KSh 3,000

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PRACTICES AND THEIR EFFECTS ON EMPLOYEE PERFORMANCE IN MAVOKO CONSTITUENCY WITHIN MACHAKOS COUNTY

BY SELERINA SAMBA MWARUTA

D53/CE/22086/2010

A Research Project Submitted in Partial Fulfillment of the Requirement for the Award of Degree of Master of Business Administration

(Human Resource Management Option)

School of Business, Kenyatta University

SEPTEMBER 2013

DECLARATION

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

Signature..... Date 2/11/2013

Selerina Samba Mwaruta

REG: D53/CE/22086/2010

RECOMMENDATION

This research proposal has been submitted, examined and passed with my approval as University supervisor.

Signature..... Date 2/11/2013

Madam Lucy Kavindah Mwangi

Department of Business Administration

School of Business

Kenyatta University

Signature..... Date.....

Dr. Muathe S.M.

Chairman

Department of Business Administration

School of Business

Kenyatta University

DEDICATION

I dedicate this work to my husband Mr. Francis Wanjau and our children Rahab Wangui, Mike Wachira and young Shiru, for their love, support, patience, encouragement and understanding that gave me the determination that watered my quest to complete my postgraduate studies.

ACKNOWLEDGEMENT

I am first and foremost deeply indebted to my Almighty God for allowing me to undertake MBA degree programme.

I am also obliged to register my sincere gratitude to my supervisor Madam Lucy Kavindah. Her guidance, support, constructive criticism, wealth of knowledge, experience, wisdom and understanding contributed greatly to the work so far accomplished.

Special thanks go to our son Mike Wachira who has been so instrumental during my undertaking of the course, right from the time I applied ad registered for this course.

THAK YOU VERY MUCH, MAY OUR GOOD LORD BLESS YOU ABUNDANTLY.

ABSTRACT

Occupational Safety and Health (OSH) is generally defined as the Science of the Anticipation, recognition, evaluation and control of hazards arising in or from the workplace that could impair the health and well-being of workers, taking into account the possible impact on the surrounding communities and the general environment. Some 160 million workers suffer from work-related diseases and about two-thirds of those are away from work for four working days or longer. After work-related cancers, circulatory diseases and certain communicable diseases, accidental occupational injuries are the fourth main cause of work-related fatalities.

The main objective of this study was to evaluate the effect of Occupational Safety and Health Administration (OSHA) practices on employee performance of manufacturing firms located in Mavoko constituency within Machakos County. The researcher adopted an ex-post facto design where independent variables have already occurred and are not manipulated by the researcher. Independent variable will include occupational practices, safety practices and health administration practices and the dependent variable will be employee performance. The target population of this study was drawn from all manufacturing forms in Mavoko constituency within Machakos County. The location was suitable for the study since there are many manufacturing firms within the constituency. The area is also accessible to the researcher. Purposive sampling was done where all OSHA officers in these organizations formed the sample attributable to the fact that they could easily articulate the issues under study.

The study used semi-structured questionnaires and observation checklists to obtain relevant information. Piloting was done in three of the manufacturing firms so as to adjust the data collection tools if need be. The researcher together with three trained research assistants visited the manufacturing firms and administered the questionnaires to the respondents. They adopted a drop-and pick-later approach. Questionnaires were administered in the morning and collected in the evening or at a later date to allow the respondents enough time to fill the questionnaires. However, the checklist was filled by the researcher and the research assistants the same day. The data collected was coded and analyzed using statistical package for social sciences (SPSS) version 17 computer package. The study findings revealed that occupational, safety and health administration practices have a positive effect on employee performance of manufacturing firms in Machakos County. There was a very strong positive relationship (R= 0.932) between the variables. The study also revealed that 86.9% of employee performance of manufacturing firms in Machakos County could be explained by the variables under study. However, occupational practices had more explanatory power on employee performance than the other practices. This was followed by safety practices and health administration practices respectively. The study findings were presented in form of tables and graphs.

