UNIVERSITY OF NAIROBI

THE EFFECT OF HUMAN RESOURCE MANAGEMENT PRACTICES ON MASONRY LABOUR PRODUCTIVITY IN THE KENYAN CONSTRUCTION INDUSTRY

A Case Study of NCA1 Contractors in Nairobi City County

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DECLARATION

I **Delores Wekoye Mbati**, do hereby declare that this research project is my original work and has not been presented for the award of a degree in any other University.

Signature…….

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SUPERVISOR'S DECLARATION

This project has been submitted for examination with my approval as a University Supervisor in the Department of Real Estate and Construction Management, School of the Built Environment.

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ABSTRACT

The purpose of this study was to investigate the effect of Human Resource Management (HRM) practices on masonry labour productivity in the construction industry in Nairobi City County. The study was guided by four specific objectives: to establish the extent to which human resource management practices are implemented in the construction industry ; to identify factors affecting masonry labour productivity in the construction industry ; and to investigate the effect of human resource management practices on masonry labour productivity in the construction industry in Nairobi City County. In order to achieve the research objectives, the study adopted a quantitative research technique whereby explanatory research design was applied since very little has been carried out on the topic under investigation, which also involves a relationship between human resource practices and labour productivity. Systematic sampling of construction managers was carried out. A sample size of 105 respondents was obtained, located on 35 construction sites. However, the investigation involved 65 (61.9%) respondents, working on 35 sites that were accessible during the study. Questionnaires were the main research instruments used to collect data from the respondents which formed primary sources of information. The filled-up questionnaires were returned by 43 masons and 22 construction managers. The response rate was therefore 61.4% and 62.9% respectively. Books, journals and the internet provided secondary sources of information.

According to the research results, the HRM practices to be investigated were performance appraisal and reward management; training and development; recruitment and selection; health, safety and welfare; employee engagement and employee relations. Various factors influencing labour productivity were established, which comprised relevant task force, sufficient tools and equipment, conducive environment, and availability of materials. The respondents' views concurred with the fact that HRM practices identified in this study have an effect on the labour productivity. Based on the findings of the investigation, it was therefore, concluded that "There is a direct relationship between Human Resource Management practices and labour productivity in the construction industry in Nairobi City County. Human labour which is the main factor of production in the construction process ought to be given the attention it deserves by ensuring that masonry employees are well taken care off in order to improve the productivity on construction sites. This can only be achieved by

incorporating most of the human resource practices not being practised on construction sites such as recruitment & selection, training & development, performance & reward management, employee relations and employee engagement. Safety, health and welfare, the only practice that is being implemented on most construction sites should be further developed to ensure that all sites embrace it including small residential developments. Implementation of all these practices can only be enforced by the National Construction Authority if labour productivity in the construction industry in Nairobi City County, is to be improved. This success will cause a paradigm shift in the entire construction industry in Kenya from low labour productivity to high productivity.

DEDICATION

This project is dedicated to my sons, Isaac Bryan and Immanuel Ryan and their father Victor Andati. The moments I was away pursuing my studies have yielded fruits, and may your lives flourish as a result.

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May the Almighty God receive all the glory and honour for it is Him who has taken me this far. Indeed, no eye has seen, no ear has heard and no heart has perceived what God has in store for His children whom He loves. Ebenezer!

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ABBREVIATIONS

ANN	Artificial Neural Networks
CEOs	Chief Executive Officers
COTU-K	Central Organisation of Trade Unions of Kenya
DOSH	Director of Safety and Health
HRM	Human Resource Management
IR	Industrial Relations
NCA	National Construction Authority
NCA1	National Constructional Authority Class 1
NCA2	National Constructional Authority Class 2
NHIF	National Hospital Insurance Fund
NSSF	National Social Security Fund
OCB	Organization Citizenship Behaviour
OHS	Occupational Health and Safety
TNA	Training Need Analysis

DEFINITION OF TERMS

Human Resource Management Practices	These are organisational activities directed at managing the pool of human resources, to ensure that they are deployed towards the achievement of organisational goals (Tiwara & Saxena, 2012).
Human Resource Management Systems	A bundle of human resource management practices that have a synergistic link form a human resource management system (Thomas et al.,1991)
Labour Productivity	Labour productivity is the units of work accomplished (as the output of labour) divided by the hours of work (that is, input for the labour), McOliver (2005).
Employee relations	A company's efforts to manage relationships between employers and employees (Bratton et al (2007).
Industrial relations	All the rules, practices and governing interactions between management and their workforce (Chandler et.al.(2007)
Engagement:	The state of emotional and intellectual involvement that motivates employees to do their best work (Armstrong, 2010).
Local Contractor	A Kenyan firm undertaking construction which had either on sole proprietorship or partnership formed within Kenyan laws with 51% of its interest belonging to the Kenyan citizens (Muneria, 2015).
International Contractor:	A construction firm incorporated outside Kenya but registered to work in Kenya with at least 51% of its shareholding being of Kenyan origin (Muneria,2015).

CHAPTER ONE
INTRODUCTION

1.1 Background of the study

Human Resource Management (HRM) is of strategic importance in all organizations. It contributes to the success of the organization and creates competitive advantage for the organization (Rana & Rastogi, 2010). The way HRM practices and policies take shape also affects the employee's experiences of work and the employment relationship (Sambasivan, 2007). HRM is therefore important in any organization. The construction company is no different in this regard. However, the researcher suggests that specific features of the construction company create specific challenges for HRM in that context, which are not widely recognized in the general management, HRM or project management (PM) literatures (Thomas, 2012).

Construction is a process that consists of the building or assembling of an infrastructure. Large scale construction is a feat of multi-tasking. Normally the job is managed by the project manager who acts as the representative of the client/developer (Hills et al., 2008) while the construction manager is tasked with the role of supervising; the construction works, design engineer, construction engineer or project architect (Rojas & Aramvareekul, 2013). For the success of construction of any sustainable development project, many aspects must be taken into consideration, inclusive of planning and management, such as human resource, safety and health, construction delays, the designs of architecture and engineering, material availability and quality; the clients need, and financial or economic limitations.

In this age of rapid growth of globalization, many construction firms focus on the effective use of Human Resource Management (HRM) practices to gain competitive advantage to achieve the organization's objectives and ensure optimal performances among the employees. Construction industry is an important part of the economy in many countries and often seen as a driver of economic growth especially in developing countries. Typically, construction industry contributes to 11% of Gross Domestic Product (GDP) in most developing countries

(RoK, 2003). The Kenyan construction industry is one of the most important sectors in the country's economy whose level of activity is an indicator of the general economic performance of the country. It contributes about 4% of the country's G.D.P and currently employs 80,000 persons. In the last five years, the construction industry has been on decline mainly because the government, who is the sector's largest and most influential client, has reduced its`

development expenditure drastically in line with the prevailing economic climate particularly the structural adjustment program and reduction of donor funds (KNBS, RoK, 2012).

The nature of construction industry, presents challenges and peculiar requirements in the developing nations (Ofori 1999). In order to check on performance and productivity, some measures in the construction industry have to be taken at various stages of socio-economic development. Many countries have set up special agencies to monitor the operations in this industry and harness their potential for improvement, although they have different objectives, responsibilities and levels of authority. The Construction Industry Council, for example in the UK, is a board which was initiated by the players in the construction industry to represent and support these players at national level. However, in developing countries like Kenya the counterpart agencies like National Construction Authority and the National Construction Council of Tanzania (Miles and Neale, 1991) are government agencies controlled and managed by the government. The agencies in developing nations therefore are restricted in their mandate rather than as assigned by the government authorities. In doing so, they are likely to exclude key players in the construction industry especially the masons and casual labourers.

Productivity happens to be a significant aspect of construction industry that may be used as an index for efficiency of production. Productivity is defined as a relationship between output produced by a system and quantities of input factors utilized by the system to yield that output (Mbiti, 2008). Productivity is considered one of the most outstanding factors influencing timely completion of a project and cost control in all construction projects. Efficient management of construction resources can lead to higher productivity that can help to achieve cost and time savings (Sebastian & Raghavan, 2015).

Productivity remains an intriguing subject and a dominant issue in the construction industry, promising cost savings and efficient usage of resources. However, Rundle (1997) identified construction productivity as a cause of great concern. Ghate and Minde, (2016) concurred with Rundle's views in observing that construction productivity seems to have declined. On the other hand, Lawal (2008) reported that in Nigeria, construction workers in the public service have almost zero productivity. Kothari (2004) identified poor productivity of craftsmen as one of the most daunting problems confronting the construction industry especially in developing countries.

Olomolaiye et al (1998) briefly studied labour productivity on construction sites in Nigeria. Their study concluded that there was a need for establishing output figures on various

construction sites through time study techniques. It was concluded that method studies and research results should be disseminated not only to large firms but also to small firms so the most productive working methods (or best practices) could be adopted by operatives, resulting in increased output without necessarily increasing physical effort.

Lim et al (1995) studied factors affecting productivity in the construction industry in Singapore. Their findings indicated that the most important problems affecting productivity were: difficulty with recruitment of supervisors; difficulty with recruitment of workers; high rate of labour turnover; absenteeism from the work site; and communication problems with foreign workers. Olomolaiye et al (1996) studied factors affecting productivity of craftsmen in Indonesia, with their findings indicating craftsmen in Indonesia spent 75 % of their time working productively. Five specific productivity problems were identified: ie lack of materials; rework; absenteeism; lack of equipment; and tools.

Wachira (1999) did a study in Kenya construction firms and found that that labour productivity is affected by many factors including, experience of the workforce; motivation; organisation of the work; type and condition of tools and equipment; and continual monitoring of performance. Tahir *et al*., (2015) observed that a lack of skilled labourers' low amount of pay, working seven days per week without taking a holiday, drawings and specifications alteration during execution of project and poor relations between labour and supervisors were the key issues. In another study, Lamka (2015) identified three major factors that affect labour productivity in masonry and painting namely; lack of training/skills, work planning & scheduling and incompetent supervisors. A critical look at these factors reveals that they are hinged on the human resource management practices. As summed up by Sebastian and Raghavan (2015), lack of proper managerial efficiency is the basic reason for all these issues. Pardo and Fuentes (2003) stated that 15% of productivity loss occurs due to resource management and 25% loss due to working environment. Ghoddousi (2015) revealed that Chief Executive Officers (CEOs) regard major aspects of human resources management as the most effective factors to increase productivity in construction projects. Monetary features of human resource management such as amount, timeliness of payments and remuneration, as well as intrinsic aspects e.g. satisfaction, ethical behaviour, promotion, individual relationships and job security were among the factors perceived by CEOs as the most influential determinant of productivity in road projects in Iran (Makulsawatudom, 2001).

Although many studies have strived to explain the effects of human resource management practices on the performance of employees in the construction companies, a few have carried

out an empirical study on the effect of human resource management practices on masonry labour productivity and none has looked at the moderating effect of employee engagement on labour productivity in the construction industry in Nairobi City County, Kenya. This research was, therefore, to fill the gap by carrying out an empirical study to establish the effect of human resource management practices on labour productivity.

Mbiti (2008) in his study in Kenya found that, there is an abundance supply of semi-skilled and unskilled labour which needs to be utilized. In order to provide social and economic advantage to the population, the construction industry has been under pressure to embrace best practices as one way of creating job opportunities for operatives in the job market. Construction process is an important means of expanding the job market in the economy and therefore every effort should be made to improve labor productivity. An improvement in labor productivity will lead to enhancing project productivity and making it attractive to project sponsors.

The labor productivity on site might be affected negatively by a variety of factors which include; extraneous reasons like adverse effects of the weather, NCA, NEMA, local authorities, stakeholders and legislation. Masu (2006) argues that Kenya being a developing country is not an exception to the trends in other countries which are at crossroads with the building teams due to the later not delivering the projects within the stipulated time.

Delays on site has caused losses on project's profit to the contractor; increased cost to the client and strained the working relationship between the parties in a project. This has been brought about by the lack of adequate information on labor productivity rates in the construction industry in Kenya (Wachira, 1999). The inaccurate determination of activity duration has in most cases led to the incorrect estimation of contract periods. Delays in completion of projects in the construction industry are indicators of productivity problems and hence a big challenge facing the construction industry. An improved labor productivity is one of the key determinants of projects prediction and therefore an important ingredient of construction delivery.

1.1.1 Construction Trades

Gruneberg (1992) asserts that construction trades were undertaken by master craftsmen organized into guilds during the medieval period, between the approximate dates of 1200 to 1600. Each guild represented a different craft, and each craft was based on a different material such as lead, wood or stone. In this way craftsmen were divided into trades. The author further explains that in the twentieth century changes took place in the construction labour force resulting to huge numbers of workers enrolled into various trades after the First World War.

The number of woodworkers increased drastically and in 1973, 13 percent of all employed operatives were carpenters and joiners by far, the largest craft. Painters followed with 9 percent and brick layers 7 percent while electricians, plumbers and other crafts made up the remainder.

Construction materials have evolved with time hence the change from extensive use of timber to brickwork, blockwork and concrete as walling materials. This has caused a paradigm shift from high numbers of woodworkers to high numbers of masons according to National Construction Authority (NCA) workers classification by trades. Masons form the highest percentage of workers at 55.1%, followed by Carpenters at 12.3% and steel fixers at 5.1%. Other trades share the remaining 27.5% as illustrated by the table below.

Table 1.1: NCA Classification of construction workers by trade.

Trade	**Number of workers**	**Percentage**
Masons	72,612	55.1
Carpenters	16,841	12.3
Steel Fixers	6,939	5.1
Supervisors	6,115	4.5
Electricians	5,892	4.3
Painters	4,889	3.6
Welders	4,195	3.1
Plumbers	4,038	2.9
Machine Operators	2,010	1.5
Tile Fixers	1,577	1.1
Drivers	442	0.3
Surveyors	425	0.3
Glaziers	134	0.1

Scaffolders	100	0.1
Interior Decorators	93	0.1
Aluminium Technicians	90	0.1
Asphalt Specialists	85	0.1
Terrazo Fitters	75	0.1
Others	802	0.6

Source: Report on RRI for Registration of Skilled Construction Workers and Site Supervisors (November, 2015) page 16.

1.1.2 Masonry Labor

The layering and joining in building to enable the surface communicate to its intended activity in an extra-ordinary variety, while using construction materials is a process commonly known as masonry. The masonry labor activities in the construction industry include; plastering, mixing mortar, laying blocks/bricks, cutting blocks, tile setting, pointer-cleaning or-sealing, refractory, marble setting, terrazzo laying and finishing. The professionals in this trade work inside and out at substantial heights and ground level and grouting (City of Seattle, 2019).

Masonry workers perform some roles to the building. The following roles were identified during extensive observations conducted in a masonry project and are complemented. The masons perform the tasks of block/brick laying, installation of beams and bars and wire for reinforcement, and set up door frames. The mason may also perform support work, e.g., cementing and building layout (Florez & Castro-Lacouture 2014). The Construction manager is responsible for staffing and sourcing for qualified masons, allocates duties and stations to personnel in the projects. The foreman performs the roles of monitoring the masons and their assistants, the layouts to the buildings, plans and distributes tasks, orders materials and equipment, performs quality control, and harmonizes working areas with other foremen (electrical, plumbing, mechanical) (Castro-Lacouture, 2014).

The construction industry consists of other building trades or crafts which include; the iron or steel trades, cement masons (masonry) trade, carpenters trade, heavy equipment operation trade, pipe and mechanical fitting trade, sheet metal and roofing trade and painting trade. The

masonry trade is the lagest trade with an estimated total labour input which takes up to 50% of the total cost of a project (Loganathan1 and Kalidindi, 2015). Therefore based on the level of labour in masonry trades, due to the high number of workers and the fact that masonry works comprise the bulk of works undertaken on construction projects, the study on HRM practices in masonry labour will explicitly address adequate labour issues in the construction industry.

Kenyan construction industry has attracted large amount of capital over the years in order to mitigate the housing shortage and the infrastructure deficit. This has in-turn created some economic benefit through improvement in construction business and employment creation especially to artisans. Subsequently, a sizeable degree in growth of the Gross Domestic Product (GDP) has been made for the country (Ganesan 1997; Crosthwaite, 2000). Ogunsemi and Jagboro (2006) reinforced this argument while stating that property development industry attracts the era of job creation and growth in monetary value.

The accessibility of labor is extremely urgent and establishes the segment of asset information necessary for the construction works (Sanni and Alabi, 2008). Labor needed for construction works include; Architects, Urban and Regional Planners, Masons, Engineers, Quantity Surveyors, Estate Managers and building artisans like bricklayers/bricklayers, craftsmen, welders, house painters, handymen, circuit repairmen and the preferences. Generally, the huge amount of labor required in construction works are artisans and workers (Sanni and Alabi, 2008). Therefore, the artisans together with the experts in the masonry works as a trade in construction industry represents one of the two noteworthy classes of labor/players required in the industry (Kwame, 2016).

Labor productivity is one of the most important factors that affect the physical progress of any construction project. In order to improve labor productivity, site production should be measured on a regular basis, and then compared to acceptable standard benchmarks. The masonry activities are labor dependent and require a large number of workers with diverse skills. The effect of masonry on labor productivity through determining and quantifying these effects is required for estimating, planning, scheduling, and evaluating performance among others (Han & Lee, 2008).

The determination of labor productivity in masonry construction has not been exhausted explicitly with many studies not quantifying the factors. There are a variety of issues that give rise to this challenge and disagreement in addition to the difficulty of defining and quantifying productivity. The complexity of the construction environment itself and the fact that there are

many different workers with different skills involved in each project, the significant variation in terms of the size of masonry construction projects, and also the different type of methods that have been used for productivity measurement have all made productivity metrics definition for the masonry construction industry a challenging task (Ghebregiorgis and Karsten, 2006). As a result, efforts and research in terms of improving productivity measurements have remained an ongoing task as seen from above. However, there is no study on the influence on productivity of interaction terms, that is, the relation between masons and between masons and site characteristics Huselid, (1995).

1.2 Problem statement

Unlike other industries, construction industry is mainly project-based. The construction projects have the general characteristics of limited budget, schedule, and quality standards with a series of complex and interrelated activities. According to Burke (2010), it requires the cooperation of all project participants that includes clients, directors, designers, contractors, constructors, project managers, project team and consultants. There are many human resource issues that will lead to poor performance of construction projects such as poor project work design and structure, shortage of qualified skilled employees, changing workforce demography, a high rate of employee turnover and high rate of burnout among construction workers (Levy, 2000).

The shortage of qualified skilled employees is also one of the common issues among the construction firms. According to Borcherding (2009), there is a "disturbing trend" in construction in which there is a "growing shortage of skilled workers and experienced managers". He further claimed that "the scarcity of both skilled trades-people and experienced managers will place more emphasis on the need to increase the quality and quantity of training in order to produce more effective and productive workers. Therefore, due to the lack of proper screening process, selection methods and poor recruitment procedure will affect badly on the success rate of the construction projects and therefore lead to low productivity and growth of the construction firm (Enshassi, 2007).

In the construction industry, the labor market is always changing and modifying due to the reduction of qualified workers and also due to the changing demographics of the workforce. One of the factors is due to the aging of construction workforce that is growing older over the long term. Therefore, human resource management has become more important to the

construction industry to overcome the changing workforce demographics (Heizer & Render, 1990).

There is undeniably a high rate of employee turnover in the construction industry nowadays. According to Horner (2011) the two major factors that cause employee termination is "perceived ease of movement" and "perceived desirability" that related to employee's career satisfaction. Employee voluntary and involuntary termination are mainly due to poor job performance, absenteeism or violation of workplace policies, firing or discharge, or leaving the company of her own volition, relocating to a new area or other reasons. The worst consequences of the high employee turnover are the loss of talent, loss of productivity, waste of time and cost to train a replacement. It is estimated that the cost is almost twice of an employee's salary to find and train a replacement, and might damage morale among existing employees.

Despite the concerns on lack of adequate productivity information, little research attention and documentation has been undertaken on construction sites to establish labor productivity data for consideration in project planning, costing and budgeting in the construction industry in Kenya. Therefore, this study seeks to assess the effect of human resource management practices on masonry labour productivity in the construction industries in Nairobi City County.

1.3 Objectives of the Study

The study was guided by a main objective and specific objectives. They are:

1.3.1 Main Objective

The main objective of this study was to determine the effect of human resource management practices on masonry labour productivity in the construction industry in Nairobi City County.

