is in the discipline of Human Resource Management and was conducted at a point in time. All other factors shall be held constant.

#### **1.6 Justification of the Study**

The results may be helpful to the management of public health institutions as they may provide insights into effect of workforce optimization on employee performance in terms of efficiency, effectiveness and work quality. Policy makers in both levels of government may also benefit from the study. They may use the study to advance better policies regarding human capital management specifically, workforce

optimization. As the study fills the existing gap, future researchers may find gaps to build on following recommendations and limitations that may arise.

### 1.7 Conceptual Framework



**Figure 1.1:** Proposed effect of human capital management (HCM) on employee performance

**Source:** Adapted from Nelbantian et al. (2004) and Becker (2015)

The conceptual framework shows the interplay between dependent variable, employee performance and independent variable, human capital management. It depicts elements of human capital management as workforce acquisition, workforce performance management and workforce optimization. Employee performance is constructed as employee efficiency, employee effectiveness and employee work quality. It is expected that human capital management has effect on employee performance and that this relationship is intervened by a number of factors such as technology.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This chapter reviews relevant literature both theoretically and empirically related to the key variables under investigation in this study. The section advances theory on which study is anchored, presents concepts and empirical evidence on related studies and finally the synthesis from which study gaps have been identified.

#### **2.1 Theoretical Literature**

##### **2.1.1 Human Capital Theory (HCT)**

Human Capital theory (Becker, 1964) is concerned with human capital in terms of the quality, not quantity of the labor supply. The proponents argue that expenditure on training and education is costly, and should be considered as an investment since it is undertaken with a view to increasing personal incomes. According to Human Capital Theory, education is an investment because it is believed that it could potentially bestow private and social benefits. The theory argues that a person's formal education determines his or her earning power. Human capital theorists believe that education and earning power are correlated, which means, theoretically, that the more one is educated, the more one can earn, and that the skills, knowledge and abilities that education provides can be transferred into the work in terms of productivity. The theory suggests that education or training raises the productivity of workers by imparting useful knowledge and skills. The proponents of the theory argue that firms should invest significantly to develop unique and non-transferable (that is firm-specific) skills through extensive training initiatives. This theory was used to anchor this study as it expressly explains the Human capital view which the study seeks explore empirically. The theory points at human capital management (HCM) outcomes such as increased productivity. The study sought to explore effect of HCM on Employee Performance.

##### **2.1.2 Resource Based View Theory (RBV)**

Resource Based View as a theory was proposed by Prahalad and Hamel (1990). The theory argues that the organizational resources and capabilities that are rare, valuable, non-substitutable, and imperfectly imitable form the basis for a firm's sustained competitive advantage. It suggests that the firm can secure a sustained competitive advantage through facilitating the development of competencies that are firm specific,

produce complex social relationship; are embedded in a firm's history and culture, and generate tacit organizational knowledge. This theory was used to explain the study in that human capital management aims at handling the human resources from a different perspective treating them as assets to be harnessed and developed. Human capital is the resource in the context of the study and managing it increases its value for better output in productivity, efficiency, effectiveness and work quality on the part of employees.

## **2.2 The Concept of Human Capital Management**

Human Capital Management (HCM) involves the systematic analysis, measurement and evaluation of how people policies and practices create value. It is 'an approach to people management that treats it as a high level strategic issue rather than an operational matter to be left to the HR people. HCM has been under-exploited as a way of gaining competitive edge. An organization's success is the product of its people's competence. That link between people and performance should be made visible and available to all stakeholders. **Human capital management** (HCM) is a set of practices related to people **resource management**. These practices are focused on the organizational need to provide specific competencies and are implemented in three categories: workforce acquisition, workforce **management** and workforce optimization.

Human capital management (HCM) is concerned with obtaining, analysing and reporting on data that informs the direction of value-adding people management, strategic investment and operational decisions at corporate level and at the level of front line management. The defining characteristic of HCM is this use of metrics to guide an approach to managing people that regards them as assets and emphasizes that competitive advantage is achieved by strategic investments in those assets through employee engagement and retention, talent management and learning and development programmes.

Nalbantian et al. (2004) emphasize the measurement aspect of HCM. They define human capital as the stock of accumulated knowledge, skills, experience, creativity and other relevant workforce attributes and suggest that human capital management involves 'putting into place the metrics to measure the value of these attributes and

using that knowledge to effectively manage the organization. HCM is defined by Kearns (2005) as 'The total development of human potential expressed as organizational value.' He believes that HCM is about creating value through people' and that it is a people development philosophy, but the only development that means anything is that which is translated into value.