ABBREVIATIONS/ACRONYMS

OSH	:	Occupational Safety and Health
OSHA	:	Occupational Safety and Health Act
OSHA ACT	:	Occupational Safety and Health Administration Act
ILO	:	International Labour Organization
WHO	:	World Health Organization
WIBA	:	Work Injury Benefit Act
HHS	:	Health and Human Services
NIOSH	:	National Institute for Occupational Safety and Health
HPM	:	Health and Productivity Management
EAP	:	Employee Assistance Programs

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE
INTRODUCTION

1.0 Introduction

This chapter deals with the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, scope of the study, limitations of study, assumptions of the study, conceptual framework and operational definition of terms.

1.1 Background to the Study

Occupational, Safety and Health Administration (OSHA) was created by law in 1970 to oversee workplace safety and health. Today, it covers more than 100 million employees and six and a half million employers. Miners, transportation workers, many public employees, and those who are self-employed are about the only ones not covered by OSHA. Businesses that use non-employee workers, such as independent contractors or volunteers, are also not subject to OSHA. Workers are considered employees under OSHA they control the actions of the employee, have the power to control the employee's actions, and are able to fire the employee or modify employment condition (Hussain, 2009).

According to Khdair et al (2011), the scope of occupational safety and health has evolved gradually and continuously in response to social, political, technological and economic changes. In recent years, globalization of the world's economies and its repercussions have been perceived as the greatest force for change in the world of work, and consequently in the scope of occupational safety and health, in both positive and negative ways. Liberalization of world trade, rapid technological progress, significant developments in transport and communication, shifting patterns of employment, changes in work organization practices, the different employment patterns of men and women, and the size, structure and life cycles of enterprises and of new technologies can all generate new types and patterns of hazards, exposures and risks. Demographic changes and population

movements, and the consequent pressures on the global environment, can also affect safety and health in the world of work.

Nyakango (2005) also argues that it is no coincidence that the protection of workers against sickness, disease and injury related to the working environment, as embodied in the preamble to the Constitution of the ILO, has been a central issue for the organization since its creation in 1919, and continues to be so today. Occupational safety and health is a key element in achieving sustained decent working conditions and strong preventive safety cultures. Close to 80 per cent of all ILO standards and instruments are either wholly or partly concerned with issues related to occupational safety and health. A large number of areas of ILO activity include an OSH or OSH-related component, among them employment, child labour, the informal economy, gender mainstreaming, labour statistics, labour inspection and maritime safety, HIV/AIDS and the world of work, and international migration. This breadth of penetration gives a clear indication of the continued importance of occupational safety and health as a core element of ILO activity and of the Decent Work Agenda in particular.

In November 2000 the Governing Body of the ILO decided to apply on an experimental basis an integrated approach to ILO standards-related activities in order to increase their coherence, relevance, impact and currency. OSHA was selected as the first area to benefit from this approach, and at its 91st Session (2003) the International Labour Conference (ILC) held a general discussion to this end (ILO, 2003a). The ILC adopted conclusions defining the main elements of a global strategy to bring about measurable improvements in safety and health in the world of work and recommending the development of a new instrument aimed at establishing a promotional framework for occupational safety and health.

The study seeks to evaluate whether and how different organizations are adhering to the provisions of the Occupational and Health Administration Act (OSHA). This is an Act which was enacted by the government of Kenya through the Ministry of Labor's strategic

plan. Through the OSHA Act (2007), the Ministry endeavored to collect, analyze and disseminate necessary information on OSHA Act to both workers and employers. Workers, like any other resource, require maintenance and care in order to maximize their productivity (Casio, 2006). It is against this background that health and safety should not be viewed as a separate function or responsibility, but as a broader initiative that aims at improving productivity, profitability and competitiveness of a firm (Pike, 2000). In America, there is the occupation health and safety Act 1970, which is supplemented by the National Institute for occupational health and safety (Schuler and Huber, 2003).

In African countries health risks and safety programmes in business and workplace are not often measured. It is therefore important to ensure employees are always free from any health and safety hazards because employees who work in a good environment are more productive. In Kenya, the Work Injury Benefits Act 2007 covers compensation for all employees, for injuries sustained at the workplaces. It is an improvement of the earlier Workman's compensations Act which only covered selected groups of workers; those earning Sh. 400,000 per annum. However employers are resisting implementation claiming it will increase labour costs.