1.3.2 Specific objectives

i. To establish the extent of human resource management practices in the masonry labour within the construction industry.

ii. To investigate the level of Labour Productivity in Masonry works within Nairobi City County.

iii. To identify factors affecting human resource management practices in the masonry labour productivity within construction industry.

iv. To investigate the effect of human resource management practices on masonry labour productivity in the construction industry.

1.4 Research Questions

i. To what extent are the human resource management practices in the masonry labour within the construction industry?

ii. What is the level of Labour Productivity in Masonry works within Nairobi City County?

iii. What factors affect human resource management practices in the masonry labour productivity within construction industry?

iv. What are the effects of human resource management practices on masonry labour productivity in the construction industry in Nairobi City County?

1.5 Hypothesis

The hypotheses for the study were as follows:

Main Hypothesis

H_0: Human resource management practices have no significant effect on masonry labour productivity in the construction industry in Nairobi City County.

H_1: Human resource management practices have a significant effect on masonry labour productivity in the construction industry in Nairobi City County.

Sub hypotheses

Sub hypothesis 1

H_0^1: Reward management practices have no significant effect on masonry labour productivity in the construction industry in Nairobi City County.

H_1^1: Reward management practices have a significant effect on masonry labour productivity in the construction industry in Nairobi City County.

Sub hypothesis 2

H_0^2: Recruitment and selection have no significant effect on masonry labour productivity in the construction industry in Nairobi City County.

H_1^2: Recruitment and selection practices have a significant effect on masonry labour productivity in the construction industry in Nairobi City County.

Sub hypothesis 3

H_0^3: Employee relations have no significant effect on masonry labour productivity in the construction industry in Nairobi City County.

H_1^3: Employee relations have a significant effect on masonry labour productivity in the construction industry in Nairobi City County.

Sub hypothesis 4

H_0^4: Employee engagement has no significant effect on masonry labour productivity in the construction industry in Nairobi City County.

H_1^4: Employee engagement has a significant effect on masonry labour productivity in the construction industry in Nairobi City County.

1.6 Significance of the Study

This research serves as reference for construction firms. The findings led to establishment of appropriate human resource management practices that could increase labour productivity in the construction industries. The results of the investigation could also be used as a useful benchmark tool for other contractors who may not have been adhering to the set standards and best practices.

A competitive advantage should be established as a result of implementing the findings of the study. Human resource management practices contribute significantly to creating a competitive advantage by creating human resources, which are unique and difficult to replicate, therefore, contributing significantly to labour productivity. Human resources are the most important asset of an organisation but very few are able to fully harness its potential.

The findings from the study will be valuable in the construction industry as they prioritize the factors that are associated with effective labor productivity on construction site. This would assist the planning for the resources to be used in the execution of the work and thereby improve labor productivity. The findings will further contribute to the pool of knowledge available in this area of construction project management and would form a useful archival material for reference to other researchers and institutional libraries which will be vital to the present and future scholars in regard to labor productivity.

A body of knowledge on effect of human resource management practices and masonry labour productivity has been created, since few pieces of research have been carried out on this subject. The knowledge shall be used by scholars for teaching purposes; contractors can utilise

it to increase their labour productivity, leading to reduced costs and number of craftsmen in masonry work, in order to create a conducive working environment. Improved labour productivity in construction industry will definitely lead to timely completion of works within project time frame and budget. The outcome of this investigation, shall hopefully contribute to high standards of workmanship as a result of incorporating efficient HRM practices into management of employees in construction companies and sites.

1.7 Scope of the Study

This study investigated the effects of human resource management practices on masonry labour productivity in the construction industry in Nairobi City County. The construction industry involves a wide range of works that include both building and civil engineering works.

The researcher focused on building projects undertaken by contractors registered under National Construction Authority (NCA), classified as NCA1 and with construction sites based in Nairobi City County. This category of construction firms are the industry leaders hence best practices by these firms will be easily benchmarked upon by the other categories of contracting firms.

Building works involve various trades but this research project is particularly investigating masonry trade which is a major activity in the construction industry. The focus on masonry works as a trade is also because of limited time and finance for the field work. Masonry is a building trade that is predominant on construction sites and it is usually a labour-intensive practice in the construction industry. The total labour input of masonry works takes up to about 50% of the total cost of a project (Loganathan1, and Kalidindi, 2015). The area covered in a day is easily measurable hence its productivity easily monitored.

1.8 Assumptions of the Study

The assumptions of this study were:

i. Most of the contractors engaged in formal and informal construction work are registered with the National Construction Authority.

ii. The gang sizes for labor on construction sites vary from one type of operation to another. For the purpose of this study, it was assumed that construction sites engage more or less the same gang sizes for similar operations.

1.9 Limitations of the Study

The researcher encountered the following barriers and challenges. First, the findings could have been influenced by the researcher's subjectivity. The researcher addressed this by comparing her personal views with literary sources so as to minimize subjectivity. Second, some respondents for one reason or another withheld important information from the researcher, forcing the researcher to re-assure the participants of the confidentiality of the information she was obtaining from them so that they freely open up to give the information. Third, the interviews that were used in the data collection despite having many advantages were time-consuming and costly. The researcher overcame this limitation by setting timeframes within which to conduct the interviews so as to save time and reduce costs.

1.10 Chapter Summary

This chapter discussed the purpose and research plan of the study. The discussion was divided into the following sub-headings: Study background, statement of the problem, study objectives, research questions, significance of the study, scope of the study and the study limitation.

CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

This chapter explores the related literature on; the human resource management practices, masonry labour, and the labour productivity in the construction industry. The various areas of literature review will also discuss the theoretical aspects of labour productivity in work place in order to relate it with the construction industry.

2.1 Human Resource Management Practices

Human resources are the intellectual capital, drivers and principal value creators for business investment through the output of the knowledge industry. The distinctiveness of a given firm in their human resources and the systems for managing these human resources efficiently may lead to extra competitive advantage over others in the same industry (Pfeffer, 1994; Barney & Wright, 1998). Consequently, the practices such as attracting, training, retaining and motivating workers is likely to determine the output for any knowledge-based industry.

According to Tessema & Soeters (2006), there are eight different human resource management practices relate to worker performance. These practices include: recruitment and selection, placement, training, compensation, employee evaluation, promotion, grievance procedure and pension or social security. Muneria (2011) developed a criterial in which the human resource management practices were grouped into seven practises whose relationship affects the organizational performance including; human resource planning, recruitment and selection, performance management, reward systems, training and development, career planning and employee relations. However not all the above practices may be applied in the construction industry, therefore some of the practices considered relevant to masonry site workers are as follows: performance and reward management; training and employee development; recruitment and selection; health, safety and welfare; employee relations and employee engagement.

2.1.1 Performance and Reward Management Practices

Armstrong (2010) notes that performance management is a means of getting better results from the whole organization, or teams and individuals within it, by understanding and managing within agreed framework of planned goals, standards and competence requirements.

According to Martinez (2001), performance management is about measuring, monitoring and enhancing the performance of staff, as a contributor to overall organizational performance. In meta-analysis of 104 articles, Ayoade (2000) concluded that performance management is among the top HRM practices. Strong evidence in literature highlights that performance management has positive link with business performance. Chowhan (2016) found that effective performance management system improves employee productivity and quality. The authors argued that performance management systems have a positive link with improved productivity of organisations.

The effective process of monitoring and feedback between employees and supervisors strengthens their relationships (Armstrong, 2006). Performance management is a vital means to offer promotion, recognition, and career development. Armstrong (2006), indicates that developmental purpose of performance management is more productive in influencing organizational performance. Performance management comprises all activities that guarantee that organizational objectives are constantly being attained in an efficient and effective manner (Homayounizadpanah & Baqerkord, 2012). Performance measurement enables an organization to assess and compare performance against benchmarks and review how strategies and practices can be improved to increase efficiency in the organization. It involves clear definition of goals and objectives for the team or individual and performance coaching. Some form of performance review and tracking to chart progress and record achievement are key stages leading to comprehensive performance and development plans.

The major aim of performance management is to establish a culture in which individuals and groups take responsibility for continuous improvement of business process and their own skills and contribution. From the foregoing it can therefore be inferred that the purpose of performance management is to improve performance by creating accountability to goals and objectives of the organization. Performance management not only includes assessing how employees are performing in their jobs, but also aligning individual goals to overall organizational goals, and keeping employees satisfied so you can retain them. According to Taifa Leo Business Report (2011), performance management ensures that everyone is performing their best so resources can be focused on growing the business, this is by making sure that everyone is working on the right goals.

Measurement of employee performance allows the company to provide compensation fairly to the deserving individuals according to certain predetermined criteria like competency, teamwork ability, initiative, soft skills and ethics. In addition to measuring progress of

employee performance toward corporate goals, well-defined performance measurement systems help gauge employee reception, understanding and buy-in for reward systems. This critical feedback can help managers make adjustments necessary to drive improvements and avoid the unanticipated behaviours and actions that negatively impact corporate goals.

Performance measurement enables an organisation to assess and compare productivity against benchmarks and review how strategies and practices can be improved to increase efficient utilisation of human resources in the organisation. The main objective of human resources management is to utilise the human resources in a most optimal manner so that targets can be achieved very effectively and efficiently (Armstrong, 2010). Therefore, performance management should maintain, develop and motivate the people at work to give better results, this will enhance labour productivity. This can be achieved by enabling people to perform their work to the best of their ability, meeting and perhaps exceeding targets and standards. For successful performance management, a culture of collective and individual responsibility for the continuing improvement of business processes needs to be established and individual skills and contributions need to be encouraged and nurtured (Levy & Williams, 2004).

Organisations exist to perform. If people do not perform organisations do not survive. Therefore, performance management is very important in any organisation, because it helps employees to understand how their job contributes to the success of the team, the department, and the company as a whole (Taleo Business Report, 2011).

Performance management involves creating motivation and commitment to achieve objectives; this is because the ultimate goal of performance management is increased performance. Kim & Kim (2001) found that the relationship between developmental goal setting and feedback on one hand, and self-reported performance on the other hand was mediated by intrinsic values of employees. Performance management should therefore help to create motivation and commitment to achieve organisational objectives. According to Macey, Schneider, Barbera, & Young (2009) employee engagement has been receiving increasing attention as a key determinant of performance.

Camp (1989), explains that reward refers to “all of the monetary, non-monetary and psychological payments that an organisation provides for its employees in exchange for the work they perform”. Motivating employees through a good reward system constitutes a difficult and challenging task for general managers as it can positively affect employees’ behaviour toward their jobs and increase their commitment and thus their performance.

Armstrong & Murlis (2007) argue that reward strategies are an important part of an organisation's human resource strategy and should be bundled with other strategies so that they complement and reinforce one another.

According to Camp (1989), there are other means to reward employees that do not just focus on financial compensation. These include the working environment, employee voice, recognition and praise, empowerment, leadership, quality of working life, job design and work-life balance to mention a few. Therefore, good reward systems lead to increased labour productivity because it acts as a motivator. This is because well-rewarded employees feel that they are being valued by the organisations that they are working for. This encourages them to work harder and better because they are aware that their well-being is taken seriously by their employers, and that their career and self-development are also being honed and taken care of by their organisation. Hence it is a constant and continuous challenge for organisations to really work on understanding what factors contribute to improved satisfaction levels of their employees, organisations need to constantly identify the motivators that boost the performance of their workforce, so to ensure their employees are adequately satisfied and hence motivated.

2.1.2 Training and Employee Development

Armstrong (2010), defines training as planned and systematic modification of behaviour through learning events, programmes and instruction, which enable individuals to achieve the levels of knowledge, skill and competence needed to carry out their work effectively. Homayounizadpanah and Baqerkord (2012) examined the Effect of Implementing Performance Management on the Productivity, Efficiency and Effectiveness of Chabahar Municipal Employees. Their result confirmed the hypotheses that employee skills, attitudes and behaviours play a mediating role between Human Resource systems and firm outcomes. Companies intending to gain a sustained competitive advantage should help their employees raise their skills by receiving continuous training so that they can learn new things needed to ensure quality improvement of the products and services of the company. Training therefore leads to an increase in productivity, since it involves developing and enhancing the capacity of the Human Capital in an organization. The more an organization recognizes the intrinsic value of each employee; the more it recognizes that this value can be enhanced through training. Training enhances employee's skills, knowledge, attitude and competence and ultimately worker performance and productivity in organizations (Armstrong, 2010).

Training is therefore a key element for improved labour productivity and hence organizational performance because it increases the level of individual and organizational competences. Scholars such as Haslinda (2009) suggest that human capital are the people in organizations whose assets are of value and can be enhanced through investment which involves the process of developing and retaining the existing knowledge, skills, abilities and competencies of employees. It helps to reconcile the gap between what should happen and what is happening – between desired targets or standards and actual levels of work performance and to improve the performance potential of employees. Although many employers continue to have reservations about the cost and extent of tangible business returns from training, training still remains a major capacity enhancing tool that can ensure continuous improvement.

According to Blanchard & Thacker (2004), a Training Need Analysis (TNA) provides a benchmark (pre-measure) of the skills trainee possess prior to training. This benchmark can be compared to a measure of the skills required in training (post-measure). The TNA should help to identify what business functions or units need training and to determine if the company has the knowledge, skills, and abilities (KSAs) in the work force that are necessary to meet its strategy and be competitive in marketplace. TNA is, therefore, very important to labour productivity since it ensures that training needs are based on employee training needs, organizational needs and the gaps identified that can help increase labour productivity by increasing the output per person.

Armstrong (2010), suggests that individuals and organizations need to meet the demands and challenges of change technology and globalization has led for the need for change adapt to any new and emerging trends. Other factors such as government policies, competition and organizational re-engineering can also influence change in an organization. Through training, change can be managed and by imparting on the employees the knowledge, skills and attitude that will help them cope with the change, employee expertise itself can be expanded through effective programmes of employee development. The development of employee expertise provides a potentially inexhaustible source of ideas for further innovation and increased productivity. The general movement towards downsizing, flexible structures of organizations and the nature of management moving towards the devolution of power to the workforce give increasing emphasis to an environment of coaching and support. Training is necessary to ensure that there is adequate supply of staff that are technically and socially competent and capable of employee development into specialist departments or management positions. There is, therefore, a continual need for the process of staff development, and training fulfils an

important part of this process. Training plays a vital role, improving performance as well as increasing productivity and eventually putting companies in the best position to face competition and stay at the top. This means that there is a significant difference between the organizations that train their employees and those that do not (Cooke, 2000).

Development is defined as the growth or realization of a person's ability and potential through the provision of learning and educational experiences. It's a long-term process. Training and development, therefore, greatly influence labour productivity. Training and development lead to learning. Armstrong (2010) has also defined learning as the process by which a person acquires new knowledge, skills and capabilities. Individuals learn for themselves and from other people. They learn as members of teams and by interaction with their managers, co-workers and people outside the organization. People learn by doing and instruction. Labour productivity is, therefore, enhanced through training and development. The benefits include the continued development of employees in competencies needed by the organization to succeed and increase employee engagement which is a key driver of productivity, retention and performance (Right Management, 2009).

2.1.3 Employees Skills Development

The importance of skills on productivity is a well-recognised fact, and that if skilled labour is unavailable and a contractor is required to complete specific task with less-skilled labour, it is possible that productivity will be affected. In a study in the UK, Arthur (1994) noted that: with the growth of self-employment in the UK construction, it becomes difficult to ensure that the construction workforce receives the necessary training to make it perform competently and let alone improving productivity. This responsibility falls within the remit of the Construction Industry Training Board (CITB) which has a central role to play in ensuring that the workforce receives enough and adequate training. However, it is important to ensure that participation in training is derived from an actual business need. Training could be an extremely expensive way of attempting to remedy a human performance problem if it is not the most appropriate strategy to use.

Arthur (1994) further noted that: After training takes place the difficulty lies in retaining the workforce due to the growth of self-employment. This makes employers reluctant to invest in training as it would not have any benefits to their business but could rather be detrimental due to high labour turnover. In Singapore, the skills level of the workforce is 23%, in Western Australia and America it is 40%, in Hong Kong it is 30% and in Japan it is 60% (MMS 1999).

2.1.4 Recruitment and Selection

Organisations exist to achieve goals and therefore, the human resource is seen as one of the most crucial factors, without which the goals are as good as dead (Gberevbie, 2010). A capable workforce is required, and this can only be obtained through correct recruitment and selection. Bratton & Gold (2007) defined recruitment as the process of generating a pool of capable people to apply to an organisation for employment. Recruitment and selection primarily aim at attracting maximum number of highly talented applicants and selecting the best to achieve competitiveness. Companies using a good recruitment in the hiring process ensure getting the right skilled and qualified people for the right job (Pfeffer, 1998). Therefore, there exists a positive relationship between human resource recruitment and selection and labour productivity.

According to Olowu and Adamolekun (2005), it is becoming more essential to secure and manage competent human resource as the most valuable resource of any organisation, because of the need for effective and efficient delivery of goods and services by organisations, whether in public or private sector. Therefore, for an organisation to realise its goals, appropriate strategies for employee recruitment and selection can result to increased labour productivity. Researchers have agreed that one of the fundamental challenges facing organisations in the area of performance is their inability to put in place strategies capable of recruiting competent employees and retaining them to achieve organisational goals (Gberevbie, 2008). Some of the strategies that can help with recruitment include attraction strategies. According to Armstrong (2010), some of the attraction strategies include employer branding and employer of choice plans, this helps the organisation in attracting the kind of employees that can significantly contribute to its success. Other recruitment strategies include the current trends of use of e-recruitment; e-recruitment or online recruitment involves use of web-based tools to help attracting, advertising, screening and tracking applicants, selecting, and offering jobs or rejecting candidates (Armstrong, 2010). Other recruitment strategies that can help organisations in targeted hiring include use of employee referral schemes, social sites and placement firms.

Gberevbie (2010) is of the opinion that recruitment should be based on appropriate educational qualifications, skills and experience even within the principal of equal regional and gender representation and can act as a basis for enhanced labour productivity. In a study on organisational behaviour, Mc-Oliver (2005) established a relationship between strategy for employee recruitment and performance in an organisation. The studies identified problems

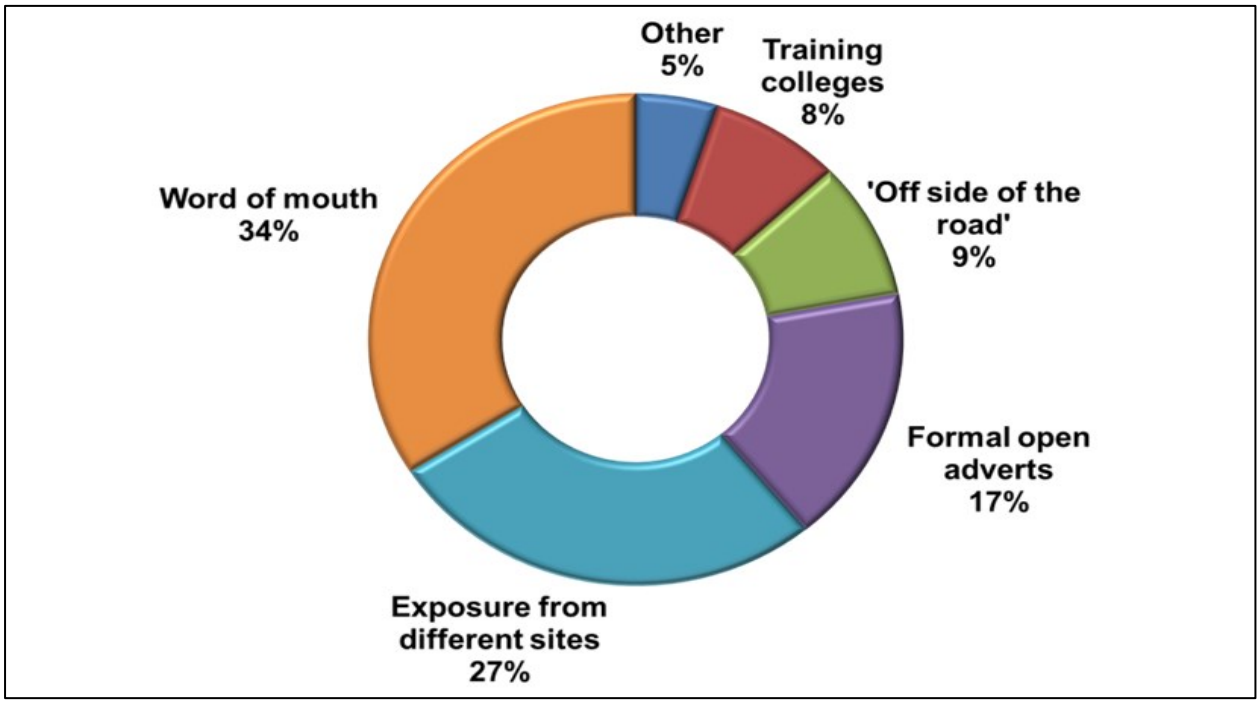
such as nepotism, favouritism, political consideration and national character principle in employee recruitment as basis for poor performance of State corporations' workers in Nigeria. This is a similar challenge in Kenya where considering the multi-ethnic, religious and cultural nature of the society, there is a need for a national character principle in recruitment of employees into the Kenyan Civil Service. Ondrack and Nininger (1984) argues that subjecting recruitment/appointment and/or promotion to national character discriminates against merit and is therefore unfair to certain sections of the country but to the advantage of others. The outcome is that of acquisition of incompetent workforce into the public service and the result is that of poor performance.