Human capital is formed by aptitudes, competences, experiences and skills of internal members of the organizations (Bontis *et al.*, 2002). Pil and Leana (2009) define Human capital as an individual's cumulative abilities, knowledge and skills developed through formal and informal education and experience. From an organizational perspective, human capital is the result of a firm's deliberate investment through the selective hiring of employees with high general skills (or formal education) plus a firm investment in training of more specific skills through in-house training activities (Skaggs and Youndt, 2004). Human capital is formed by aptitudes, competences, experiences and skills of internal members of the organizations (Bontis, 1999; Bontis *et al.*, 2002).

Sometimes human capital is called intellectual capital to reflect the thinking, knowledge, creativity, and decision making that people in organizations contribute. For example, firms with high intellectual capital may have technical and research employees who create new biomedical devices, formulate products that can be patented, or develop new software for specialized uses. All these organizational contributions illustrate the potential value of human capital. Becker (2015) expanded the view of human capital by emphasizing that countries managing human capital better are more likely to have better economic results. Human capital is not solely the people in organizations. It is what those people bring and contribute to organizational success. Human capital is the collective value of the capabilities, knowledge, skills, life experiences, and motivation of an organizational workforce.

Sometimes human capital is called intellectual capital to reflect the thinking, knowledge, creativity, and decision making that people in organizations contribute. For example, firms with high intellectual capital may have technical and research employees who create new biomedical devices, formulate products that can be patented, or develop new software for specialized uses. All these organizational

contributions illustrate the potential value of human capital. Becker(2015) expanded the view of human capital by emphasizing that countries managing human capital better are more likely to have better economic results.

The importance of human capital in organizations can be seen in various ways. One is sheer costs. In some industries, such as the restaurant industry, employee-related expenditures may exceed 60% of total operating costs. With such significant levels comes an increasing need to measure the value of human capital and how it is changing through HR metrics.

Mayo (2001) argues the essential difference between HCM and HRM is that the former treats people as assets while the latter treats them as costs. Kearns (2005) believes that in HCM people are value adders, not overheads' while in HRM people are (treated as) a significant cost and should be managed accordingly. HCM is clearly seen and respected as an equal business partner at senior levels and is holistic, organization-wide and systems-based as well as being strategic and concerned with adding value.

The concept of human capital can be categorized by each perspective of academic fields. The first viewpoint is based on the individual aspects. Most of researchers have accepted that his thought viewing the capacity of human being is knowledge and skills embedded in an individual (Beach, 2009). Similar to his thought, a few researchers show that the human capital can be closely linked to knowledge, skills, education, and abilities (Garavan et al., 2001; Youndt et al., 2004). Rastogi (2002) conceptualizes the human capital as 'knowledge, competency, attitude and behavior embedded in an individual'.

There is the second viewpoint on human capital itself and the accumulation process of it. This perspective stresses on knowledge and skills obtained throughout educational activities such as compulsory education, postsecondary education, and vocational education (De la Fuente and Ciccone, 2002). Despite the extension of that concept, this perspective neglects that human being would acquire knowledge and skills throughout his/her own experience.



The third viewpoint is closely linked to the production-oriented perspective of human capital. Frank and Bemanke (2007) define that human capital is an amalgam of factors such as education, experience, training, intelligence, energy, work habits, trustworthiness, and initiative that affect the value of a worker's marginal product. Considering the production-oriented perspective, the human capital is the stock of skills and knowledge embodied in the ability to perform labor so as to produce economic value (Sheffin, 2003). Furthermore, some researchers define that human capital is the knowledge, skills, competencies and attributes in individuals that facilitate the creation of personal, social and economic well-being' with the social perspective (Rodriguez & Loomis, 2007).

Workforce optimization (WO) is a business strategy that integrates automation, data visibility, compliance on legislation and solving business processes related to staff (Becker, 2015). It consists of a series of strategies that are geared towards employee efficiency. Companies implement these strategies by monitoring a specific positions activity and then assigning appropriate number of employees to meet the forecasted activity. Industries that commonly adopt workforce optimization practices range through service to manufacturing. Workforce optimization therefore entails scheduling and task assignments, assigning tasks and matching skills, improving communication between managers and employees, monitoring performance analytics along processes, deployment of tools to drive results, automating time and attendance and establishing thresholds for candidates skill sets. According to Gross (2015), workforce optimization results into improved compliance, improved productivity among workers, better customer satisfaction, improved efficiency and savings in costs that enhance revenues.

### **2.3 The Concept of Employee Performance**

Employee Performance implies to the level at which an employee applies resources and meets targets and quality of output. According to Gross (2015), it is about, quality of employee's work, efficiency and effectiveness. Work quality is the value of work delivered by an individual, team or organization. This can include the quality of task completion, interactions and deliverables. Work quality is a common consideration in managing the performance of programs, projects, vendors and individuals. When an employee's work quality is low, usually we assume that the

employee was not trained properly. In other words, quality of work is the accuracy, thoroughness, competence that is displayed in work output.