The ministry of labour reports that more than half of the industrial accidents and injuries in Kenya go unreported. It estimates that reported occupational fatalties and injuries for the years 2000 to 2004 were 1528, 1923,1332, 1599 and 1387. This is viewed against the background that factories and other work places have to be registered by the Department of Occupational Health and Safety, but by the end of 2004 only 11,387 such enterprises were registered excluding the 1.3 million micro and small enterprises (Nyakang'o, 2005).

Most of the reported accidents are those seeking compensation under the Workman's Compensation Act. In the year 2003 data indicated that 41% of accidents in Kenya were from mining, construction and transport, machine operators and assemblers 28% while other occupations share 31% of workplace accidents. This shows that these occupations are injury prone yet matters of safety treated casually by both the employer and employees. The figure of accidents victims shows an increase, which is a pointer that working environment is still unsafe

TABLE OF CONTENTS

(Mberia, 2001). Defective and unmaintained machines are also associated with high accident rate in Kenya. Inadequate operation procedures and non-fencing of dangerous machines were identified as potential hazards to employees. These hazards may range from noises and vibrations from machines to radiation (Kenei, 2005).

1.1.1 Overview of the OSHA Act in Kenya

The government of Kenya has made a lot of effort in ensuring safety of the workers. This is quite evident in that every year on 24th April; Kenya joins other countries in celebrating the World Day for safety and health. The day is celebrated in commemoration and solidarity with the workers who have died or have been injured in the course of their work. Despite all the efforts, however, a number of challenges have been cited. Currently, OSH is not integrated into the Kenyan education curricula. Labour market entrants in the country therefore lack basic knowledge and skills in occupational safety and health. There is shortage of OSH skills both in the public and private sectors. In addition, occupational and health services are not adequately integrated into all levels of the country's health care system (NOSH Policy, 2012).

Byars and Rue (2007) indicate that employee safety and health are important concerns in today's organizations. The National Safety council estimates that 5,000 deaths and 3.5 million disabling injuries resulted from occupational accidents in 2011. The associated total work accident costs was estimated to exceed 300,000 each year. As these figures indicate, the costs associated worth workplace injuries or illnesses are high. Other indirect costs include employer's costs of health insurance and workers compensation. For example, a late 2000 study reported that the average medium-sized organization (500 to 4,999 employees) spent an average of over $800,000 per year. Small organizations spent an average of over $41,000. These costs vividly illustrate an incentive for organizations to reduce work-related injuries and illnesses and to improve overall employee health. While health costs have escalated dramatically in the last decade, occupational injuries and illnesses have been around for a long time. For example, 35,000 occupational deaths occurred in 2005. In spite of the known inquiries and associated costs for years many

organizations did very little to reduce the problem. Because of this, a bipartisan U.S Congress passed Safety and Health Act in 1970.

1.1.2 OSHA Standards

Occupational Safety and Health Act (OSHA) establishes legally enforceable standards relating to employee health and safety. Usually the human resource department is responsible to being familiar with these standards and ensuring that the organization complies with them. Currently OSHA publishes six volumes of standards; covering four major categories; general industry, maritime, construction and agriculture.

OSHA can initiate standards on its own or on petitions from other parties including the US Secretary of Health and Human Services (HHS), the National Institute for Occupational Safety and Health (NIOSH), state and Local governments, and nationally recognized standards producing organization, Employers, Labour organizations or any other interested party. OSHA compliance officers (inspectors) are authorized under the act to conduct workplace inspections. Originally employers were not given advance notice of inspections and could not refuse to admit OSHA inspectors. However, a 1978 Supreme court decision ruled that employers were not required to admit OSHA inspectors onto their premises without a search warrant. Because OSHA does not have the resources to inspect all workplaces covered by the act, a system of inspection priorities have been established.

1.2 Statement of the Problem

Over the past two decades, policymakers have called for improvements in employee performance in various organizations. Policy makers have long reported that paying attention to employee working environment is the most important action that any employer can consider. If the work environment is not hospitable then employee performance can suffer (Terry, 2011). According to Khdair et al (2011), occupational, safety and health administration practices at work is a difficult and complex phenomenon, and the subject of employee performance across industries is hard and challenging to be achieved. It needs a lot of measures and policies to be applied. Moreover,

employee performance is very complicated and sensitive concern of the organization to deal with, as it's the matter lives of people and resources, and who involved in the project towards success.