Armstrong (2010) articulates one of the ways of improving the recruitment and selection process as through the use of assessment centres, which incorporate a range of techniques that can better forecast the future performance of potential candidates. Other current methods that can help in making better hiring decisions include the use of selection tests such as psychometric tests which are able to provide an objective means of assessing candidate's abilities or characteristics. This can help to ensure correct person job fit and person organisation fit, which are very crucial ingredients for labour productivity.

Mansour (2010) is of the view that there exists a positive relationship between human resource recruitment and selection and labour productivity because organizations using a good selectivity in the hiring process ensure that they get the right skilled and qualified people for the right job**.** According to Sekiguchi (2004), proper recruitment and selection should result in person-job fit and person-organization fit. This will help to ensure that there is a match between the abilities of a person and the demands of a job as well as a match between the person and the organization. These two fits play a key role in ensuring there is labour productivity.

A study on labour and work conditions in the South African construction industry (Construction Industry Development Board, 2015) revealed that 54% of the survey respondents indicated that they did not have formal company recruitment policies for unskilled and semi-skilled workers. The general practice in the industry is to use word of mouth advertising where workers in current employ bring their family and friends. Alternatively, workers are 'poached' from other companies when their competencies have been experienced while working on the same sites. Employees confirmed this when they indicated that they are mainly employed through personal contacts and other informal recruitment methods as shown below. The most common method of recruitment is by word of mouth.

Figure 2. 1: Recruitment Practices



Source: Construction Industry Development Board (2015:18). Labour and Work Conditions in the South African Construction Industry.

2.1.5 Health, Safety and Welfare

Health and safety policies and programmes are concerned with protecting employees and other people affected by what the company produces and does against the hazards arising from their employment or their links with the company (Armstrong 2010). Construction safety and health management therefore deals with actions that managers at all levels can take to create an organisational setting in which workers will be trained and motivated to perform safe and productive construction work. The system should delineate responsibilities and accountabilities. It should also outline procedures for eliminating hazards and identifying potential hazards before they become the contributing factors to unfortunate accidents (Saxena & Tiwari, 2009).

In construction, threats to health and safety come from a myriad of sources such as the physical nature of tasks, the attitudes of employees, the culture of the industry, cost and time pressures, the relatively hostile and uncontrollable production environment, client and management priorities, onerous contracts and a fragmented system of organisation. Whatever the causes, the industry's occupational health and safety (OHS) performance is unacceptably poor and

construction sites remain one of the most hazardous environments in which to work (Scholz, 2007).

The construction industry has therefore earned the reputation of being a dangerous or highly hazardous industry because of the disproportionately high incidence of accidents and fatalities that occur on construction sites around the world (Smallwood & Haupt, 2008). Similarly, Sohail (1999) labels construction industry as very hazardous. Internationally, construction workers are two to three times more likely to die on the job than workers in other industries while the risk of serious injury is almost three times higher.

Health and safety at construction sites deals with both physical and psychological well-being of workers on construction sites and other persons whose health is likely to be adversely affected by construction activities. It is of primary concern to employers, employees, governments and project participants. Health and safety, therefore, is an economic as well as humanitarian concern that requires proper management control (Probst & Brubaker, 2001).

In Kenya, the Director of Safety and Health (DOSH) is tasked with the responsibility of inspecting work places to ensure they comply with health and safety regulations. Employees or their representatives have the right to file a complaint with nearest OHS inspector requesting an inspection if they believe unsafe or unhealthy conditions exist in their work place. They should not be discharged or discriminated against in any way for filing safety and health complaints or otherwise exercising their rights under the law, and an employee who believes he or she has been discriminated against may file a complaint with the nearest OHS inspectorate. Penalties are issued to employers who violate the law. A citation indicating such violations should be issued, normally specifying a time period within which the alleged violation must be corrected and it may have to be prominently displayed at or near the place of alleged violation until it is corrected.

There is an increasing emphasis within the construction industry on people taking responsibility for their own safety and welfare. This demands that all employees have an awareness of the risks to health and safety, some insight into accident causality, and knowledge of the measures that they must take to avoid injury, ill health or death. Although basic site-induction programmes can help to explain the procedures, hazards and responsibilities, only thorough health and safety training can provide employees with the in-depth knowledge needed for safer working (Cascio, 2003).

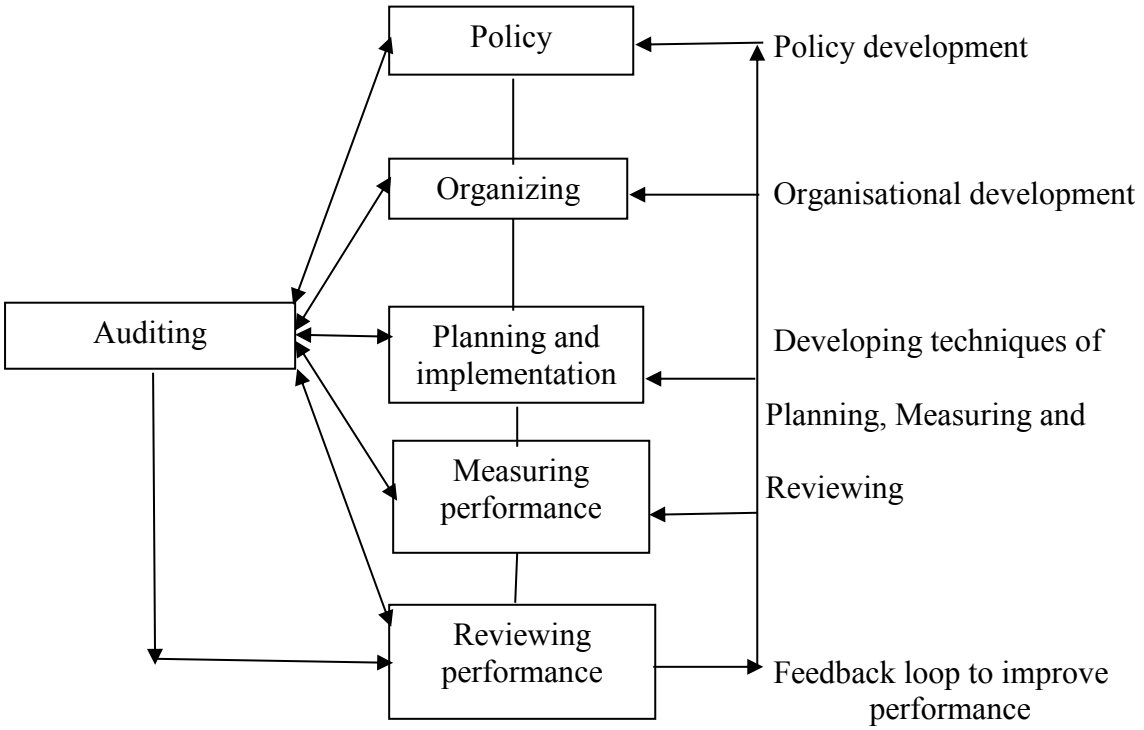


Figure 2. 2: Key elements of successful health and safety management
Source: Loosemore et al., (2003)

Loosemore *et al*. (2003) discusses the macho culture of the construction industry as one that makes intimidation and violence more likely aspects of the workplace culture than in other industries. Workplace violence can arise for a wide range of reasons such as stress caused from overwork or personal problems, cultural differences and intolerance, financial disputes, personal conflicts, drug and alcohol abuse, psychiatric or psychological disturbance or intellectual impairment, dissatisfaction with a service or payment, or opportunism. The industry is characterised with low wages, temporary employment and energy draining activities in a hostile work environment which cause high levels of stress resulting to violence and intimidation by superiors. HIV is transmitted by infected blood and bodily fluid transfer and is a potential health risk in the construction industry, where physical injuries are a problem. Here, employees could be reasonably being expected to come into contact with blood at some time in their working lives. Not only is productivity lost from illness but the fear of the disease by co-workers. The authors are of the opinion that companies need to develop policies to deal with this sickness effectively such as education and communication programs to inform staff of risks and potential hazards; universal precautions to prevent contamination such as cleaning protocols (housekeeping on construction sites), personal protective equipment etc., control plans to minimise exposure and the spread of infection; record keeping systems of all possible incidents.

Loosemore *et al*., (2003) concludes by stating that the industry has had a dreadful safety record and, despite increasing penal legislation, continues to do so. The authors view the systems developed by construction companies as being as good as those in other industries which means that the problem is structural and cultural. It also means that it will be slow and difficult to change. The author is of the opinion that the consideration of safety and health risks in the construction industry has become more widespread in recent years, albeit forcibly. Safety method statements are now common and operation plans almost always include assessments of the risks present in the work place. Furthermore, specialist health and safety managers and professionals often have an input into both the design and construction phases of construction projects, ensuring that health and safety is defined as a core project priority rather than an afterthought to be considered during the construction phase.

Welfare services may be provided for matters concerning employees which are not immediately connected with their jobs although they may be connected generally with their place of work. These matters will include individual services relating to employees' welfare such as private help with counselling on personal problems, assistance with problems of health or sickness and special services for retired employees. Group services may include the provision of social and sporting activities and restaurants. Child-care facilities may be provided for individual employees but on a collective basis (Armstrong 2010).

2.1.6 Employee Relations

Golhar and Deshpande (1997) observes that Employee Relations is a subject that covers industrial relations, employee participation in management decisions communications, plus policies for improving co-operation between management and workers, the control of employee grievances and minimisation of conflict. Industrial relations (IR) may be regarded as all the rules, practices and conventions governing interactions between management and their workforce, normally involving collective employee representations and bargaining. Lawler and Mohrman (2003).) They say that the rules for IR define procedures for setting the wages and conditions of work, for solving disputes and dealing with conflicts and for implementing a wide range of grievance and disciplinary process. Rules may be written or verbally agreed; internally formulated or externally imposed, for example, through government legislation.

Employment in the construction industry can be either formal or informal. Internationally, and in particular in developing countries, informal employment is often characterised by a lack of employment contracts and poor pay, often below the regulated labour rates. Informal workers

largely do not have employment contracts or protection against discriminatory practices such as unfair labour practices, long working hours, low pay, unsafe work environment and unilateral dismissals. They also do not have any social benefits such as sick and annual leave provision offered to their formally employed counterparts.

A trade union is an association of workers formed to protect their interests in employment situations. Unions have very specific objective; they seek better wages and working conditions for their members, greater job security and improved welfare benefits. Hence, unions wish to negotiate with managements on many issues, and may also have wider social aims: higher social security provision, employment protection legislation, more employee participation in management and so on (Haslinda, 2009). Central Organisation of Trade Unions of Kenya (COTU-K) is the dominant national trade union in Kenya. The COTU-K was founded in 1965 upon dissolution of the Kenya Federation of Labour and the African Workers' Congress. The COTU-K is registered and operates within the provisions of the Trade Unions Act (Chapter 233).

2.1.7 Employee Engagement

Gallup defines employee engagement as the involvement with and enthusiasm for work. Guzzo and Noonan (1994) likens employee engagement to a positive employee's emotional attachment and commitment. Hence Employee engagement includes frequent, scheduled and spontaneous dialogue with management on issues concerning workers. This implies inclusion and participation in decision making, which enables workers/ artisans to 'own' these decisions.

Aon Hewitt Global Research on Engagement (2012) defined engagement as the state of emotional and intellectual involvement that motivates employees to do their best work. Engaged employees deliver better performance, which is critical for business success. They understand their role in the business strategy, have a strong connection and commitment to the company, are more involved, and strive to go above and beyond in their jobs; this translates into higher labour productivity. Engaged employees speak positively about an organization, have a desire to be part of the success of the organization and therefore put in extra effort to ensure the success of the organization. Since labour productivity is defined as total output divided by labour inputs, then employee engagement plays a moderating role on labour productivity.

Jarkas et al. (2014) describes engagement as a positive, fulfilling, work-related state of mind characterised by vigour, dedication and absorption. Job satisfaction and commitment to an

organisation are not the same as employee engagement. Employee engagement can therefore be a predictor of labour productivity since it leads to positive behaviour such as taking personal initiative, organisational citizenship behaviour and employee effectiveness. National Workforce Projects, (2007) defines employee engagement as a measure of how people connect in their work and feel committed to their organisation and its goals. People who are highly engaged in an activity feel excited and enthusiastic about their role, say time passes quickly at work, devote extra effort to the activity, identify with the task and describe themselves to others in the context of their task. This, therefore, means that engaged employees are interested in the success of an organisation and also identify with this success.

West and Dawson (2012) identify consequences of poor engagement as burnout, absenteeism, labour turnover, stress and poor physical health and indifference to work to mention a few. Employee engagement, therefore, plays a key role in labour productivity. According to a study by the Gallup Management Journal, only 29% of employees are actively engaged in their jobs. Those "engaged" employees work with passion and feel a strong connection to their company. Moreover, 54% of employees are not engaged meaning that they go through each workday putting time but no passion into their work. According to a report by Harvard Business Review (2013), highly engaged workforce can increase innovation, productivity, and bottom-line performance while reducing costs related to hiring and retention in highly competitive talent markets. A growing body of research has demonstrated that having a highly engaged workforce not only maximises a company's investment in human capital and improves productivity but it can also significantly reduce costs, such as turnover, that directly impact the bottom line. Employee engagement is, therefore, one of the important drivers of labour productivity. Job resources, task variety and career development opportunities have been shown through research to have the strongest positive effect on job state engagement, while the organisational resources, employee welfare and the job resources as well as development opportunities have the strongest positive effect on organisation state engagement (Bondarouk & Rue, 2008). Therefore, it can be concluded that career development is very important in enhancing and increasing both job and organisational commitment.

Engaged employees demonstrate labour productivity that can be measured in terms of lower absenteeism, lower turnover, greater sales and greater customer satisfaction and a decline in the number of industrial actions to mention a few. Some of the employee engagement drivers include; the work itself, quality of working life, total rewards, company practices, management/leadership, career opportunities and working relationship to mention a few.

Organizational culture plays a crucial role in employee engagement. Organizational culture has been defined as the collection of traditions, values, policies, beliefs and attitudes that constitute a pervasive context for everything we do and think in an organization (Ahmad & Ali, 2010). Chandrakumara and Sparrow (2004) found that culture has crucial importance in organizations preferences in developing appropriate structure and methods for HR practices affectivity. Organizational culture involves looking at the values, traditions and basic underlying assumptions that influence how employees behave in an organization. The underlying individual employees' perception of the organization influences their subsequent behaviour which can either be productive as seen through Organisational Citizenship Behaviour (OCB) or unproductive as seen in counterproductive destructive and hazardous behaviour. Armstrong (2010) observes that a good culture has a positive impact on organizational behaviour and can help create positive OCB which in turn can influence organizational performance and can help to produce a high level of business performance. Business performance can be translated into high employee morale and productivity.

2.2 Theories in Human Resource Management

2.2.1 Human Capital Theory

According to Schultz (1961), the Human Capital Theory (HCT) provides an outlook based on the value addition by people within a firm in order to contribute to better performance. This theory regards human being as assets and not a cost within the firm. The human elements in a firm are the ability to learn, change, invent and providing the creativity to ensure the long-term survival. The Human Capital Theory highlights the extra value that someone would add to a firm. Boxall (1996) denotes this as one that confers "human capital advantage".

Human capital is an intangible asset which is not owned by the firm that employs it. People would report at their workplace, perform their duties and when they leave at the end of a working session, they take most of their knowledge and relationships with them. Human capital when viewed from a time perspective consumes time in its key activities; knowledge (activities involving one employee); collaboration (activities involving more than one employee); processes (activities specifically focused on the knowledge

2.2.2 Resource Based View

The resource-based theory provide a new point in explaining the success of a firm where the success is due to joint resources and capabilities owned by a firm and makes it different from

its competitors, Porter's (1985). The theory is based on resources and capabilities within the human resources and the crucial attributes of knowledge, skill, Know-how and talent. The firm would have a competitive advantage over others depending on these resources and capabilities. Therefore the human resources practices in a firm should be utilized in strengthening the existing capabilities and knowledge.

There is strong evidence that firms compete in a dynamic business environment. Firms can achieve a constant competitive advantage over others through their workers according to Barney (1991). The resource based view theory is therefore a basis to explain the competitive advantage that lies within a firm when it effectively value its human resources. In this theory, the resource based view of the firm (Barney, 1991) delivers a major element that if human resource management practices must be difficult to imitate, valuable, rare and non-substitutable in order to create sustained competitive advantage.

2.3 Factors Affecting Human Resource Management Practices

The factors that are likely to affect the implementation of human resource practices including: cultural, economic, legal, gender and many other aspects. According to Budhwar and Baruch (2003), some human resource practices in developing countries are associated with the cultural of the business while Oinas Paivi and Van Gils (2001) identified the circumstantial elements that could affect the human resource competencies. These elements may be external or internal environment, like the company sixe, business ownership, and other corporations, linkages to the business, industries, sectors, regions, and nations.

2.4 Labour Productivity.

2.4.1 Measuring Labour Productivity

Productivity can be measured by establishing the ratio of outputs and inputs since it is often defined as a relationship between output produced by a system and quantities of input factors utilised by the system to produce that output (Mbiti, 2008). Here, the output can be any outcome of the process, whether a product or service, while input factors consist of any human and physical resources used in a process. Webster (1980) referred to productivity as the quality or state of being productive while according to Coelli *et al.* (2005), productivity could be briefly defined as the ratio of the outputs that are produced to the inputs used to produce the outputs as in Equation 1.

Equation 1: $$\text{Productivity} = \frac{\text{Outputs}}{\text{Inputs}}$$

When all inputs to productivity are considered, Equation 1 can be used to calculate the total factor productivity (TFP). Thomas *et al*., (1990) defines that TFP is a major measure to calculate productivity as captured in Equation 2.

Equation 2: $$\text{TFP} = \frac{\text{Total outputs}}{\text{Labour} + \text{Equipment} + \text{Materials} + \text{Energy} + ...}$$

Another common measure to consider in productivity is single factor productivity in which outputs are compared against one particular input (Yi & Chan, 2013). As pointed out by Thomas *et al.* (1990), single factor productivity within the construction context is usually considered in terms of labour productivity, in view of the criticality of labour for construction activities (Yi & Chan, 2013).

Improving productivity is a major concern for any profit-oriented organisation, as it represents the effective and efficient conversion of resources into marketable products and determining business profitability (Wilcox *et al.*, 2000). Consequently, considerable effort has been directed to understanding the productivity concept, with the different approaches taken by researchers resulting in a wide variety of definitions of productivity (Lema, 1995).

While most construction contractors estimate unit rates on the basis of job records, knowledge, and experience, researchers have proposed various structured methods such as regression models and models based on Artificial Neural Networks (ANNs) (Dissanayake *et al*., 2005). For example, regression-based models have been used to study the productivity of the earthmoving and the masonry sectors. On the other hand, ANNs have been used to model the relationship between productivity and the factors that influence it in various trades, such as the production of earthmoving equipment, concrete, formwork, and pipe spool fabrication and installation (Song & AbouRizk, 2008).