Ways to improve efficiency include meeting with managers and employees to outline ways to implement efficiency in the workplace and asking for opinions on what the workplace is missing. Efficient employees and managers complete tasks in the least amount of time possible with the least amount of resources possible by utilizing certain time-saving strategies. Inefficient employees and managers take the long road. For example, suppose a manager is attempting to communicate more efficiently (Griffin and Moorhead, 2014). Efficiency and effectiveness are mutually exclusive. A manager or employee who's efficient isn't always effective and vice versa. Efficiency increases productivity and saves both time and money. Employees and managers are often inefficient because they either don't know how to be efficient or do not have the necessary tools to perform tasks efficiently (Gross, 2015).

Employee effectiveness refers to capability of employees to produce a specific, desired effect with minimized costs and in strict compliance with initial requirements. It is when a worker produces a desired outcome in the best possible level. Effectiveness is the level of results from the actions of employees and managers. It is a qualitative characteristic that indicates the extent to which targeted problems are addressed and the degree to which preset goals and objectives are achieved by employees. Labor output acts as a key parameter for measuring employee effectiveness (Quick, Thomas, Joyce, Debra and Jonathan, 2013). For example, a web designer's effectiveness includes the drafted website, which is the labor output of the designer. Higher effectiveness of this employee is reached if the website is designed as close to customer requirements as possible.

Employee effectiveness can be improved through a range of activities that create a better working environment. These activities include training and recertification, better communications, rewarding and remuneration, employee recognition, improved leadership and teamwork, retooling and re-equipment and better corporate culture (Griffin and Moorhead, 2014). Employees and managers who demonstrate effectiveness in the workplace help produce high-quality results. Companies measure effectiveness often by conducting performance reviews. The effectiveness of a

workforce has an enormous impact on the quality of a company's product or service, which often dictates a company's reputation and customer satisfaction.

## **2.4 Empirical Literature**

The empirical evidence adduced in this section relates to fieldwork around the subject of Human Capital Management. The evidence is gathered from around the world and focuses on recent studies on the subject

### **2.4.1 Workforce Optimization and Employee Efficiency**

Studies have been conducted in the field of Human Capital Management and its outputs in various contexts. One such study is by Munjuri, *et al.*, (2015) who studied influence of human capital on the performance of insurance firms and commercial banks in Kenya was being moderated by employee empowerment. Their study adopted a descriptive cross-sectional survey design and a census survey was carried out on Human Resources Managers. Descriptive statistics were computed for organizational data and the findings revealed that employee empowerment did not moderate the influence of human capital on firm performance, but rather had a mediating effect.

Another study was conducted by Odhong *et al.* (2014). They explored effect of human capital management drivers on organizational performance in investment and mortgage banks in Kenya. Their focus was to determine the effect of leadership practices, identify the effect of employee engagement, establish the effect of knowledge accessibility, investigate the effect of workforce optimization and determine the effect of learning capacity on organizational performance. The study concluded that it is possible to use human capital management drivers to benchmark organizational capabilities, identify human capital management strengths and weakness, and link improvements in specific human capital management practices with improvements in organizational performance and obtain sustainable competitive edge.

Human capital investments and employee performance in IT services industry has been explore. The study examined whether human capital investment directed towards employee training was effective in improving employee performance (Ravi *et al.*, 2013). Using a dynamic panel model, the study identified a significant positive

impact of training on employee performance. A unit increase in training is linked to a 2.14 per cent increase in an employee performance. The study also found that general training which an employee can utilize outside the focal firms improved employee performance.

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

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

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

Bassiet *al.*, (2007) did a study on human capital and organizational performance across American Standard Organizations to the relationship between HCM metrics (for example, employee turnover rate) and subsequent organizational performance. The empirical research revealed a core set of HCM drivers that predict performance to

be; leadership practices, employee engagement, knowledge accessibility, workforce optimization and learning capacity.

The studies above covered various areas. Munjuri *et al.* (2015) investigated influence of human capital on performance of insurance firms and commercial banks in Kenya, moderated by employee empowerment. On the other hand, Odhong *et al.* (2014) investigated effect of human capital management drivers on performance of investment and mortgage banks in Kenya. Moreover, Ravi *et al.*, (2013) investigated on human capital investments and employee performance in IT services industry as Nzuve *et al.* (2012) merely determined the extent to which Kenya National Security Fund (NSSF) had adopted the HCM practices. While Bassi *et al.* (2007) investigated on human capital and organizational performance across American Standard Organizations, quite differently, Bontis and Serenko (2007) investigated on the moderating role of human capital management practices on employee capabilities of knowledge management in North American financial service institutions.