Asist (2000) reported that labour productivity might be affected by many factors which are fortunately under the control of the project management. These factors were: experience of the workforce; motivation; organisation of the work; type and condition of tools and equipment; and continual monitoring of performance. Gberevbie (2008) investigated factors affecting labour productivity in building projects of Pakistan and observed that a lack of labourer experience, low amount of pay, working seven days per week without taking a holiday,

drawings and specifications alteration during execution of project as well as poor relations between labourers and supervisors were the key issues.

2.4.2 Measure of Labour Productivity in the Construction Industry

Labour productivity for the construction industry has been defined as the units of work accomplished (as the output of labour) divided by the hours of work (that is, input for the labour). This definition is implied throughout this study McOliver, 2005) while discussing Productivity Improvements on Alberta Major Construction Projects compiled the following list of commonly used definitions to measure productivity in the construction industry:

Labour Productivity = Output/Labour Cost or Labour Productivity = Output/Work Hours

Increased productivity occurs when either output is constant, while input is reduced, and/or input is constant, while either the quantity or quality of output has been increased or enhanced. Increasing productivity will increase output or the quality of output and if at a faster rate competition will also increase. Benefits will be achieved through the value-added products (Mc-Oliver, 2005).

The construction industry is continuously becoming more complicated, with clients having higher expectations and requirements. More commonly, clients are expecting more complex projects to be completed in a shorter period of time. Moreover, the increased competition is causing contractors to complete day-to-day business with very low-profit margins, while taking on more risks (McOliver, 2005). In order to survive in such an industry, decision makers and project managers need to be able to ensure that their projects are being completed productively as possible.

In order for this to take place efficient human resource practices need to be adopted to ensure maximum productivity from the beginning to the end of each project. It is, therefore, necessary to analyse labour productivity in relation to the human resource management practices of a construction firm. Increased productivity in the construction industry can be viewed from two perspectives, the consumer and the contractor.

- From the consumer's perspective, increased productivity lowers costs, shortens construction schedules, offers more value for the money, and achieves better returns on investments.

- From the contractor's perspective, increased productivity leads to a more satisfied customer, while also providing a competitive advantage, and in return leading to faster turnover and increased profits (Ozutku & Ozturkler, 2009).

2.4.3 Level of productivity within the construction industry

The overall level of productivity in the construction context is still unsatisfactory (Fales J1991). In this context, construction has remained a labour-intensive sector in which the workforce is the primary contributor and the major determinant of productivity (Khaled & Remon, 2014). There are three major aspects in the construction field as the main sources of labour productivity. Motivation is one of these aspects and has been regarded as the key to increase the productivity in managing people as postulated by (Berman, 2006).

Garavan, Wilson, Cross and Carbery (2008), emphasise that motivation is among the constructs affecting productivity under the category of manpower. Further, it was opined by Jarkas & Radosavljevic (2013) and later acknowledged by Farndal, et al. (2011) that several factors impact the efficiency of construction operatives, but motivation is among the most important. Additionally, as noted by Dogramaci and Adam (1985), the other two aspects which are central determinants of productivity are the affecting environment and the decisions and policies implemented within the boundaries of the organisation. The mentioned aspects were termed as exogenous factors and the basic elements of the models of construction productivity proposed by Gumerova, Gamayunova and Gorshkov (2017) aspects are further discussed next.

2.4.4 Productivity Model of Construction Labour

The productivity model of construction labour has been studied since 1940 and this technique is still being improved. The model was first developed using statistics, but subsequently went on to address problems associated with this technique by offering alternatives (Enshassi, Mohamed, Mayer & Abed, 2007). Labour productivity studies fall into one of the following two categories: those that estimate unit rates using a combination of factors that affect labour productivity; and those that consider the impact of a single factor (or multiple factors) on productivity.

2.4.5 Masonry Labour Productivity

Masonry practices including framework installation, cement mixing, block/brick laying and cutting, and mortaring are labour intensive and require a large number of employees with various skills. The masonry work is physically demanding where masons and their assistants

often carry heavy materials for long periods of time while on duty (Boschman et al, 2011). The masonry features like block or stone cutting, excessive materials, numerous corners, numerous openings (windows and doors), the use of non-adjustable scaffolds, and the size of masonry units is likely to have impact masonry labour productivity.

In masonry, workers are transferred between different projects and even between different roles to accomplish a specific task. This temporary nature of the work reduces the motivation of workers and creates pressure due to the uncertainty of future assignments, variability of work durations, and lack of opportunities for career growth. Furthermore, the size and number of projects change constantly, making it difficult for contractors to predict future workers and for workers to achieve a work-life balance.

2.5 The Effect of Human Resource Management (HRM) Practices on Labour Productivity.

Some studies show that certain human resource management practices, such as working in teams, greater discretion and autonomy in the workplace and various employee involvement and pay schemes, do motivate workers and generate higher labour productivity. Employees' involvement in terms of delegation of responsibility and systems of collecting proposals from employees may have a positive impact on productivity (Arthur 1994). Cross functional teams, job rotation, quality circles and integration of functions may all contribute positively to labour productivity (Barney, 1991).

a) Formal and informal training leading to efficiency

Human resource management activities providing informal and formal training as well as recruitment and selection have also been shown to have an impact on productivity and market value (Huselid 1995). Recently in the study conducted by Bartol and Srivastava (2002), it has been found that human resource management practices (training, selection, career planning, employee participation, job definition, compensation, performance appraisal) were correlated positively with the employee performance. Further respondents gave highest importance to performance appraisal and then to compensation among individual human resource management practices.

b) Increase productivity to the organisation

Farndale, Hailey, Kelliher and Veldhoven (2011), conducted a study on labour productivity in Iranian construction projects: perceptions of chief executive officers (CEOs) and found out that

CEOs regard major aspects of human resources management as the most effective factors to increase productivity in construction projects. Likewise, monetary features of human resources management such as amount and timeliness of payments and remuneration and intrinsic aspects, for example, satisfaction, ethical behaviour, promotion, individual relationships and job security were among the factors perceived by CEOs as the most influential determinant of productivity in road projects in Iran. They further proposed that investigating major aspects of human resource management (for example, motivation, job satisfaction) for the Iranian construction industry could be a productive approach given the awareness of the significance of role of CEOs in road projects.

c) Time saving in the project implementation

Fey, Bjorkman and Pavlovskaya (2000) carried out a study on importance of measurement of labour productivity in construction in Mumbai region. The results revealed that measurement of labour productivity is helpful in saving the time of the project as well as cost of project without hampering the quality of work. Wachira (2014) conducted a study on labour productivity in the Kenyan construction industry and found out that management factors, particularly in terms of availing materials, adequacy of supervision and motivation of workers are the most important factors affecting labour productivity. She further argued that these factors can be influenced positively by the training of contractors in management skills like planning, scheduling and motivation of workers.

d) Increase in efficiency and effectiveness

According to Jackson, Schuler and Rivero (1989), compensation plays an important role in employee motivation and fair promotion. Employee development practices play an important role in ensuring effectiveness and efficiency in Kenyan organisations. Ivancevich, (2006) observed that there is a need to look at modern human resource management practices that ensure maximum utilisation of human resources in an organisation, and these practices can contribute to the desired transformation in the State corporations.

e) Improved organisational performance.

Sang (2015), investigated the relationship between human resource management practices and labour productivity in state corporations in Kenya. The findings showed that these practices have a positive and significant effect on labour productivity while employee engagement had an overall enhancing effect indicating a strong significant moderation effect on labour productivity. When these human resource management practices were bundled together, they

had a significant effect on Labour productivity and were found to significantly contribute to labour productivity. Muneria (2015) studied the Effect of Human Resource Management Practices on the Performance of Contracting Firms in Kenya: A Case Study of NCA1 Contractors in Nairobi and concluded human resource management leads to improved organisational performance.

2.6 Summary

While introducing the study, the researcher cited Lamka (2015) who identified three major factors that affect labour productivity in masonry including; a lack of training/skills, work planning and scheduling, and incompetent supervisors. A critical look at these factors revealed that they are hinged on the human resource management practices as summed up by Sebastian & Raghavan (2015) that the lack of proper managerial efficiency is the basic reason for all these issues.

Empirical studies suggested that HRM practices contribute significantly to labour productivity (Wright, 2003). Ghoddousi et al. (2015) revealed that CEOs regard major aspects of human resources management as the most effective factors to increase productivity in construction projects. Monetary features of human resource management such as amount and timeliness of payments and remuneration and intrinsic aspects, for example, satisfaction, ethical behaviour, promotion, individual relationships and job security were among the factors perceived by CEOs as the most influential determinants of productivity in road projects in Iran.

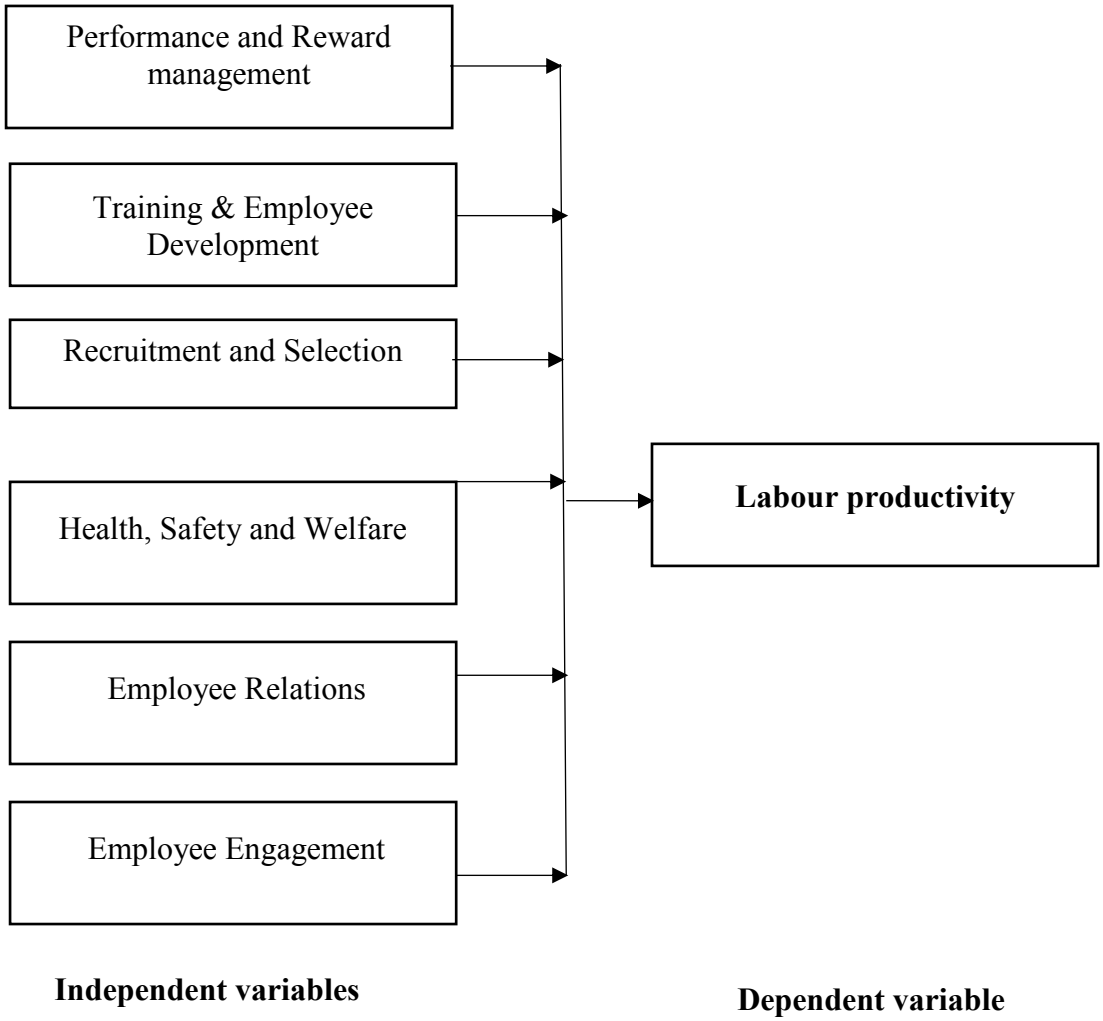
From the foregoing, it is evident that HRM practices influence labour productivity of employees in any industry and more so in the construction industry. This study was based on studying human resource management practices of construction firms on sites where the actual production takes place. Masonry trade was considered for the study due to insufficient time and resources to study all the trades on construction sites in Nairobi City County. The HRM practices that were identified include: performance and reward management; training and employee development; recruitment and selection; health, safety and welfare – employee relations and employee engagement.

2.7 Conceptual Framework

This is a theoretical structure which explains facts and their relationships. It is derived from the study and identifies the concepts included in the complex phenomenon and shows their relationships. The relationships are presented visually in a fashion chart or other schematic

representation. Figure 2.3 illustrates the relationship between the independent variables of the study which are human resource management practices, and masonry employees' labour productivity, which is derived from the dependent variable.

Figure 2. 2: Human Resource Management Practices and Labour Productivity



Source: Researcher's own Field work (2019).

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology used in collecting, analyzing and presenting data. It is organized around five sub-headings namely: research design, study population, sampling and sampling techniques, data collection instruments, data analysis.

3.2 Research Design

A research design can be defined as the structure of a study. It is the core of all the different aspects of any research (Mansour, 2010). Orodho (2003) as cited in Sang (2015) asserts that a research design is a plan of all the conditions and elements for the collection and analysis of data in an objective manner that is in line with the research aims. The study adopted quantitative approach that involved survey research design that supports an explanatory design. According to Cooper (2003) explanatory design method is useful where very few researches have been carried out and there is very little information available in the area of investigation.

Kothari (2004) asserts that explanatory research design is suitable for those studies that seek to determine relationships between variables. According to Philips and Pugh (1987) cited in Pardo and Fuentes (2003), explanatory design focuses on the why questions and this involves developing causal explanations to explain the phenomenon under study when the problem is not very well understood and unstructured. This design was suitable for this study since very little information exists on the subject under study, which also involves a relationship between two variables which are human resource management practices and masonry labour productivity.

The respondents were grouped based on their technical knowledge in the construction sector through the Bio-data obtained prior to the administration of questionnaires. Masonry foremen on live projects with activities in masonry trade were sampled. Masonry trade was chosen because it is among the predominant trades on construction sites where labour-intensive construction is practiced. Masonry labour accounts for 25% of the total labour on a construction site and normally has the highest number of employees on the construction site.

Mugenda & Mugenda (2003) define survey as an attempt to collect data from members of a population in order to determine the current state of the population with respect to one or more

variables. The main advantage of survey studies is that they provide information on large groups of people, with very little effort and in a cost-effective manner.

Surveys allow researchers to mitigate information obtained from a sample rather than the entire population at one point or another. A questionnaire was used to collect primary data to fulfil the objectives of this study relating to masonry labour productivity in relation to human resource management systems. The questionnaires comprised both structured and open-ended questions. The questionnaires were administered to masonry employees, foremen and construction site managers.

3.3 Target Population

According to Mugenda & Mugenda, (2003), the population refers to an entire group of individuals, events or objects having common observable characteristics. The target population is defined as the entire set of units for which the survey data are to be used to make inferences. Thus, the target population defines those units for which the findings of the survey are meant to generalise (Lavrakas, 2007 cited in Chowhan, 2016). The target population for this study comprise construction managers in NCA1 construction companies in Nairobi City County. The NCA1 construction company are the industrial leaders among the contracting companies. These leading contractors were considered for this research because they were viewed to have a large proportion of their labour force engaged in sites where labour-intensive construction is practiced in masonry trade operations. The registered number of NCA1 contractors at the beginning of 2015 were about 200, of which 170 were based in Nairobi. The number of registered NCA1 contractors as per the NCA register was 274 in February 2018 with nearly all of them being within Nairobi City County.

3.4 Sampling and Sampling Procedure

Sampling is the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected (Mugenda & Mugenda, 2003).

3.4.1 Sampling Technique

Systematic sampling technique was used in identifying and interviewing the NCA1 construction sites. This was based on the active construction sites in Nairobi City County undertaking masonry works. The NCA1 contractors placed in an ordered list obtained from

National Construction Authority. This systematic sample involved selecting a starting point and then selecting every **k** individual where k = population size/sample size (2 = 67/35). This technique was used to sample both the construction mangers. This technique was necessary as there was a list obtained associated with the NCA1 and construction sites. The techniques was also efficient for sampling from large databases obtained from NCA. However, it was challenging as the order patterns of construction sites was not based on location thereby necessitating moving back and forth.

The study also applied Multi stage sampling techniques where both systematic and convenience Sampling was used to identify the respondents. The sampled construction sites were identified using the systematic sample. Within each construction site identified, a convenience technique was applied in selecting the 2 masons per site. According to the convenience sampling technique, samples are selected based on their availability. This method was used because target respondents were rare and their time was costly. Based on the convenience samples of masons, 70 were selected.

3.4.2 Sample Size

NCA1 building contractors with sites in Nairobi City County formed the target population from which the sample size is derived. They NCA1 contractors have also high volume of masonry works that they undertake hence engaging a high number of employees on site. The target contractors whose building works was at masonry level were considered for this study. The number of registered NCA1 contractors as per the NCA register was 274 in February 2018 (as per list obtained from NCA). During the period between April 16th and 20th, a reconnaissance survey was carried out to determine the level of masonry works for the NCA 1 contractors. The construction sites in Nairobi which were undertaking masonry works during the reconnaissance were 67 construction sites, which therefore became the population in which the sample size would be derives from as shown below. The researcher employed the following formula by Chiara & Nachmias (1996) cited in Pardo and Fuentes (2003) to come up with sample size. The confidence level the researcher chose was 95% with an estimated error of 5% of the true value. From the statistical tables, for 95% confidence level *Z* value is (+ or -1.96).

$$n = \frac{Z^2.p.q.N}{\{e^2.\ (N\text{-}1) + Z^2.p.q\}}$$

Where:

n = Sample size

N = Population size

P = Sample population estimated to have characteristics being measured (confidence level)

q = (1 - p)

e = Acceptable error (e = 0.05 since estimated error for the research is 5% of the true value)

Z = the standard normal deviate at the required confidence level (Z = 1.96 at 95% confidence level)

By substitution,

$$n = \frac{(1.96^2) \times 0.95 \times 0.05 \times 67}{[(0.05)^2 \times 66] + (1.96^2) \times 0.95 \times 0.05}$$

$$\boldsymbol{n = 35}$$

Therefore, the study sample comprised of 35 NCA1 contractors/construction sites. The study used systematic sampling technique to arrive at the sample size for the two categories.

Table 3. 1: Sample size

Categories	Sample size
Construction managers	35
Masons	70
Total	105

Source: Researcher (2019)

From the 35 construction sites sampled, the researcher purposely selected one construction manager from each site. The two masonry employees on each site were also sampled to arrive at the above 105 sampled size.

3.5 Data Collection Instruments

3.5.1 Questionnaires

The primary data was obtained directly from the construction site through questionnaires, as a primary source of information. A questionnaire is a research tool composed of set of questions for the purpose of gathering information from respondents (Mugenda & Mugenda, 2003). In this study, questionnaires were the main instrument for collecting data. The questionnaire was preferred for its suitability to the study since it allows the researcher to reach a larger sample within limited time. It also ensures confidentiality and thus gathers more candid and objective responses. Questionnaires to both the Construction managers and masonry workers were designed to collect information on human resource management practice being applied in the

sites, the factors which have been considered in human resource management, and the masonry labour productivity in relation to human resource management systems.

The questionnaires comprised closed-ended questions for the purpose of collecting a detailed and all-round data which would provide a rich base for the descriptions of the variables under consideration. They also provided sufficient, complete and accurate information without bias to maximize the reliability of the data. Each questionnaire covered the background information of the respondents and human resource management practices that are likely to influence labour productivity in masonry. The background information covered in the questionnaire was: experience (years) in practice, professional background and status in the company. The respondents were requested to rate on a Likert scale of 1 to 5, the order of significance of each item, from "not significant" (rated 1) to "most significant" (rated 5) for most questions. The researcher and her assistants visited the sites and offices to deliver the questionnaires to the respondents who were asked to complete the questionnaires themselves which were collected later by either the researcher or an assistant. Questionnaires were used to quantify data that indicates the prevalence of particular beliefs or actions, or allow for statistical comparison of perceptions and behavior amongst different groups across a representative sample.

3.5.2 Observations

Observation is one way to collect primary data by purposeful, systematic and selectively watching and listening to an interaction or phenomenon as it takes place. This study observed some of the human resource management practices and the effects of these practices on labour productivity by the masons within the construction sites. This method was appropriate because some of the information on human resource practices could not be elicited by questioning, as the respondents either were not co-operative or are unaware of the answers because it is difficult for them to detach themselves from the interaction. For instance, use of Personal Protective Equipment (PPE) could be observed since some employees fill on the questionnaires that they wear them yet they don't because of discomfort and ignorance on their importance especially the hard huts, which are quite uncomfortable during sunny seasons.

Quantitative research approach involved measuring the actual areas of plaster achieved in a day to establish the masonry labour productivity. This measurement was carried out on sites with human resource management systems and compared to sites where these practices were not being practiced.

3.6 Data Analysis

The collected questionnaires were edited and cleaned for completeness in preparation for coding. After coding the information was entered into the Statistical Package for Social Science (SPSS) version for analysis. The results of masonry labour productivity of employees obtained under normal construction conditions without implementation of human resource management systems of masonry employees' questionnaire and those obtained after implementation of human resource systems on the foreman's questionnaire were used to test the hypothesis.

3.7 Summary

This is a synoptic presentation of the main issues that were discussed in chapter three on Research Methodology. Data was collected using research instruments and interviews.

3.7.1 Research Instruments

The research instruments were mainly the questionnaires, books, journals the internet, PhD theses, Masters dissertations and Bachelor's degree level projects.

3.7.2 Interviews

An in-depth interview was also carried out with managers of the benchmarking company. Attached on Appendix IV is an Interview Schedule of the questions that were asked.

The findings obtained in this chapter were analysed using Statistical Package for Social Science (SPSS).

CHAPTER FOUR
DATA ANALYSIS AND PRESENTATION

4.1 Introduction

In this chapter, the researcher discussed the results of the information obtained from the field. It discussed the data as obtained from three groups of respondents, which included masonry employees, masonry foremen, and construction managers**.**

4.2 Response Rate

The Survey design was employed with sample size of 105 respondents was obtained, located on 35 construction sites in Nairobi City County, and which consisted of two categories: masons 70 and construction managers (35). However, the total number of respondents who were actually involved in the study happened to be 65 (61.9%). These were working on 22 construction sites, meaning that about 22 respondents as construction managers and 43 respondents as masons who were able to participate in the study, by responding to the questionnaire.

Questionnaires were sent out to Masonry employees; Foremen and Managers responses are as shown in Table 4.1.

Table 4. 1: Response Rate

	Masonry employees	**Construction Manager**	**Total**
Sample size	70	35	105
Total number of questionnaires returned	43	22	65
Percentage response	61.4%	62.9%	61.9%
Total percentage	**100%**	**100%**	

Source: Researcher (2019)

The results indicated a response rate of between 61.9% which is sufficient for analysis. Masonry employees, appendix II had a response of 43 out of 70 representing 61.4 percent response rate while Construction managers, appendix III had a response of 22 out of 35 representing 62.9% response. As per the findings, it means, those who were working, 62% respondents from each category participated in the investigation, by responding to the questionnaire. This commendable response rate was made a reality after the researcher made personal visits to remind the respondent to fill-in and return the questionnaires. This response rate was considered adequate as recommended by Mugenda and Mugenda (2003) who said

that, a response rate of 50% or more is adequate. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good,

4.3 Demographic Characteristics of the Respondents

Profile of the respondents outlines personal details about the respondent which for the purpose of this study was limited to designation and professional experience. Appropriate designation and professional experience of the respondent is crucial to enable them give an informed opinion on the subject of study. Two groups of respondents participated in the study, which included masons and construction managers.

4.3.1 Masons' Response

On the gender of the respondents, the study found that there were no female employees in the masonry trade which means that, in the construction industry in Nairobi City County, masonry work is only dominated by male personnel, which make about 100%. This is depicted in the table 4.2 below.

Table 4. 2: Gender of Masons

	Frequency	**Percentage**
Male	43	100
Female	0	0.0
Total	**43**	**100**

Source: Researcher (2019)

1. **Level of Education**

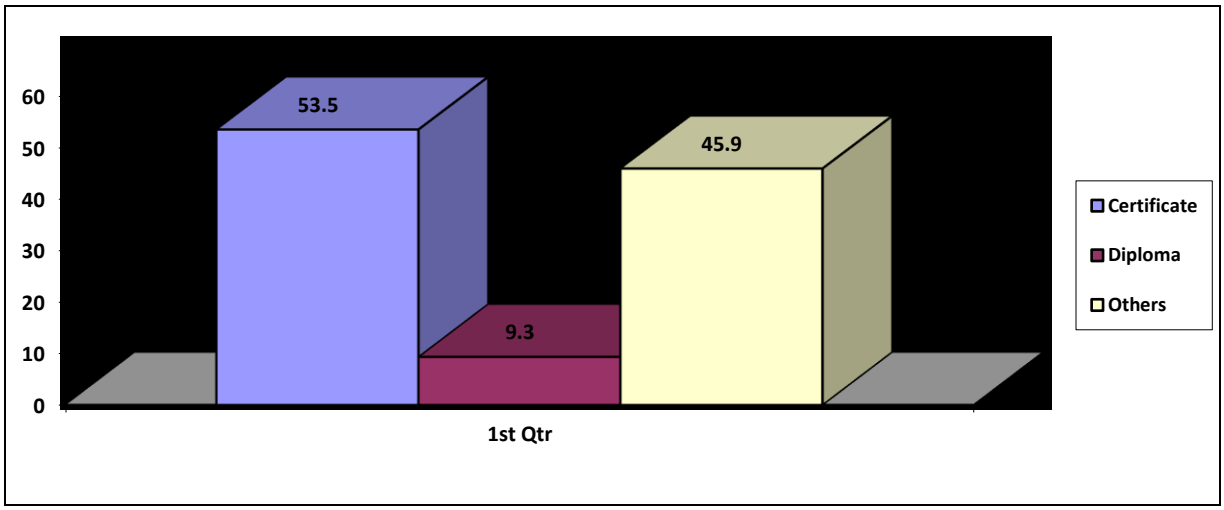
In view of Table 4.3 below, the study found that the majority of respondents (53.5%) were college certificate holders, followed by 37.2% of the respondents who had other professional qualification as their highest level of education and 9.3% was a diploma holder. This shows that most of the respondents were well educated to respond to the research questions.

Table 4. 3: Level of Education for Masons

	Frequency	**Percentage**
Certificate	23	53.5
Diploma	4	9.3
Degree	0	0.0
Other	16	37.2
Total	**43**	**100**

Source: Researcher (2019)

Figure 4. 1: Level of Education for Masons



Source: Researcher (2019)

2. Skills ranking

The study sought to establish the rate of skilled and unskilled masonry workers in the construction industry in Nairobi City County. The results shown in Table 4.4 below indicates that, 100% of the masonry employees are skilled workers. Based on the results provided, the study established that all masons in the construction industry within Nairobi City County are skilled.

Table 4. 4: Skills Ranking

	Frequency	Percentage
Unskilled labourer	0	0
Skilled labourer	43	100
Total	**43**	**100**

Source: Researcher (2019)

3. Working Experience

The results in table 4.5 below shows that the largest numbers of masons' experience at 46.5% falls in the range of 0-10 years, 22.7% of the masons have worked for between 11-20 years, while 30.3% are in the 21-30 years range. Firm productivity is supposed to grow with workers level experience, Robson and Benneti, (2000) also, older firms have reached a reasonably secure position in the market in which they compete, having long ago surpassed the minimum efficient scales of production. At the same time studies show that employees' level of working experience has a positive impact on industrial growth which is common in construction firms

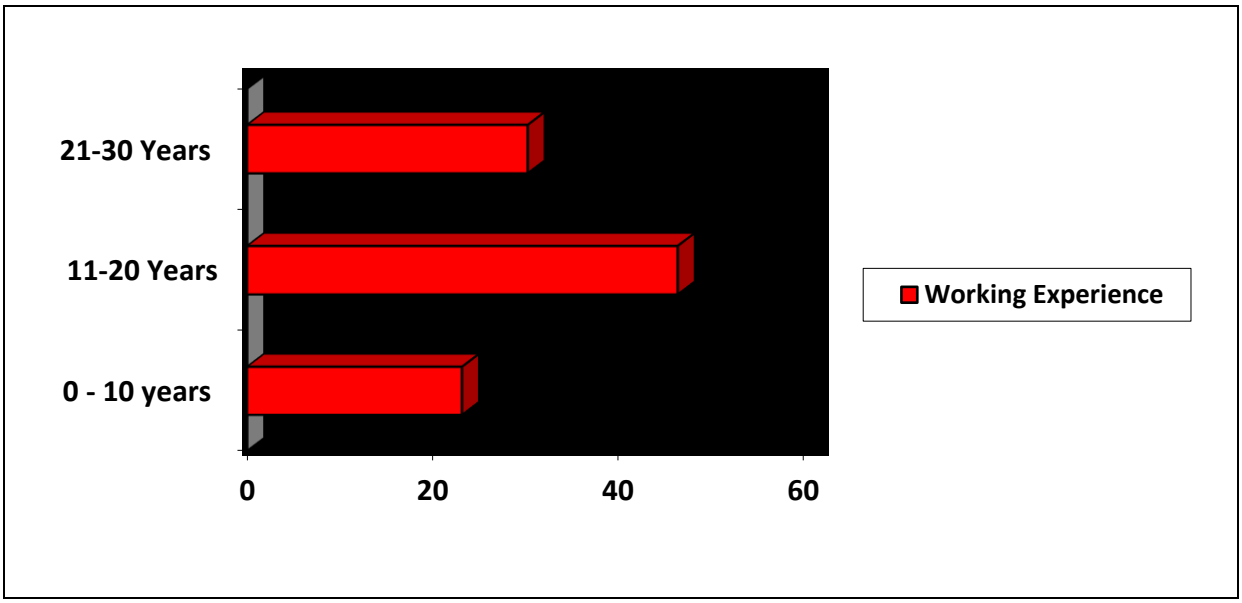
in in any developing Nation which have been in existence for long (Nurmi, 2002). Other studies by Anderson, (2004) confirm that there is a positive relationship between level of working experience and masonry labour productivity in the construction firms in Kenya.

Table 4. 5: Working Experience for Masons

Years	Frequency	Percentage
0-10	10	23.2
11.-20	20	46.5
21.-30	13	30.3
31 & above	0	0
Total	**43**	**100**

Source: Researcher (2019)

Figure 4. 2: Working Experience for Masons



Source: Researcher (2019)

4.3.2 Construction Managers' Response

1. Gender

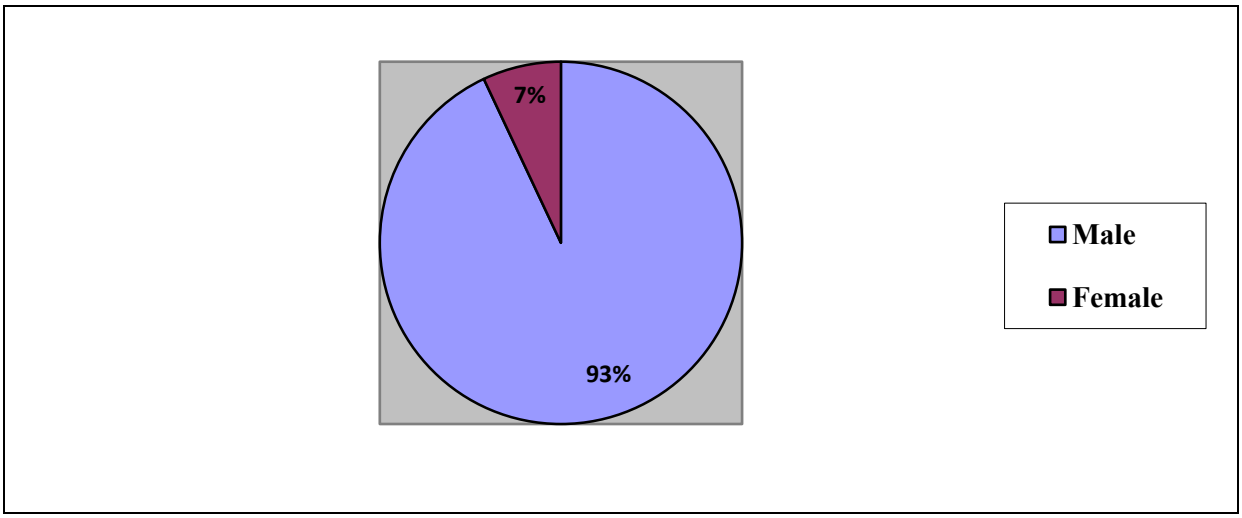
On the gender of the respondents, the study found that majority of the construction managers were males as shown by 93.0% than females shown by 7.0% of the respondents. This shows that there are more males than females employed as construction managers. This is depicted in the table 4.6 below.

Table 4. 6: Gender of Construction Managers

	Frequency	Percentage
Male	40	93.0
Female	3	7.0
Total	**43**	**100**

Source: Researcher (2019)

Figure 4. 3: Gender for construction managers



Source: Researcher (2019)

This also revealed that many construction firms in Nairobi employ male construction managers. This is attributed to the male domineering culture in Kenya where women are expected to deal with domestic chores and not serious businesses and the prejudicial treatment of women regarding property rights which limits women's access to collateral security for bank credit (Stevenson & St-Onge, 2005). This is also supported by Wanjau, (2012) where he concluded that 60% of the construction jobs are led and managed by men.

2. **Level of education**

The study found that the majority of respondents as shown in table 4.7 below indicated that there were 81.4% of the managers with undergraduate degree holders, followed by 9.3% of the respondents who had both diploma with the same 9.3 % having attained certificate as their highest level of education. According to the findings, none of the respondents had masters, PhD nor any other qualifications level of education. This shows that most of the respondents were well educated to respond to the research questions.

Table 4. 7: Level of education

	Frequency	Percentage
Certificate	4	9.3
Diploma	4	9.3
Degree	35	81.4
Masters	0	0.0
PhD	0	0.0
Others	0	0.0
Total	**43**	**100**

Source: Researcher (2019)

3. Working experience

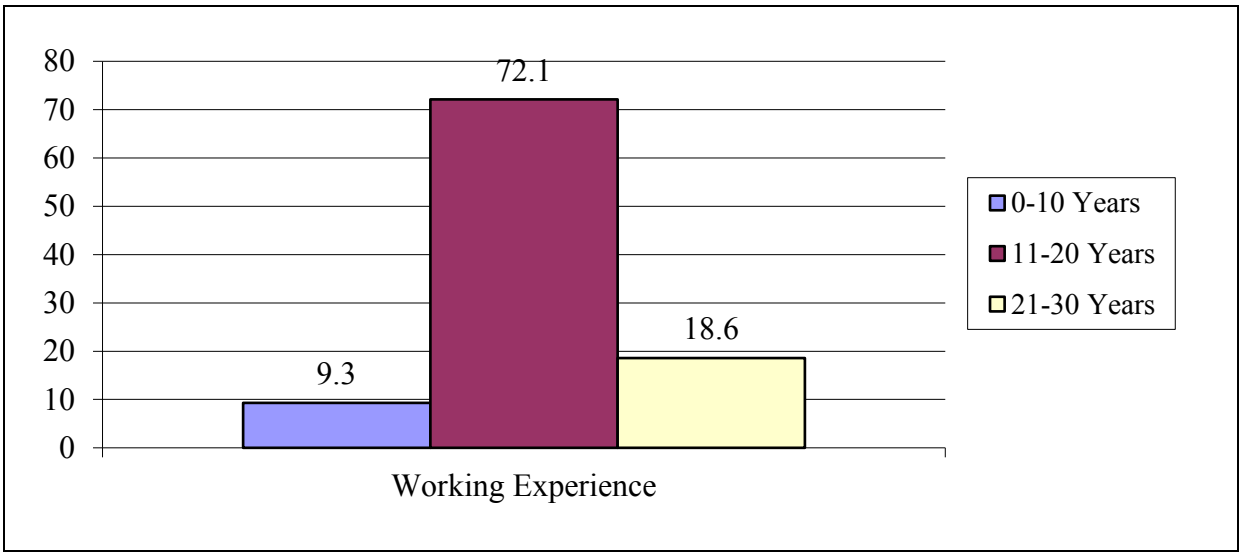
The study sought to establish how long the respondents had been working as construction managers, this was to ascertain to what extent their responses could be relied upon to make conclusions for the study based on experience.

Table 4. 8: Years of experience

Years	Frequency	Percentage
0-10	4	9.3
11.-20	31	72.1
21.-30	8	18.6
31 & above	0	0.0
Total	**43**	**100**

Source: Researcher (2019)

Figure 4. 4: Years of experience



Source: Researcher (2019)

From the study findings as indicated in table 4.8, majority 72.1% of the respondents indicated they had been working at the construction firm for a period ranging between 11-20 years, followed by 18.6% who indicated they had been working for a period of 21-30 years while 9.3% of the respondents had been working for a period between 0-10 years respectively. This indicates that, most of the construction managers had enough experience to manage a construction projects effectively.

4. **Class of contractors**

The study was carried out on NCA 1 contractors hence their percentage formed 100%.

Table 4. 9: Class of contractors

	Frequency	**Percentage**
NCA 1	41	100
Total	**41**	**100**

Source: Researcher (2019)

5. **Type of contractor**

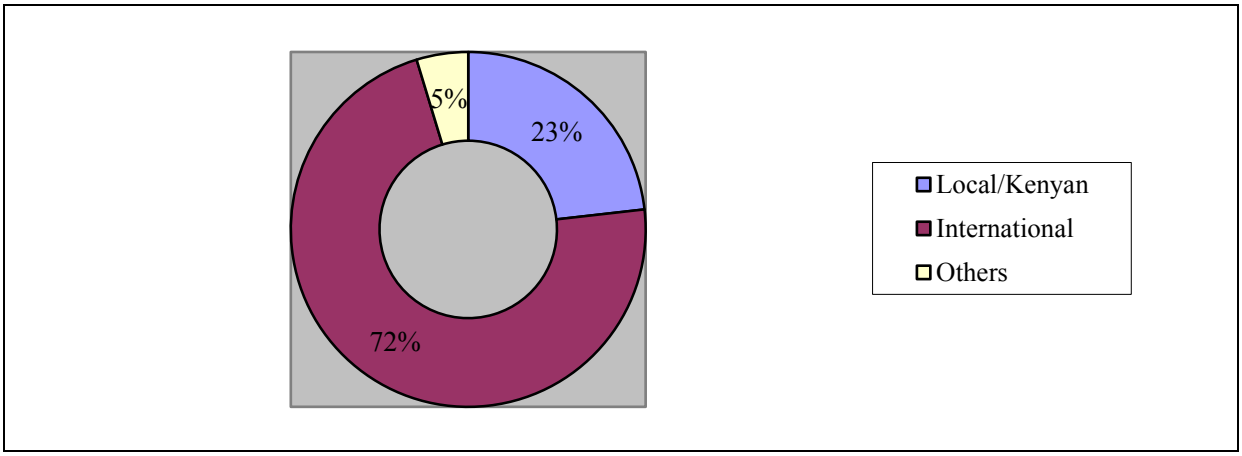
Respondents were asked to provide their type of contractor, as per the table 4.10 results, most (72.1%) of the contractors are international, 23.2 are local, and 4.7% are of the other types.

Table 4. 10: Types of contractors

	Frequency	**Percentage**
Local	10	23.2
International	31	72.1
Others	2	4.7
Total	**43**	**100**

Source: Researcher (2019)

Figure 4. 5: Types of contractors



Source: Researcher (2019)

4.4 Extent to which Human Resource Management practices are applied.

The extent to which human resource management systems are practiced is crucial in construction industry, especially at masonry stage.