The studies above have covered various contexts and investigated human capital management (HCM) and its various outputs. The studies cover human capital, human capital management drivers and human capital investments linking these to employee empowerment, employee capabilities, employee performance and organization performance. The studies were conducted in IT, Finance, Banking and Insurance and Social Services industry. The studies are not specific on workforce optimization which is an important aspect of HCM. Knowledge is not evident on effect of workforce optimization on employee efficiency.

#### **2.4.2 Workforce optimization and employee effectiveness**

More studies have been conducted on the subject of human capital management. Munjuri *et al.* (2015) sought to establish whether the influence of human capital on the performance of insurance firms and commercial banks in Kenya was being moderated by social capital. The study adopted a descriptive cross-sectional survey design and a census survey and targeted Human Resources Managers as key respondents. Hypothesis was tested using regression analysis and descriptive statistics computed. The findings revealed that social capital did not moderate the influence of human capital on firm performance, but had a mediating effect. The study concluded

that Organizations can enhance their performance by building their human capital base through rigorous selection procedures and matching the right people with the right jobs.

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

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

Welch (2011) developed a conceptual model, which explains the impact of communication on employee engagement. This model recognizes engagement as a three-component construct. These three components are Kahn's emotional, cognitive and physical dimensions. This model also integrates organizational commitment as an antecedent of engagement. It links senior management leadership communication with employee engagement. It positions commitment to the organization and a sense of belonging to the organization as mediating antecedent engagement variable, while communication related engagement outcomes are awareness and understanding of changing organizational environment and goals. The conceptualized outcomes are innovation, competitiveness and organizational effectiveness, which are promoted by internal corporate communication. Clearly, prior research has shown that internal communication is a key to numerous positive outcomes, including employee engagement, employee commitment and trust between employees and managers.

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

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

The studies above indicate variations in subject, context and methodologies. It is observed that while Munjuri *et al.* (2015) focused on human capital management and performance insurance and commercial banks in Kenya, Mishra *et al.*(2014) investigated internal communication in driving employee engagement in United States of America (USA). On the other hand Nzuve and Bundi (2012) studied the relationship between human capital management practices and performance of Commercial Banks in Kenya differing in their conceptualization and methodologies with Munjuri *et al.* (2015). Hayes (2002) on the other hand investigated internal communication in organizations and employee engagement and used self-administered questionnaires to collect data.

The studies above are rather general on Human Capital Management (HCM). They cover practices of HCM and intervention of internal communication. They concentrate on organizational performance. The studies do not cover workforce optimization as a critical element of Human capital management. Knowledge is lacking on this aspect and its effect on employee effectiveness.

### **2.4.3 Workforce Optimization and Employee Work Quality**

More field evidence is available around the subject of human capital management. Mollel *et al* (2017) purposed to investigate the influence of performance appraisal management practices on employee productivity in Muheza District in Tanzania. A sample of 339 employees participated in the study through questionnaires and interviews. Validity was ensured through expert judgment and reliability ranged between 0.682 and 0.955 Cronbach's Alpha implying all items in the questionnaire were reliable. Descriptive statistics represented mean scores while Pearson Product moment correlation coefficient evaluated potential relationships between the independent and dependent variables. The findings of their study highlighted the fact that performance appraisal tools such as recognition and feedback are vital to employee's performance and indeed influenced employee productivity in the organization. Training and development and promotion did not have a significant effect on employee productivity.

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

In another study, Mwema and Gachunga (2014) explored effects of performance appraisal on employee productivity in the World Health Organization (WHO) focused on Kenya Country Office, Garissa suboffice, and Somalia and Sudan offices based in Kenya. Descriptive design was adopted and regression analysis done to establish the effects of performance appraisal on employee productivity. From their findings, the study concluded that organizations should appraise their employees often through utilized targets, accomplishments, organization goals, time management and efficiency for performance measure purposes as it would lead to increase in



employee's productivity. The study concluded that organizations should establish and adopt performance appraisal systems to aid in providing opportunities to the management in identifying staff training needs, help employees meet performance targets, offer poor performers a chance to improve, help employees on time management through planning and setting of deadlines, enable managers to make informed decisions about promotions and assignments based on applicable facts, improve employee's synergies.

Additional investigation was done by Nadeem *et al.* (2013) who studied impact of performance appraisal on employee's performance and also analyzed that motivation affects the relationship of performance appraisal and employee's performance. Two hypotheses were analyzed using sampling techniques; a sample of 150 employees was selected using simple random sampling among the banks of Dera Ghazi Khan. Data was collected through standard questionnaire; correlation coefficient through IBM, SPSS and Amos Software were used to analyze the data. Results revealed that there was positive relationship between performance appraisal and employee's performance. Motivation as a moderator positively affected the relationship between performance appraisal and employee's performance.

Studies above cover general areas in Human Capital Management. Mollel, Mulongo and Razia (2017) investigated on the influence of performance appraisal management practices on employee productivity in Muheza District in Tanzania. Similarly, Oluoch. (2007), and Wanjala (2015) investigated on performance appraisals and employee performance in commercial banks in Kenya. Quite close is study by Fletcher (2002) who investigated effect of staff appraisal on employee performance in the Ministry of Energy. Nadeem *et al* (2013) differ. They analyzed motivation as an intervening variable that affect the relationship of performance appraisal and employee's performance in banks of Dera Ghazi Khan in Pakistan. Mwema and Gachunga (2014) investigated on effects of performance appraisal on employee productivity in the World Health Organization in Garissa County in Kenya. The above evidence lacks clear focus on constructs of human capital management. In fact they concentrate on performance appraisal and employee organization performance. Government, private sector and world bodies. Evidence is not available on effect of workforce optimization on employee work quality. Knowledge on this is lacking.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

This chapter is about the methodological components which were used to identify, collect and analyze data. It presents the research design, area of study, target population, sample design procedures and sampling techniques to be used, data collection, verification of reliability and validity of instruments, and data analysis.

#### **3.1 Research Design**

This study employed a correlational survey research design because it is concerned with assessing the relationship between human capital practices and employee engagement. Correlation research design is used to establish whether a relationship exists between or among variables under study.

#### **3.2 Area of Study**

The study was conducted in public teaching and referral hospitals in Kenya. The study focused on Jaramogi Oginga Odinga Teaching and Referral Hospital in Kisumu County. The Hospital is situated in Kisumu City along Kakamega Road adjacent to Kibuye open air market.

#### **3.3 Population of the Study**

The total population is 72 senior administrative staff members of the hospital. This population is targeted because they are expected to have knowledge on human capital practices of the hospital as well as related outcomes such as efficiency, effectiveness and work quality of employees.

#### **3.4 Sampling Technique**

The study was a census. All the subjects in the target population were interviewed. In other words, it was a saturated sample study. This is because the population is small.

### 3.5 Data Collection

#### 3.5.1 Data Type and Sources

Both Primary and secondary data was used. This data was collected from respondents and from relevant documents in library and custody of hospital and government.

#### 3.5.2 Data Collection Instrument

Primary data was collected using structured questionnaires that include open ended and Likert scale questions. The study employed self-administered case study approach, with the questionnaires delivered to respective respondents.

#### 3.5.3 Instrument Reliability and Validity

Pilot test data on 7 respondents was used to estimate the reliability of the instruments. Reliability test was determined using Cronbach's Alpha coefficient at a threshold of .70. According to Mugenda and Mugenda (2003), the high coefficient implies consistency. Reliability is the consistency of measurement, or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. Kothari (2004), reliability is the extent to which the study instruments produce consistent results under similar circumstances.

Expert opinion from the researcher's supervisors, practitioners in the field was sought regarding data collection tools to establish validity. The experts comments were expected to help check validity. Pilot data was analyzed for reliability test. Cronbach's alpha test results were as in table 3.1

**Table 3.1: Instrument Reliability**

Scale	No.of Items	$\alpha$
WO	5	.789
EFY	5	.801
EFS	5	.822
EWQ	5	.739

Source: Pilot Test Data (2019)

### 3.7 Data Analysis and Presentation

Data was analyzed using descriptive and inferential statistics. Each objective was actualized through simple regression.

#### Model Specification

##### Objective 1

$$Y_1 = \beta_0 + \beta_1 X + \varepsilon \dots\dots\dots 1.0$$

Where:

$Y_1$  = Employee Efficiency

$X$  = Workforce Optimization

$\beta_0$  = Y intercept in the equation

$\beta_1$  = measure of effect of Workforce Optimization on employee efficiency

$\varepsilon$  = error term

##### Objective 2

$$Y_2 = \beta_0 + \beta_1 X + \varepsilon \dots\dots\dots 2.0$$

Where:

$Y_2$  = Employee Effectiveness

$X$  = Workforce Optimization

$\beta_0$  = Y intercept in the equation

$\beta_1$  = measure of effect of workforce Optimization on employee effectiveness

$\varepsilon$  = error term

##### Objective 3

$$Y_3 = \beta_0 + \beta_1 X + \varepsilon \dots\dots\dots 3.0$$

Where:

$Y_3$  = Employee Work Quality

$X$  = Workforce Optimization

$\beta_0$  = Y intercept in the equation

$\beta_1$  = measure of effect of workforce Optimization on employee effectiveness

$\varepsilon$  = error term

**Source:** Adapted from Fairchild and MacKinnon (2009)

## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

This chapter presents the results and discussions presented on the basis of the research objectives as defined in chapter one. The data is analyzed and summarized in form of frequency distribution tables, using descriptive analysis technique and inferential statistics using multiple linear regression.