4.4.1 Performance Appraisal and Reward.

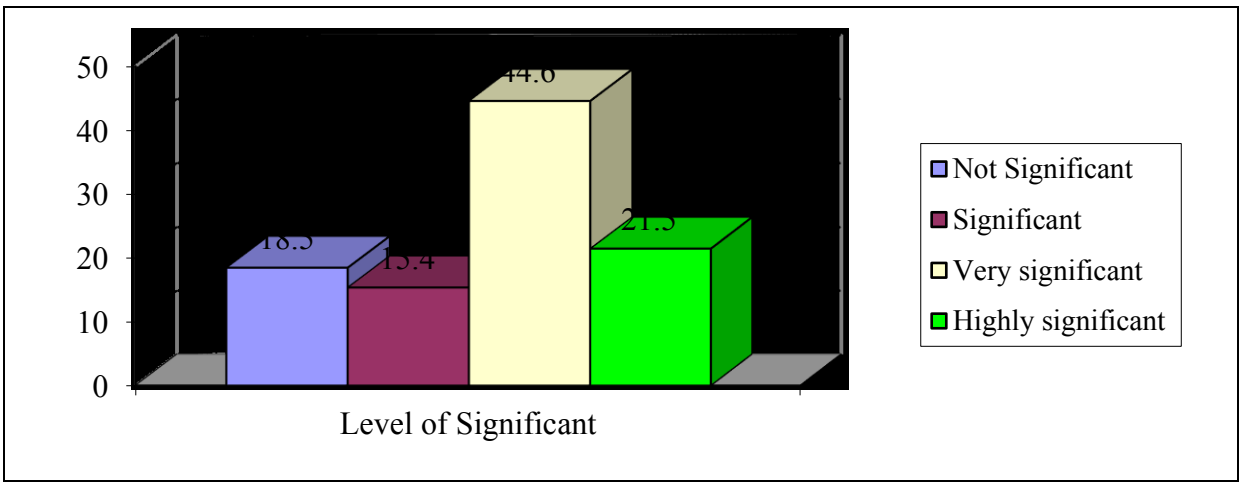
In table 4.11 below, most of the respondents who were masons at 44.6% suggested that the performance appraisal and reward practices in HRM are very significant. The 21.5% of the respondents who were construction managers acknowledged that this practices is highly significant. However 15.4% of the respondents disputed this fact. They felt that the practice is considered not significant and less meaningful to a large extent as shown in the table below.

Table 4. 11: Performance appraisal and reward

Opinion	Masons Frequency	Managers Frequency	Total Frequency	Percent
Not significant	4	8	12	18.5
Significant	10	0	10	15.4
Very significant	29	0	29	44.6
Highly significant	0	14	14	21.5
Total	**43**	**22**	**65**	**100**

Source: Researcher (2019)

Figure 4. 6: Performance appraisal and reward



Source: Researcher (2019)

4.4.2 Training and Development Management

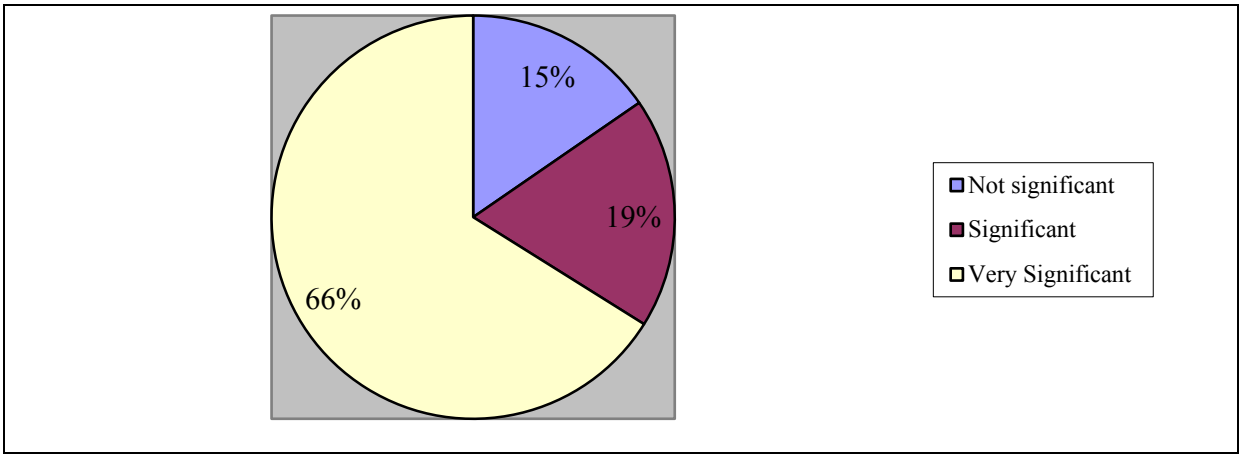
According to results in table 4.12 below, training opportunities and provision for career growth and advancement are HRM practices that were considered to be very significant at 66.1% of the respondents, while at 18.5%, were of the view that the HRM practices are significant as. This therefore imply that the practices are necessary on the construction sites to a large extent.

Table 4. 12: Provision for career growth and advancement

Opinion	Masons Frequency	Managers Frequency	Total Frequency	Percent
Not significant	6	4	10	15.4
Significant	12		12	18.5
Very significant	25	18	43	66.1
Total	**43**	**22**	**65**	**100**

Source: Researcher (2019)

Figure 4.6: Provision for career growth and advancement



Source: Researcher (2019)

4.4.3 Recruitment and Selection Management

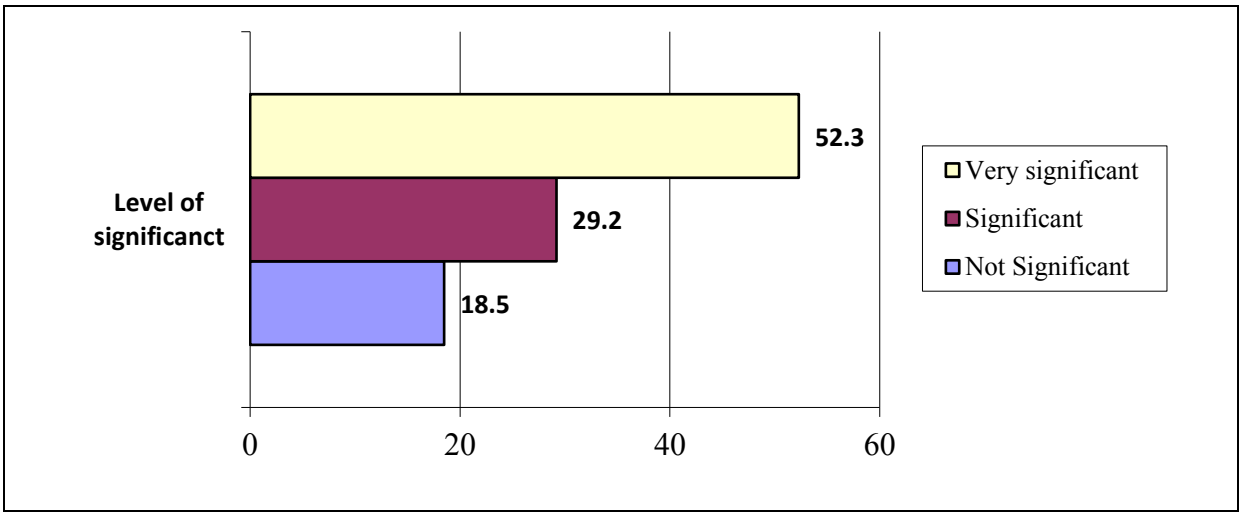
The table 4.13 below shows that the majority of the respondents at 52.3% felt that recruitment and selection management is very significant in masonry work, where as 29.2% of the respondents also considered this HRM practice significant. The result suggests that recruitment and selection are practiced to a great extent, therefore, crucial when hiring masonry personnel on construction sites.

Table 4. 13: Recruitment and Selection Management

Opinion	Masons Frequency	Managers Frequency	Total Frequency	Percent
Not significant	12		12	18.5
Significant	14	5	19	29.2
Very significant	17	17	34	52.3
Total	**43**	**22**	**65**	**100**

Source: Researcher (2019)

Figure 4. 7: Recruitment and Selection Management



Source: Researcher (2019)

4.4.4 Safety, Health and Welfare

In table 4.15 below the highest respondents at 81.5% stated that health, safety, and welfare as HRM practices, are very significant in construction industry, while a few respondent at 15.4% recorded that the practise is significant. However very few respondents at 3.1% did not acknowledge this fact. It means the respondents value health, safety, and welfare securities at the construction sites to a great extent.

Table 4. 14: Safety, health and welfare

Opinion	Masons Frequency	Managers Frequency	Total Frequency	Percent
Not significant	2		2	3.1
Significant	6	4	10	15.4
Very significant	35	18	53	81.5
Total	**43**	**22**	**65**	**100**

Source: Researcher (2019)

4.4.5 Employee Relations Management

Table 4.15 reveals that majority of the respondents at (41.5%) are of the opinion that employee relations are very significant in the construction companies. This was closely followed by another major respondent at 40.0% who felt the practices was significant. This means employee relationship should be in place, where it lacks, to create a healthy job environment among masonry workers.

Table 4. 15: Employee Relations

Opinion	Masons Frequency	Managers Frequency	Total Frequency	Percent
Not significant	6	6	12	18.5
Significant	10	16	26	40.0
Very significant	27	0	27	41.5
Total	**43**	**22**	**65**	**100**

Source: Researcher (2019)

4.4.6 Employee Relations

According to results in the table 4.16 below, employee engagement are HRM practices that was rated as very significant at 58.4% of the respondents. This practices was also supported as being significant at 15.5% of respondents. However some of the respondents at 23.1 % felt that the practices are not significant. Therefore, the general respondents felt they need to be involved in decision making on the construction sites. This calls for participatory management where it does not exist, for the success of the construction firms.

Table 4. 16: Employee Engagement

Opinion	Masons Frequency	Managers Frequency	Total Frequency	Percent
Not significant	10	5	15	23.1
Significant	12	0	12	15.5
Very significant	21	17	38	58.4
Total	**43**	**22**	**65**	**100**

Source: Researcher (2019)

4.5 The Level of Labour Productivity in Masonry Works

Management of masonry work is usually faced with various challenges due to the fact that it involves enormous quantities of materials as well as a large number of employees. Therefore, masonry labour productivity is affected by a diversity of factors, most of which are considered in this study.

4.5.1 Level of productivity

Table 4.17 below illustrates how respondents were satisfied with the level of masonry work assigned. The level of satisfactory in work as assigned was used to determine the productivity with the majority at 53.9% rated as satisfied with daily work. This work was also supported as being very satisfactory at 24.6% of respondents. However, some of the respondents at 21.5% felt that the masonry work wasn't satisfactory.

Table 4. 17: Level of work satisfactory

Opinion	Masons Frequency	Managers Frequency	Total Frequency	Percent
Not satisfied	8	6	14	21.5
Satisfied	26	9	35	53.9
Very Satisfied	9	7	16	24.6
Total	**43**	**22**	**65**	**100**

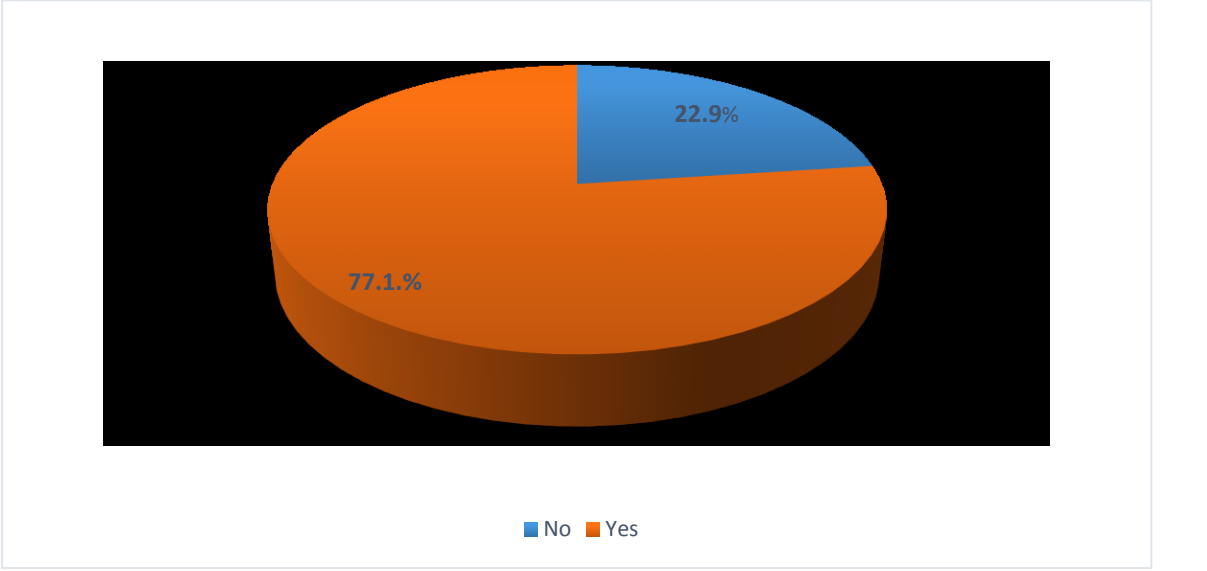
Source: Researcher (2019)

4.5.2 Factors that affect Masonry Labor Productivity

1) Sufficient tools and equipment

According to the results in figure 4.8 below, sufficient tools and equipment form a basic factor that has been identified by most (77.1%) of the employees as one, which affects masonry labour productivity on construction sites. A minority (22.9%) did not consider this to be a factor. The observations imply tools and equipment are crucial assets for the success of masonry work.

Figure 4. 8: Tools and Equipment

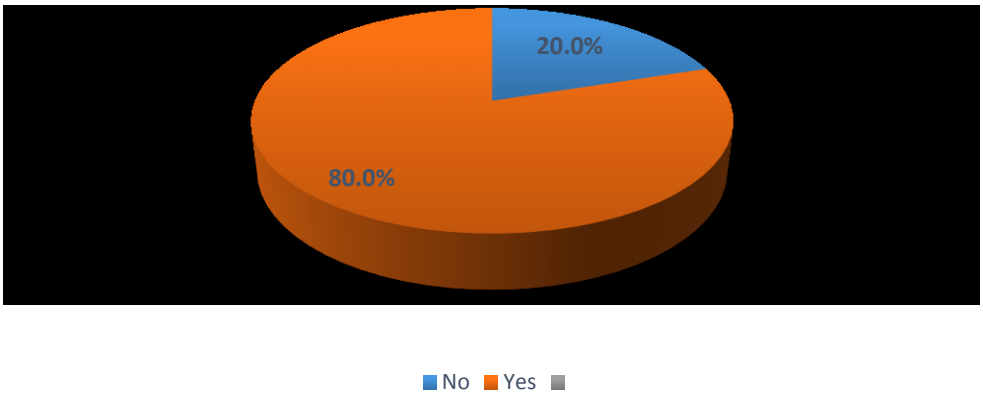


Source: Researcher (2019)

2) The conducive work environment

In figure 4.9, it was noted that, conducive work environment is a factor that affects masonry labour productivity, having been acknowledged by the high percentage (80.0%) of the employees; A low percentage (20.0%) of the respondents viewed this not a factor, which would affect labour productivity. The observation points to the fact that conducive environment plays an important role in improving masonry labour productivity.

Figure 4. 9: Conducive Work Environment

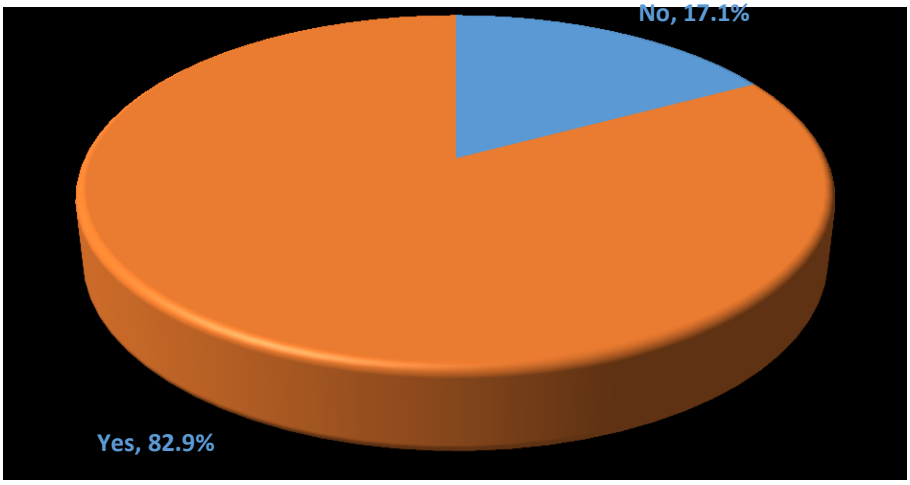


Source: Researcher (2019)

3) Availability of masonry material

Figure 4.10 show that availability of masonry material was considered by most (82.9%) masonry employees a factor affecting masonry labour productivity, yet a few (17.1%) of the respondents were of the opinion it is not a factor. Masonry materials, therefore, form significant portion of the input required during masonry stage of construction.

Figure 4. 10: Availability of masonry material

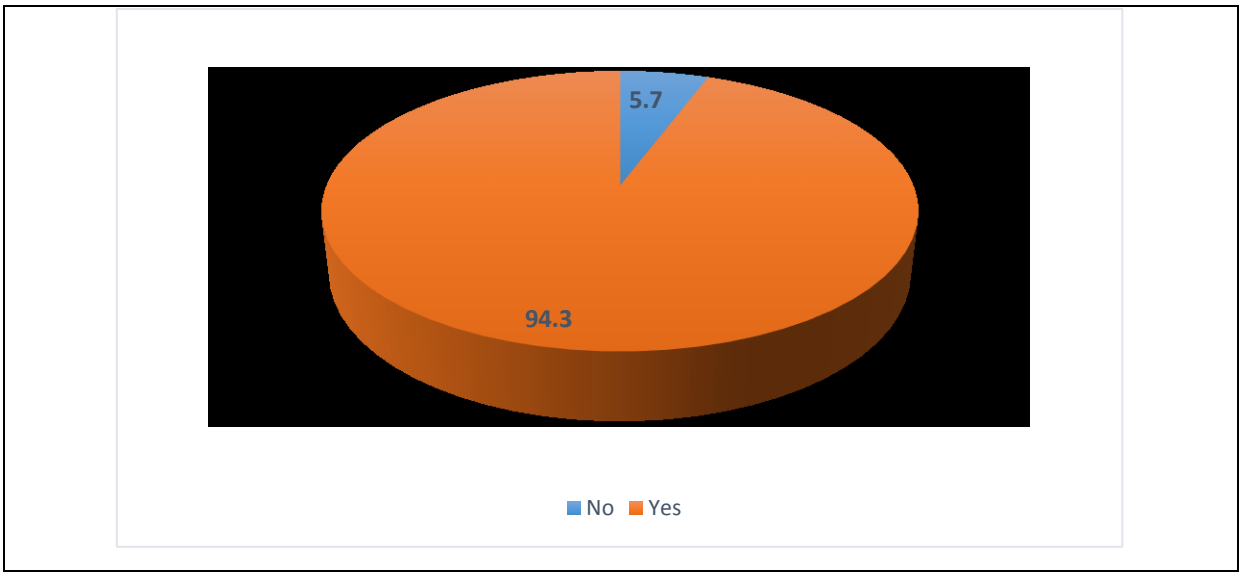


Source: Researcher (2019)

4) Relevant Taskforce for Masonry

The results in figure 4.11 indicated that most (94.3%) construction managers felt relevant taskforce for masonry happens to be a factor affecting labour productivity on the construction site. However, very few (5.7%) of the managers viewed availability of masonry materials not a factor.