#### 4.1 Questionnaire Response Rate

The study was designed to draw responses from 72 senior administrative officers. Of these officers, data was collected from 7 for pre-testing of instrument. Out of the 65 remaining targeted respondents, 60 returned duly filled questionnaires giving a questionnaire return rate of 92.3%. This was considered adequate in line with previous studies.

#### 4.2 General Information

Respondents were asked to specify their departments. The findings were analyzed and presented as presented in Table 4.1.

**Table 4.1: Department of Respondent (N=60)**

<b>Department</b>	<b>Frequency</b>	<b>Percent</b>
Accounting Finance ( )	13	21
Human Resource ( )	10	17
Procurement and Supplies Management ( )	11	28
General Administration ( )	10	17
IT and Others ( ).	16	27
<b>Total</b>	<b>60</b>	<b>100</b>

*Source: Research Data (2019)*

From the findings, 21% of the respondents are in Accounting and Finance Department while 28% of them were in the procurement and supplies department. Moreover 16% of the respondents were IT and other departments and 10% of them in general administration with another 10% in human resource department.

### 4.3 Descriptive statistics of variables

**Table 4.2: Description of Variables(N=60)**

Variable	Obs	Mean	Std.			Comment
			Dev.	Min	Max	
Workforce optimization	60	4.06963	0.7079	2.5	5	High
Employee efficiency	60	3.76449	0.9196	1.5	5	High
Employee effectiveness	60	3.98206	0.6689	2.4	5	High
Employee Work Quality	60	3.66666	0.7171	1.0	5	High

*Source: Research Data (2019)*

From the results in table 4.2, the respondents indicated that workforce optimization was high (mean=4.1; standard deviation [SD] =0.70). Equally, experience with employee efficiency (mean=3.8; standard deviation [SD] =0.92), employee effectiveness (mean=4.0; standard deviation [SD] =0.67) and employee work quality (mean=3.6; standard deviation [SD] =0.72) was that each of them was also high.

### 4.4 Effect of Workforce Optimization on Employee Efficiency

**Table 4.3 Summary Results: Workforce Optimization and Employee Efficiency**

Model	R			Std. Error of the Estimate	Change Statistics		
	R	Adjusted R Square	R Square		R Square Change	F Change	Sig. F Change
1	.304 <sup>a</sup>	.092	.090	2.05652	.092	52.721	.000

a. Predictors: (Constant), Workforce Optimization

*Source: Research Data (2019)*

This table provides the  $R$  and  $R^2$  values. The  $R$  value represents the simple correlation and is 0.304 which indicates a low degree of correlation. The  $R^2$  indicates how much of the total variation in the dependent variable, employee efficiency can be explained by the independent variable, workforce optimization. In this case, 9.2%.

**Table 4.4: Regression Coefficient: Workforce Optimization on Employee Efficiency**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
	(Constant)	.438	.520				.842
Workforce optimization	.913	.126	.304	7.261	.000	.666	1.160

a. Dependent Variable: Employee Efficiency

Source: Research Data (2019)

U

sing the model equation  $Y_1 = \beta_0 + \beta_1 X + \varepsilon$  where  $Y_1$  is employee efficiency,  $X$  is workforce optimization and  $\varepsilon$  is the error term, the equation connecting the variables can be written as: Employee Efficiency = 0.438 + 0.913 \* workforce optimization

The results revealed that workforce optimization had a positive and a statistically significant effect on performance. This implies that for every unit increase in workforce optimization employee efficiency increases by 0.913 units.

#### 4.5 Effect of Workforce Optimization on Employee Effectiveness

*Table 4.5 Summary Results: Workforce Optimization and Employee Effectiveness*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	Sig. F Change
1	.317 <sup>a</sup>	.101	.099	2.04708	.101	58.002	.000

a. Predictors: (Constant), Workforce Optimization

Source: Research Data (2019)

This table provides the  $R$  and  $R^2$  values. The  $R$  value represents the simple correlation and is 0.317 which indicates a low degree of correlation. The  $R^2$  indicates how much

of the total variation in the dependent variable, employee effectiveness can be explained by the independent variable, workforce optimization. In this case 10.1%.