Figure 4. 11: Relevant Taskforce for Masonry



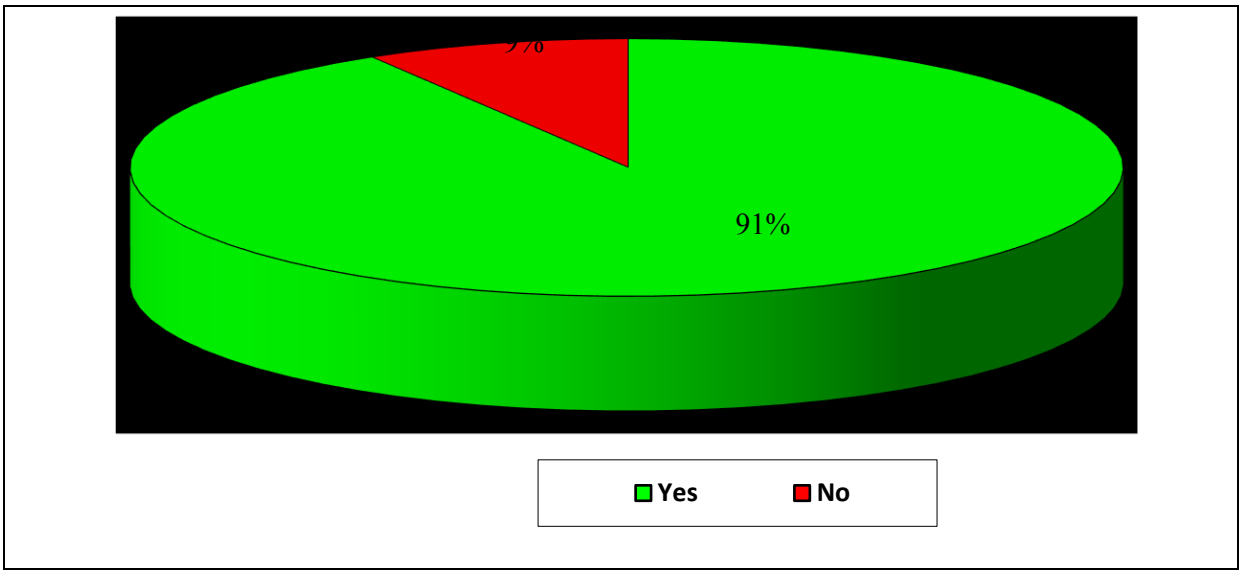
Source: Researcher (2019)

4.6 Effect of HRM Practices on Masonry Labor Productivity.

4.6.1 Masonry Employees' Response

In figure 4.12 below, setting agreed goals and targets based on organisational goals as part of performance management has been viewed by the majority (91%) of masonry employees as HRM practices that affects masonry labour productivity; only a few (9%) were of the opinion that performance management has no effect.

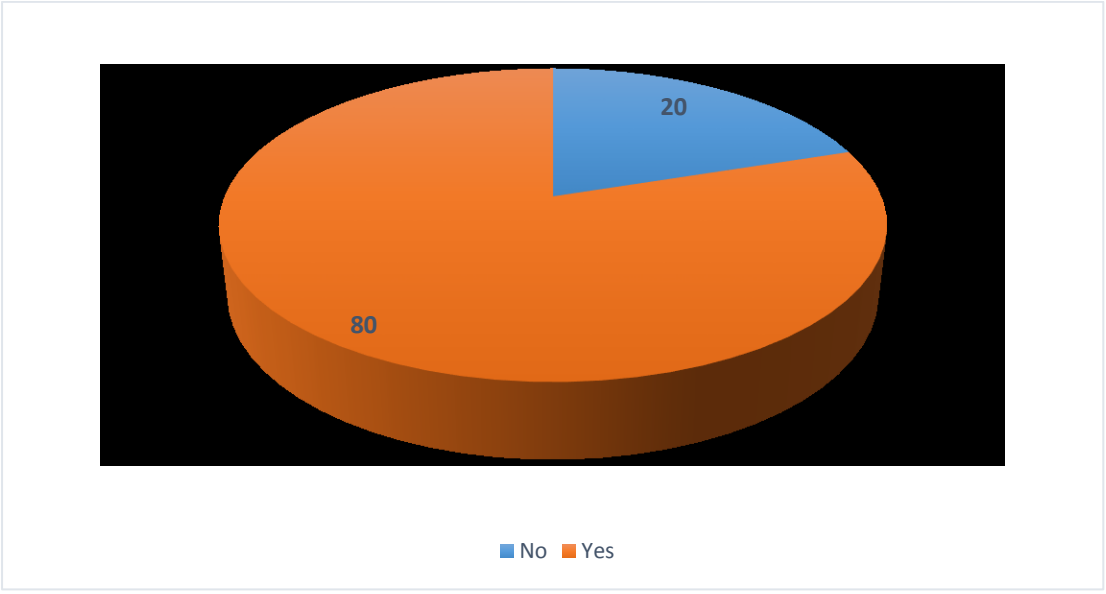
Figure 4. 12: Performance Management



Source: Researcher (2019)

Reward management, in terms of salaries and benefits (incentives) appears to be a HRM practice, according to results in figure 4.13, was identified by many (80.0%) employees as one that affects masonry labour productivity. On the other hand, quite few (20.0%) of the respondents showed the practice does not affect labour productivity.

Figure 4. 13: Reward Management

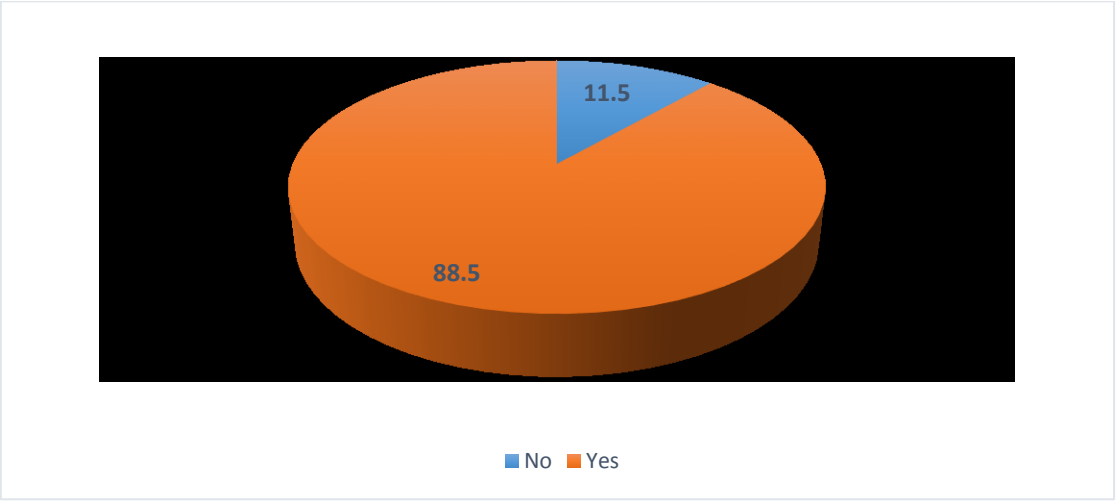


Source: Researcher (2019)

From the study in figure 4.14 below, it was observed that most (88.5%) of the respondents held the opinion, basing job promotion on employee labour productivity exhibits an effect on

masonry labour productivity. Alternatively, a low percentage (11.5%) of the employees felt this practice has no effect at all.

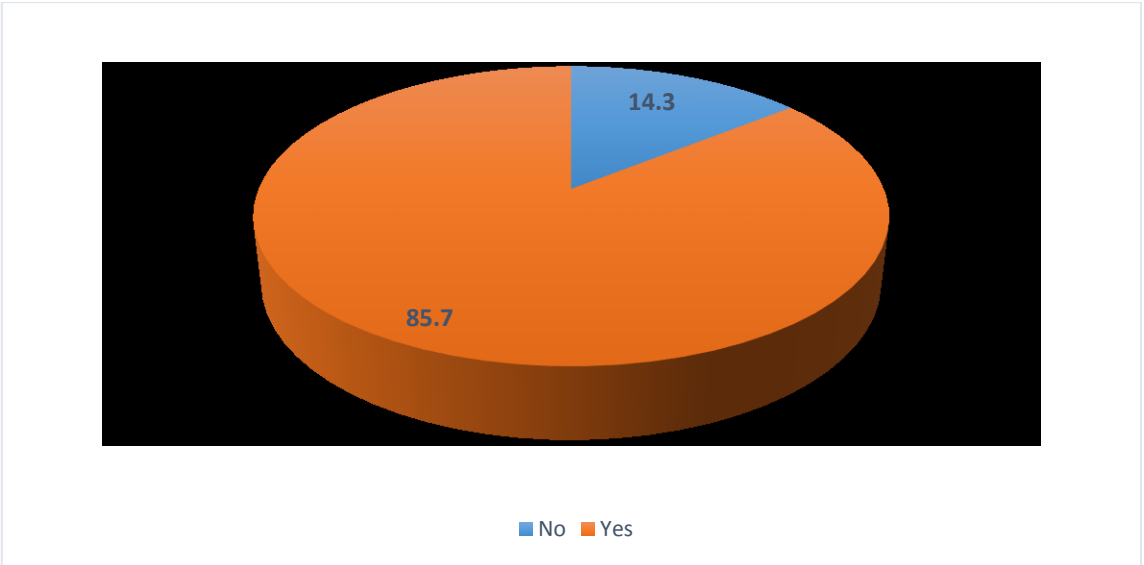
Figure 4. 14: Job Promotion on Employee Labour Productivity



Source: Researcher (2019)

In figure 4.15 results, HRM practice in which employees are encouraged to take responsibility for personal development has been identified by the majority (85.7%) of the respondents as one that affects masonry labour productivity. However, a minority (14.3 %) of the masonry employees disputed this fact.

Figure 4. 15: Responsibility for Personal Development

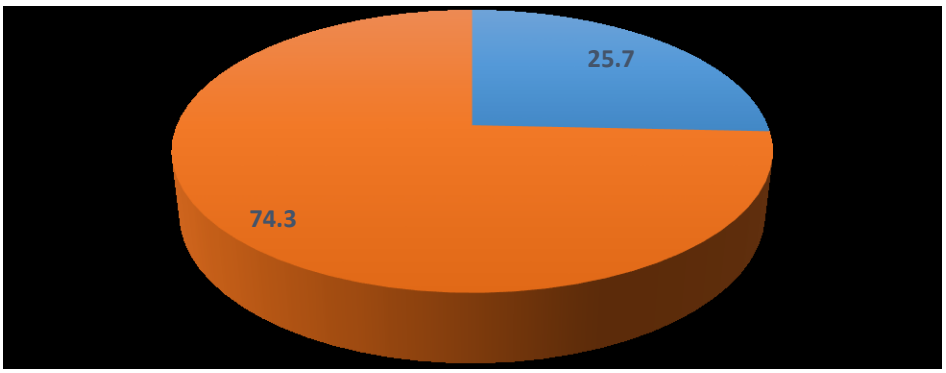


Source: Researcher (2019)

In figure 4.16, high percentage (74.3%) of the respondents considered recruitment practices to have a tremendous effect on masonry labour productivity, especially when they are

implemented fairly. It means the practices lead to attraction of large numbers of people who are talented, and of high qualification in the field of masonry. Unlike (25.7%) who did not.

Figure 4. 16: Recruitment Practices



Source: Researcher (2019)

4.6.2 Construction Managers' Response

According to table 4.18 below, it was observed that a great percentage (82.9%) of masonry foremen held a view masonry labour productivity is influenced when reward of employees is based on performance; 17.1% of the respondents maintained the practice does not affect the productivity reward of employees.

Table 4. 18: Effects of Reward on Masons on their Labour Productivity

Opinion	Frequency	Percentage
No	4	17.1
Yes	18	82.9
Total	**22**	**100**

Source: Researcher (2019)

In table 4.19 below, most (88.6%) respondents established that training and development management has an effect on masonry labour productivity, while a few (11.4%) disputed this fact. It implies the management system plays an important role in employee performance during masonry stage.

Table 4. 19: Effects of training and development management on masonry labour

Opinion	Frequency	Percentage
No	3	11.4
Yes	19	88.6
Total	**22**	**100**

Source: Researcher (2019)

According to table 4.20 results obtained, the majority (74.3%) of the masonry foremen ascertained that masonry labour productivity is influenced when recruitment and selection practices are fair, transparent, and based on merit. On the other hand, 25.7% of the respondents were of the opinion the practices do not affect the productivity.

Table 4. 20: Effects of Recruitment and Selection on Masonry labour Productivity

Opinion	Frequency	Percentage
No	6	25.7
Yes	16	74.3
Total	22	100

Source: Researcher (2019)

Table 4.21 results show that the majority (75.9%) of the masonry foremen held a view that masonry labour productivity is affected when the masonry employees are provided with protective gear, milk, drinking water among others. Alternatively, 24.1% of the respondents did not acknowledge the observation.

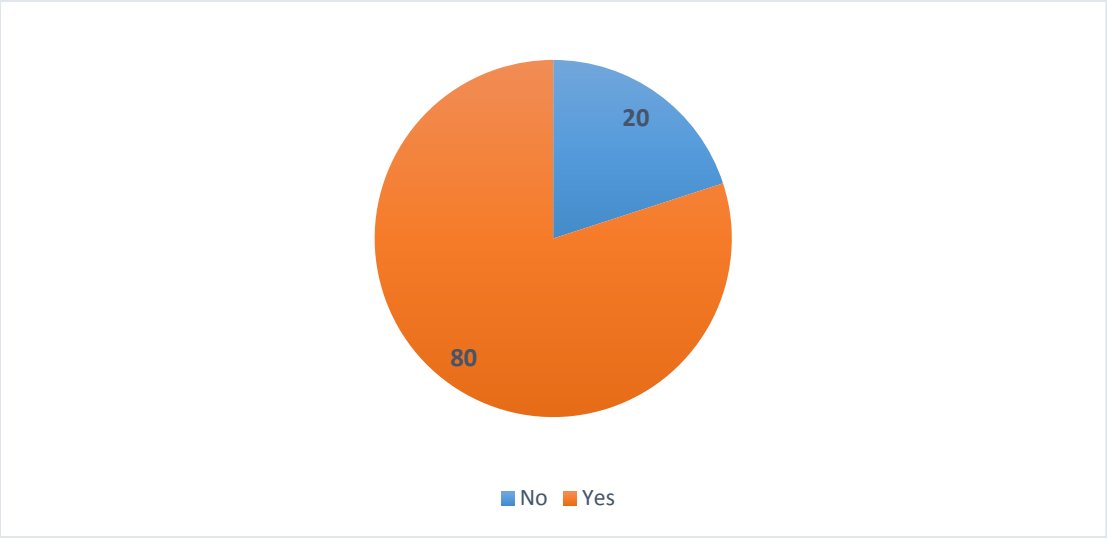
Table 4. 21: Effects of Protective Measures on Masonry labour productivity

Opinion	Frequency	Percentage
No	5	24.1
Yes	17	75.9
Total	**22**	**100**

Source: Researcher (2019)

In figure 4.17 below, the data yielded by the questionnaire showed that a high percentage (80.0%) of the construction managers held the opinion performance and reward management system has an effect on masonry labour productivity. However, a low percentage (20.0%) of the respondents were of the view the system has no effect on the productivity.

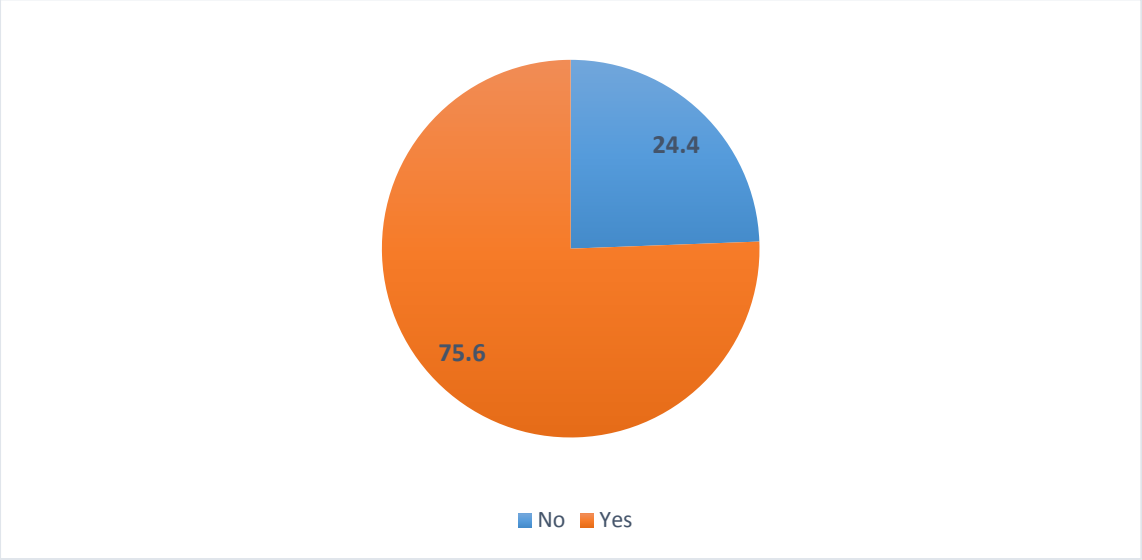
Figure 4. 17: Performance and reward management system



Source: Researcher (2019)

In figure 4.18 below, results show that recruitment and selection management is a system of HRM that was identified by most (75.6%) of the managers as one that affects masonry productivity; a few (24.4%) of the respondents disputed this fact.

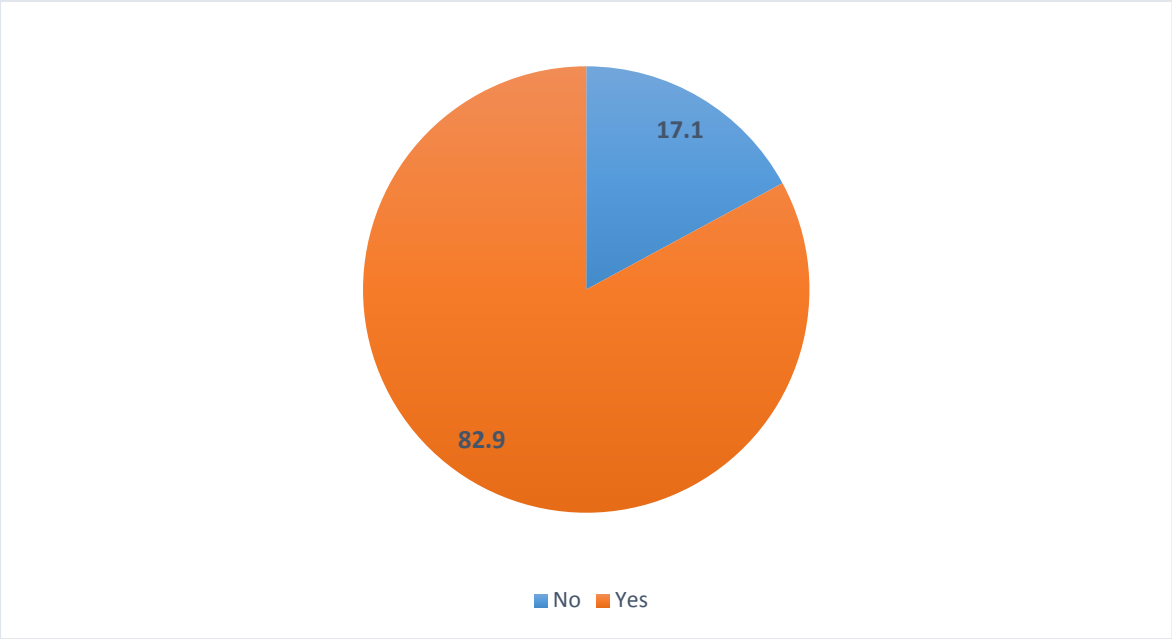
Figure 4. 18: Recruitment and Selection Management



Source: Researcher (2019)

In figure 4.19 below, it was recorded that 82.9% of the construction managers felt employee relations is a system of HRM, which has a significant effect on the masonry productivity, yet only 17.1% of these decision makers looked at the system as one that does not affect the productivity.

Figure 4. 19: Employee Relations



Source: Researcher (2019)

4.7 Inferential Analysis

This section described the inferential analysis of data. Inferential statistics infer information about a population by formation of conclusions about the differences between populations with regard to any given parameter or relationships between variable. This study used correlation analysis.

4.7.1 Pearson Correlation Coefficient Matrix

The study conducted a correlation analysis of the variables of the study: performance & reward management practices, recruitment & selection, employee relations and employee engagement. To quantify the strength of the relationship between the variables, the study used Karl Pearson's coefficient of correlation. A 2-tailed Pearson Correlation test was done at 99% and 95% confidence levels and the analysis presented in Table 4.20.

Table 4. 22: Pearson Correlation Coefficient Matrix

		PRMp	***RS***	***ER***	***EE***	***MLP***
PRMp	Pearson Correlation	1				
	Sig. (2-tailed)	.				
RS	Pearson Correlation	.644(**)	1			

	Sig. (2-tailed)	.000	.			
ER	Pearson Correlation	.346	.509(**)	1		
	Sig. (2-tailed)	.052	.003	.		
EE	Pearson Correlation	.587(**)	.268	.136	1	
	Sig. (2-tailed)	.000	.138	.456		
	Sig. (2-tailed)	.686	.192	.784	.	
MLP	Pearson Correlation	.339	.490(**)	.224	.430	1
	Sig. (2-tailed)	.037	.004	.217	.000	.