**Table 4.6: Regression Coefficient: Workforce Optimization on Employee Effectiveness**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.294	.386		3.352	.001	.536	2.053
Workforce Optimization	.953	.099	.317	9.626	.000	.559	.947

a. Dependent Variable: Employee Effectiveness

*Source: Research Data (2019)*

Using the model equation  $Y_2 = \beta_0 + \beta_1 X + \varepsilon$  where  $Y_2$  is employee effectiveness,  $X$  is workforce optimization and  $\varepsilon$  is the error term, the equation connecting the variables can be written as:

$$\text{Employee Effectiveness} = 1.294 + 0.953 * \text{workforce optimization}$$

The results revealed that workforce optimization had a positive and a statistically significant effect on employee effectiveness. This implies that for every unit increase in workforce optimization employee effectiveness increases by 0.953 units.

#### 4.6 Effect of Workforce Optimization on Employee Work Quality

**Table 4.7 Summary Results: Workforce Optimization and Employee Work quality**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	Sig. Change	F
1	.379 <sup>a</sup>	.143	.136	2.12373	.143	17.106	.000	

a. Predictors: (Constant), Workforce Optimization

*Source: Research Data (2019)*

This table provides the  $R$  and  $R^2$  values. The  $R$  value represents the simple correlation and is 0.379 which indicates a low degree of correlation. The  $R^2$  indicates how much



of the total variation in the dependent variable, employee work quality can be explained by the independent variable, workforce optimization. In this case 14.2%.

**Table 4.8: Regression Coefficient: Workforce Optimization on Employee Work quality**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.860	.563		3.305	.001	.754	2.965
Workforce Optimization	.374	.139	.179	2.690	.000	.301	.847

a. Dependent Variable: Employee Work quality

Source: Research Data (2019)

Using the model equation  $Y_3 = \beta_0 + \beta_1 X + \varepsilon$  where  $Y_3$  is employee work quality,  $X$  is workforce optimization and  $\varepsilon$  is the error term, the equation connecting the variables can be written as:

$$\text{Employee Work quality} = 1.860 + 0.374 * \text{workforce optimization}$$

The results revealed that workforce optimization had a positive and a statistically significant effect on performance. This implies that for every unit increase in workforce optimization employee work quality increases by 0.374 units

#### 4.7 Effect of Human Capital Management (Workforce Optimization) on Employee Performance

**Table 4.9: Summary results: Effect workforce optimization on employee performance**

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Change Statistics		
					R Square Change	F Change	Sig. Change
1	.365 <sup>a</sup>	.133	.128	2.01363	.133	26.444	.000

a. Predictors: (Constant), workforce optimization

This table provides the  $R$  and  $R^2$  values. The  $R$  value represents the simple correlation and is 0.365 which indicates a low degree of correlation. The  $R^2$  indicates how much of the total variation in the dependent variable, employee performance can be explained by the independent variable, Human Capital Management (workforce optimization) in this case 13.3%.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

This chapter contains a summary of study findings, conclusions and recommendations based on the major findings. Based on limitations arising from the study, it recommends further research.

#### **5.1 Summary of Findings**

From the findings of objective one, it can be summarized that workforce optimization has significant positive effect on employee efficiency. As a result, the null hypothesis **H<sub>0</sub>1** which states that workforce optimization has no significant effect on employee efficiency in JOOTRH in Kenya, is rejected.

From the findings of objective two, it can be summarized that workforce optimization has significant positive effect on employee effectiveness. As a result, the null hypothesis **H<sub>0</sub>2** which states that workforce optimization has no significant effect on employee effectiveness in JOOTRH in Kenya, is rejected

From the findings of objective three, it can be summarized that workforce optimization has significant positive effect on employee work quality. As a result, the null hypothesis **H<sub>0</sub>3** which states that workforce optimization has no significant effect on employee work quality in JOOTRH in Kenya, is rejected

#### **5.2 Conclusions of the Study**

From the results of objective one, the conclusion is that efficiency of employees increases significantly with increase in workforce optimization activities.

Similarly, from the results of objective two, the conclusion is that effectiveness of employees is significantly and positively affected by workforce optimization activities. From the results of objective three, workforce optimization positively and significantly affects work quality of employees.

### **5.3 Recommendations of the Study**

Based on conclusion of objective one, the study recommends that the public teaching and referral hospitals in Kenya especially JOOTRH should enhance their activities OF workforce optimization. The more they optimize workforce, the more the employees' efficiency increases

Based on conclusion of objective two, the study recommends that the public teaching and referral hospitals in Kenya especially JOOTRH should enhance their activities workforce optimization. The more they optimize workforce, the more the employees' effectiveness increases

Based on conclusion of objective three, the study recommends that the public teaching and referral hospitals in Kenya especially JOOTRH should enhance their activities workforce optimization. The more they optimize workforce, the more the employees' work quality increases

### **5.4 Suggestions for Further Research**

The study suggests to future researchers to engage in similar studies in different contexts. The future researches may also study the same phenomenon but use more advanced methodologies different from simple regression approach. They can engage in surveys to stake out the advantages of survey studies.