** Correlation is significant at the 0.01 level (2-tailed), N = 72

Key: ***PRMp***= Performance Appraisal & Reward Management Practices*;* ***RS***= Recruitment and Selection*;* ***ER***= Employee Relations*;* ***EE***= Employee Engagement*;* ***MLP***= Masonry Labour Productivity.

The results in Table 4.10 indicate that there is a positive and significant relationship between reward management practices and masonry labour productivity ($r = 0.339$, $p < 0.05$), there is a positive and significant relationship between recruitment and selection and masonry labour productivity ($r = 0.490$, $p < 0.05$). Further, the results indicate that there is a positive and significant relationship between employee relations and masonry labour productivity ($r = 0.224$, $p < 0.05$). And lastly, the results indicate that there is a positive and significant relationship between employee engagement and masonry labour productivity ($r = 0.430$, $p < 0.05$).

4.8 Hypotheses Testing Results

Hypothesis testing is a process by which the researcher infers the result of sample data on the larger population based on a presupposition made prior to commencement of research (Gujarati, 2003). The study performed hypothesis testing by determining statistical significance of the coefficients of explanatory variables. Test-of-significance method is meant to verify the truth or falsity of a null hypothesis by using sample results, showing that the means of two normally distributed populations are equal. This was done by using the two-tailed t-test statistic and the corresponding *p*-values at 5% levels. The decision to use a two-tailed test was based on the fact that the alternative hypothesis of the study is composite rather than directional (Martina, Tanya & Martin, 2014). This procedure was carried out against the null hypotheses enumerated in section 1.4.1 of chapter one. In all the tests, the decision rule was that: if the *p*-

value observed is less than the set alpha (significance level), then reject the null hypothesis and if the observed *p*-value is greater than the set alpha, do not reject the null hypothesis.

H_{01}: Reward Management Practices has no significant effect on masonry labor productivity in the construction industry in Nairobi City County.

The correlation analysis results in Table 4.20 show that reward management practices have significant and positive relationship with masonry labor productivity at 5% level of significance. This is based on the *p*-value corresponding to the coefficients equivalent to 0.037. This finding led the study to reject the stated null hypothesis with 95% confidence level. By rejecting the null hypothesis, the study concluded that reward management practices significantly influence masonry labor productivity among the construction firms in Nairobi City County.

These study findings are in line with Siwan and Jennifer (2013) who found that there was a significant and positive relationship between reward management practices and firm performance in the construction firms in Malaysia. Consistently, Khan (2010) infers that reward management causes high productivity for the industry when it directly influences performance of its employees. Additionally, Maurer (2001) states that rewards and recognitions are essential factors in enhancing employee satisfaction and work motivation which is directly associated to firms' labor productivity. Moreover, a study by Mercer (2003) reports that employees will remain in an organization if they are rewarded since a proper reward system motivate employees towards better labor productivity of a firm.

H_{02}: Recruitment and Selection have no significant effects on masonry labor productivity in the construction industries in Nairobi City County.

The correlation analysis results in Table 4.20 show that recruitment and selection have significant and positive relationship with masonry labor productivity at 5% level. This is based on the *p*-values corresponding to the coefficients equivalent to 0.004. This finding led the study to reject the stated null hypothesis with 95% confidence level. By rejecting the null hypothesis and concluded that recruitment and selection significantly influence masonry labour productivity among construction firms in Nairobi City County.

The findings are in line with O'sullivan and Dooley (2009) who established that recruitment and selection practices had an insignificant but positive relationship with firm productivity in Finland. However, these findings are contrary to the results of Ballantyne (2009) who argues

that selection of workers aims at putting in place workers that are able to perform at a high level and demonstrate commitment thereby leading to high level of firm's production.

H_{03}: Employee Relations have no significant effects on masonry labor productivity in the construction industries in Nairobi City County.

The correlation analysis results in Table 4.20 show that employee relations have significant and positive relationship with masonry labor productivity at 5% level. This is based on the *p*-values corresponding to the coefficients equivalent to 0.000. This finding led the study to reject the null hypothesis with 95% confidence level. By rejecting the null hypothesis, the study concluded that employee relations significantly influence masonry labor productivity among construction firms in Nairobi City County.

The study findings are in line with Sequeira and Apoorva (2005) who did a study on employee relations and its impact on employee performance and found that employee relations practices followed in the organization had a direct impact on the performance. Employees with higher level of satisfaction with the existing organization practices were more productive and resistive towards changing the current organization. The study also revealed that improving the employee relations practices an organization can improve the performance of employees and thereby the overall productivity of the organization.

H_{04}: Employee Engagement has no significant effects on masonry labor productivity in the construction industry in Nairobi City County.

The correlation analysis results in Table 4.20 shows that employee engagement does not have a significant and positive relationship with firms' labor at 5% level. This is based on the *p*-values corresponding to the coefficients equivalent to 0.217. This finding led the study to fail to reject the null hypothesis with 95% confidence level and concluded that employee engagement had a significant influence on masonry labor productivity in construction firms in Nairobi City County.

The findings do not concur with Erajesvarie and Shamila (2018) who carried out a study on the Impact of employee engagement on organizational performance of Insurance Brokerage Company in Gauteng and found that, low engagement affected commitment and motivation levels of staff. The low employee engagement levels were produced by job design, ineffective communication, management approach, participation and incentives in the form of recognition.

4.9 Summary

According to the results of the study, most human resource management (HRM) practices were not practised on the construction sites, except health, safety and welfare even though they are significant to the majority of the respondents. Various factors, which influence masonry productivity were established, and majority held the opinion HRM systems affect productivity, a fact confirmed by the result of measuring of the productivity by masonry employees and foremen. The findings led to a conclusion that human resource management practices positively influence and masonry labour productivity.

CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings of the study. The study investigated the effect of human resource management practices on masonry labour productivity in Nairobi City County, Kenya. The chapter draws conclusions from the findings and makes recommendations on how human resource management practices can help to improve masonry labour productivity in in the construction industries in Nairobi City County. Therefore, conclusion and the recommendations are presented as per each specific objective. Finally, the chapter proposes areas for further research.

5.2 Conclusions

5.2.1 Extent to which Human Resource practices are practiced.

Considering the extent to which the human resource management practices are practised, masons and construction managers concurred, by ascertaining that all HRM systems listed above are highly significant. As such, the systems are practiced to a large extent. Various factors influencing implementation of the systems were also established.

5.2.2 Establishing factors affecting Labour Productivity

The following factors were established as those which affect labour productivity by masonry employees and construction managers: relevant task force, management system of workers, sufficient tools and equipment, conducive work environment, and availability of masonry materials. Therefore, masonry labour productivity is affected by a diversity of factors, of which the management needs to address for the construction firms to be successful.

5.2.3 Human Resource Management Practices on Masonry Labour Productivity

The results obtained from masons and construction managers are in agreement that the HRM practices in question have an influence on masonry labour productivity. Therefore, the researcher concluded that there is a direct relationship between HRM practices and masonry labour productivity.

5.3 Recommendations

Human labour which is the main factor of production in the construction process ought to be given the attention it deserves by ensuring that masonry employees are well taken care off in order to improve the productivity on construction sites. This can only be achieved by incorporating most of the human resource practices not being practised on construction sites such as recruitment & selection, training & development, performance & reward management, employee relations and employee engagement. Safety, health and welfare, the only practice that is being implemented on most construction sites should be further developed to ensure that all sites embrace it including small residential developments since it has a great influence on productivity of the employees. Implementation of all these practices can only be enforced by the National Construction Authority if labour productivity in the construction industry in Nairobi City County, is to be improved. This success will cause a paradigm shift in the entire construction industry in Kenya from low labour productivity to high productivity.

The National Construction Authority should also consider enforcing implementation of the other human resource management practices if productivity in masonry as well as all the construction trades is to be achieved. These other practices include performance appraisal and reward management, Training & development, recruitment & selection, employee relations and employee engagement.

Construction firms should establish research and development units to continuously carry out research on emerging trends in other industries and benchmark on best practices. They should also consider partnering with research institutions such as those in Schools of Built Environment in Kenyan Universities. Most of the other industries have vibrant human resource management departments especially the banking sector and the information technology industry, which results in implementation and monitoring of these practices. This can also be facilitated by the construction industry regulating body, the National Construction Authority.

5.4 Areas of further study

Other areas of further study in relation to this research are:

i. An investigation on the effect of human resource management practices on project cost in construction firms.

ii. A study of the relationship between performance appraisal and retention of employees by construction firms as a job security measure.

iii. The cost benefits of human resource management practices implementation by construction firms.

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APPENDICES

Appendix I: Letter of Introduction

Delores Wekoye Mbati
P.O Box 48554-00100
Nairobi
Telephone: 0722 311665

Date: 7th August 2018

Dear Respondents

RE: REQUEST TO FILL THE QUESTIONNAIRE

I am a student at the University of Nairobi undertaking a Masters of Arts degree in Construction Management. It is a requirement that I carry out a research during my studies and I am therefore studying "**The Effect of Human Resource Management Practices on Masonry Labour Productivity in The Kenyan Construction Industry: A Case study NCA 1 contractors in Nairobi City County".** Any information obtained will only be used for academic purposes and will treated as confidential.

Thank you for according me an opportunity of interviewing **Masons and Construction Managers**. It is a great honour to have interacted with the management and employees of this esteemed organisation and therefore your cooperation and support is greatly appreciated.

Thank you,

Yours sincerely,

Delores Wekoye Mbati.

Appendix II: Questionnaire for Masons

I am a postgraduate student at Nairobi University. I would be grateful if you would answer questions herein. The information will be treated confidentially and will only be used for the purpose of the research. Please respond to questions by ticking (✓) against the appropriate information and writing appropriate answer in blank spaces. Don't write your name or that of the company anywhere on the questionnaire interview.

PART I: DEMOGRAPHIC INFORMATION

Please tick appropriately

1. Gender**:** Male ☐ Female ☐
2. Level of education:

☐ Certificate ☐ Diploma ☐ Degree

Other……...

3. Rank:

☐ Unskilled labourer ☐ skilled labourer

4. Experience (in terms of years)

☐ 0-10 ☐ 11-20 ☐ 21-30 ☐ 31 and above

PART II: THE HUMAN RESOURCE MANAGEMENT PRACTICES.

1. Please indicate by ticking as appropriate the extent to the following Human Resource Management practices available in your operations. Using the 5-point measurement scale. The correct order of significance of each of the factors is indicated below and applies to all sections in this part. *(1- Not significant 2 - Slightly significant 3 - Significant 4 - Very significant 5 - Most significant)*

ITEM	**1**	**2**	**3**	**4**	**5**
Performance and Reward Management					
Training and Development Management					
Recruitment and Selection Management					
Safety, Health and Welfare					
Employee Relations					
Employee Engagement					
In your opinion, is there any other Human Resource Management System and to what extent is it practiced on site?					

PART III: THE LEVEL OF LABOUR PRODUCTIVITY IN MASONRY WORKS

1. Based on your working area, please rate your daily satisfaction to completion on the masonry tasks assigned daily.

1	Very unsatisfied	
2	Unsatisfied	
3	Satisfied	
4	Slightly Satisfied	
5	Very Satisfied	

PART IV: THE FACTORS AFFECTING LABOUR PRODUCTIVITY IN MASONRY WORKS

1. Do you have sufficient tools and equipment for masonry?

   ☐ Yes ☐ No

2. Do you work in a conducive work environment?

   ☐ Yes ☐ No

3. Are masonry materials always available?

   ☐ Yes ☐ No

4. Please tick appropriately the extent to which the work environment affects masonry labor productivity. *(1- Not significant 2 - Slightly significant 3 - Significant 4 - Very significant 5 - Most significant)*

ITEM	**1**	**2**	**3**	**4**	**5**
Adequate working space					
There is prefabrication/standardization/field work					
Field/site is easily accessible					
There is advance work at some times					
There is enough crew size and composition					
There are little work difficulties encountered					
There is substantial work quantity done					
In your opinion, is there any other way in which work characteristics affect masonry labour productivity in the organisation?					

5. Please tick appropriately the extent to which the materials affect masonry labor productivity. *(1- Not significant 2 - Slightly significant 3 - Significant 4 - Very significant 5 - Most significant)*

ITEM	**1**	**2**	**3**	**4**	**5**
Materials are in accordance to the specifications					
Materials are always enough					
Materials are handled and transported in a conducive environment					
There is no material procurement delay					
There is easy, faster and quality material application					
In your opinion, is there any other way in which work materials affect masonry labour productivity in the organisation?					

PART V: EFFECT OF HUMAN RESOURCE MANAGEMENT ON MASONRY LABOUR PRODUCTIVITY

1. Please tick the significance of the following effects of the HRM practises are experienced masonry labour. *(1- Not significant 2 - Slightly significant 3 - Significant 4 - Very significant 5 - Most significant)*

ITEM	1	2	3	4	5
Formal and informal training leading to efficiency					
Increase productivity to the organisation					
Time saving in the project implementation					
Increase inefficiency and effectiveness					
Improved organisational performance.					
Any other (Specify)					

2. Please tick appropriately the extent to which following HRM practices affects masonry labour productivity. *(1- Not significant 2 - Slightly significant 3 - Significant 4 - Very significant 5 - Most significant)*

ITEM	1	2	3	4	5
Performance and reward management					
Training and development management					
Recruitment and selection					
Safety, Health and Welfare					
Employee relations					
Employee Engagement					
In your opinion is there any other way to improve masonry labour productivity in the organisation?					

Appendix III: Questionnaire for Construction Managers

I am a postgraduate student at Nairobi University. I would be grateful if you would answer questions herein. The information will be treated confidentially and will only be used for the purpose of the research. Please respond to questions by ticking (✓) against the appropriate information and writing appropriate answer in blank spaces. Don't write your name or that of the company anywhere on the questionnaire interview.

PART I: DEMOGRAPHIC INFORMATION

Please tick appropriately

1. Gender: ☐ Male ☐ Female
2. Level of education:

☐ Certificate ☐ Diploma ☐ Degree ☐ Master's Degree ☐ PhD

3. Experience (in terms of years)

☐ 0-10 ☐ 11-20 ☐ 21-30 ☐ 31 and above

4. Type of the contractor:

Local ☐ International ☐ Others ☐

5. Who funds this project?

Government of Kenya ☐ World Bank ☐ Others ☐

6. Region of the construction site (County location)

……...

7. Level of construction works

……..

PART II: THE HUMAN RESOURCE MANAGEMENT PRACTICES.

Please indicate by ticking as appropriate the extent to which human resource management systems are practiced using the 5-point measurement scale. The correct order of significance of each of the factors is indicated below and applies to all sections in this part. *(1- Not significant 2 - Slightly significant 3 - Significant 4 - Very significant 5 - Most significant)*

ITEM	**1**	**2**	**3**	**4**	**5**
Performance and Reward Management					
Training and Development Management					
Recruitment and Selection Management					
Safety, Health and Welfare					
Employee Relations					
Employee Engagement					
In your opinion, is there any other Human Resource Management System and to what extent is it practiced?					

PART III: THE LEVEL OF LABOUR PRODUCTIVITY IN MASONRY WORKS

Based on your experience in managing this construction site, please rate your daily satisfaction to completion on the masonry works.

1	Very unsatisfied	
2	Unsatisfied	
3	Satisfied	
4	Slightly Satisfied	
5	Very Satisfied	

PART IV: THE FACTORS AFFECTING LABOUR PRODUCTIVITY IN MASONRY WORKS

1. Do you have the relevant taskforce for masonry works?
   ☐ Yes ☐ No
2. Is there a management system of workers in masonry?
   ☐ Yes ☐ No
3. Please tick appropriately the extent to which the workers and management affect masonry labour productivity. *(1- Not significant 2 - Slightly significant 3 - Significant 4 - Very significant 5 - Most significant).*

ITEM	**1**	**2**	**3**	**4**	**5**
Ability and skills					
Sense of responsibility					
Health and safety measures are observed					
Workers have experience and expertise					
Workers undergo relevant education and training					
There is motivation to work					
Proper communication channel is followed					
There is teamwork among workers					
The workers have positive attitude towards work					
There is good management ability exhibited					
There are proper field work plans					
There are no defects in design documents					
There are no delays for approvals					
There are no order errors					
There are no strikes					
There are no public complaints and claims					
There are no safety issues reported					
There is no work delay					
There is no repeat of work					
There is smooth work continuity					
There is continuous monitoring of quality of masonry materials					

In your opinion, does hiring relevant taskforce and efficient work management and control affect masonry labour productivity in the organisation?

PART V: EFFECT OF HUMAN RESOURCE MANAGEMENT ON MASONRY LABOUR PRODUCTIVITY

4.Please tick the significance of the following effects of the HRM practises are experienced masonry labour. *(1- Not significant 2 - Slightly significant 3 - Significant 4 - Very significant 5 - Most significant)*

ITEM	1	2	3	4	5
Formal and informal training leading to efficiency					
Increase productivity to the organisation					
Time saving in the project implementation					
Increase inefficiency and effectiveness					
Improved organisational performance.					
Any other (Specify)					

5.Please tick appropriately the extent to which following HRM practices affects masonry labour productivity. *(1- Not significant 2 - Slightly significant 3 - Significant 4 - Very significant 5 - Most significant)*

ITEM	1	2	3	4	5
Performance and Reward management					
Training and development management					
Recruitment and Selection					
Safety, Health and Welfare					
Employee Relations					
Employee Engagement					
In your opinion is there any other way to improve masonry labour productivity in the organisation?					

6.Please indicate by ticking as appropriate how the following human resource management systems will affect the labour productivity of masonry employees using the 5-point measurement scale. The correct order of significance of each of the factors is indicated below and applies to all sections in this part.

Appendix IV: Interview Schedule

In depth Interview to Construction Managers

Q1. Is there a Human Resource Department in the Firm?

Q2. Are your employees motivated to perform their duties?

Q3. Do you think presence or absence of Human Resource Management Practices contributes to the productivity of the employees?

Q4. Does the company organize team building so that the management can interact with the employees?

Q5. What can be done to improve employees' welfare in the construction industry?

Q6. Does the company offer milk to masons on a daily basis?

Q7.What happens to those who demand money instead of milk?

Q8. Besides giving employees milk to drink after masonry work that exposes them to dangers of inhaling cement and other harmful materials, what other measures are in place by the company to protect their health?

Q8. Do you sensitize the employees on safety issues so that they can take responsibility for their safety by wearing Personal Protective Equipment?

Q9. Are employees allowed to join unions that fight for their welfare?

Q10. Construction employees are usually paid wages on weekly basis, do you have a system of better remuneration packages to enable them save and undertake long term activities such as paying school fees or paying for hospital bills?

Q11. Finally, in your opinion, what measures can be taken by stakeholders in the Construction Industry such as the Government, National Construction Authority and Training Institutions to improve the work environment for contractors so that they can also improve the welfare of their employees?

Thank you so much for your time

Delores Mbati

Appendix IV: Introductory Letter

UNIVERSITY OF NAIROBI

DEPARTMENT OF REAL ESTATE AND CONSTRUCTION MANAGEMENT

P.O. Box 30197,00100 Nairobi, KENYA, ***Tel: No.+254-020-4913531***

E-mail: *dept-recm@uonbi.ac.ke*

Ref: B53/82925/2015 **Date:** 27th August, 2018

SUBJECT: DELORES WEKOYE MBATI

This is to certify that the above named is a student in the Department of Real Estate and Construction Management, pursuing a Masters degree in Construction Management.

She is carrying out a research entitled "***The Effect of Human Resource Management Practices on Masonry Labour Productivity in the Construction Industry: A case study of NCA1 Contractors in Nairobi City County"*** in partial fulfillment of the requirements for the degree programme.

The purpose of this letter is to request you to allow her access to any kind of material she may require to complete her research. The information will be used for research purposes only.

DEPARTMENT OF REAL ESTATE
AND CONSTRUCTION MANAGEMENT
UNIVERSITY OF NAIROBI

Dr. Luke Obala (Phd)

Ag. Chair & Senior Lecturer

Dept. of Real Estate & Construction Management