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## APPENDICES

### Appendix I: Letter of Introduction

TRENSA MARWA

C/O

DEPARTMENT OF BUSINESS ADMINISTRATION

SCHOOL OF BUSINESS AND ECONOMICS

MASENO UNIVERSITY

DATE \_\_\_\_\_

*TO WHOM IT MAY CONCERN*

Dear Sir/Madam

#### **ACADEMIC RESEARCH**

I am a student at Maseno University pursuing Master of Science in Human Resource Management Course. As part of the requirements, I am carrying out this research entitled, “**EFFECT OF HUMAN CAPITAL MANAGEMENT ON EMPLOYEE PERFORMANCE IN PUBLIC TEACHING AND REFERRAL HOSPITALS IN KENYA: A CASE OF JARAMOGI OGINGA ODINGA TEACHING AND REFERRAL HOSPITAL.**” Please assist to answer the questions provided in a questionnaire. Your Identity is not required and the information you provide was treated in strict confidence.

Yours Sincerely

**Trensa Marwa (MSC /BE/00088/2017)**

**Supervisor**

**Dr Charles Ondoro, Maseno University**

**Maseno University**

## Appendix II: Questionnaire

### a) General Information

Department of Respondent

Accounting Finance ( )

Human Resource ( )

Supplies and Supplies Management ( )

General Administration ( )

IT and Others ( ).

### b) Workforce Optimization

Tick one box to indicate the extent to which the following workforce optimization practices take place in the organization

		EXTENT				
	<b>Workforce Optimization</b>	<i>Very High 5</i>	<i>High 4</i>	<i>Moderate 3</i>	<i>Low 2</i>	<i>Very low 1</i>
1	Scheduling task and assignments					
2	Assigning tasks and matching skills,					
3	Enhancing communication between managers and employees,					
4	Monitoring performance analytics along processes,					
5	Deployment of tools to drive results,					
6	Automating time and attendance					
7	Establishing thresholds for candidates' skill sets.					

### c) Employee Performance

Tick one box to indicate the extent to which the following employee performance indicators are witnessed in the organization

		EXTENT				
	<b>Employee Effectiveness</b>	<i>Very High 5</i>	<i>High 4</i>	<i>Moderate 3</i>	<i>Low 2</i>	<i>Very low 1</i>
1	Success with which the employees roll					

	out programmes					
2	Numbers of programmes initiated by employees against numbers planned					
3	Spread of essential services by effort of employees in the organization					
4	Quality of essential services offered by employees in organization					
5	Conformity of employees with requirements set by other bodies relating with the organization					
	<b>Employee efficiency</b>	<i>Very High 5</i>	<i>High 4</i>	<i>Moderate 3</i>	<i>Low 2</i>	<i>Very low 1</i>
11	Reduction of physical resource wastage by employees					
12	Reduction of time wastage in activities by employees					
13	Reduction in number of complaints about delays in service delivery by employees					
14	Increase in coordination of processes of service delivery by employees within the institution					
15	Reduction in numbers of employees in different functions of the institution					
	<b>Employee work quality</b>	<i>Very High 5</i>	<i>High 4</i>	<i>Moderate 3</i>	<i>Low 2</i>	<i>Very low 1</i>
16	Quality of work delivered by team					
17	Quality of work delivered by individuals					
18	Quality of processes that employees are involved in					
19	Accuracy of works and outputs of employees					
20	Reduction in defective services					

**Appendix III: Work Schedule**

**WORK PLAN**

**PERIOD**

**2019**

**Month1Month2Month3Month4Month5**

<b>ACTIVITY</b>					
<b>Problem Identification</b>				■	
<b>Review of literature</b>			■	■	■
<b>Proposal Writing and Presentation</b>			■	■	
<b>Proposal presentation</b>					■
<b>Data collection and data entry</b>					■
<b>Data Analysis</b>					■
<b>Presentation of draft</b>					■
<b>Final draft</b>					■
<b>Submission of project for examination</b>					■

**Appendix IV: Budget**

<b><u>ITEM</u></b>	<b><u>KSHS</u></b>
<b>Stationery</b>	<b>8,000</b>
<b>Literature Review and proposal development</b>	<b>10,000</b>
<b>Data collection</b>	<b>16,000</b>
<b>Data analysis</b>	<b>10,000</b>
<b>Secretarial costs</b>	<b>12,000</b>
<b><u>TOTAL COSTS</u></b>	<b><u>56000</u></b>