Research on factors affecting employee performance of manufacturing firms in Kenya have accelerated over the last two decades (Nyakang'o 2005, and Ayoo, 2002). These scholars have expressly called for research on and documentation of factors affecting employee performance of manufacturing firms in Kenya. Most of these research works have focused on human resources management practices (Munjuri,2011). However, limited research has been carried out on the effects of OSHA practices on employee performance of manufacturing firms.

Gopal and Rajendra (2012) studied on awareness and knowledge about risk, practices on risk prevention in salons/parlors in India. The research findings revealed that the knowledge and practices were adequate but the practices were different among the rural and urban salon workers. Alli (2008) studied on the measures and strategies designed to prevent, reduce or eliminate occupational health hazards and risks established that the measures had been developed and applied continuously over the years to keep pace with technological and economic changes. Nevertheless, occupational accidents and diseases were all too frequent and their costs in terms of human suffering and economic burden continued to be significant. In Kenya, according to the Ministry of Labor's strategic plan work place deaths, injuries and illnesses are of great concern. As a result the cost of workers' compensation, insurance costs and medical expenses has continued to increase despite introduction of OSHA Act (2010).

Based on the foregoing empirical studies among others, no systematic study has been undertaken to show how OSHA practices affect employee performance of manufacturing firms in Mavoko Constituency within Machakos County. It is for this reason that the researcher seeks to investigate the effects of these OSHA practices on employee performance of all manufacturing firms in Mavoko Constituency within Machakos County.

1.3 Purpose of the Study

The purpose of this study was to establish the effect of occupational, safety and health administration practices on employee performance in Machakos County.

1.4 Objectives of the Study

The study was guided by the following objectives:-

i. To establish the extent to which various occupational practices affect employee performance in Machakos County.

ii. To establish the extent to which various safety practices affect employee performance in Machakos County.

iii. To establish the extent to which health administration practices affect employee performance in Machakos County.

1.5 Research Questions

i. To what extent do occupational practices affect employee performance in Machakos County?

ii. To what extent do safety practices affect employee performance in Machakos County?

iii. To what extent do health administration practices affect employee performance in Machakos County?

1.6 Significance of the Study

The management of various organizations will improve on the methods of safety to their employees and have interest towards the programmes. Likewise, the government and other policy makers will be able to gain insight on OSHA aspects that can be implemented in order to promote workers and employers welfare. This research will assist the government in unraveling the challenges facing different organizations in implementing safety programmes, as per the Act.

It is hoped that this research will be beneficial to the general public because they will be in a position to know their right to have safety training before they start operations and even as regularly as possible.

The study may also contribute through the development of fresh knowledge which employees and their employers can use to deal with the emerging challenges in the implementation of OSHA programmes in their organizations.

The study may also add to the body of knowledge on OSHA practices besides filling gaps in research which could prompt other researchers to do similar studies in other regions or levels of education. This study paves the way for other researchers in this field towards identifying areas for further research. The study will also add to the increasing body of theoretical knowledge in human resources management. This therefore, lays down the foundation for other similar replicative studies with extensions in developing countries. However, in this respect, recommendations for further research will be presented at the end of this study.

1.7 Limitation and Delimitation

1.7.1 Limitations

The study will be constrained by the following factors: The study will be confined to Mavoko Constituency in Machakos County and therefore the study findings generation can not extend to other parts of the country. Financial constraints will limit the study to a small area since carrying out research in Kenya as a whole would be very expensive and practically impossible. The research will also be constrained by time factor and therefore longitudinal methods study cannot be used. The study will only sample 30% of the population making sampling restrictions a limitation. Some respondents may be suspicious and hence give inaccurate information.

1.7.2 Delimitation

Delimitations are the self imposed limitations to the study. This study will be carried out in Mavoko Constituency, Machakos County. The sample will be drawn from manufacturing firms in Mavoko Constituency for the sake of data collection and analysis.

1.8 Assumptions of the Study

The study will be carried out on the basis of the following assumptions:-

i. That all the respondents will give genuine, truthful, and honest responses to the research questions and interviews.

ii. That OSHA practices affect employee performance in Machakos County, Kenya.

iii. That the sample taken will be a fair representation of the population and therefore the findings will be generalized.

iv. That the target population is homogeneous

1.9 Scope of the Study

The study will be carried out on manufacturing firms in Mavoko Constituency within Machakos County as attached in Appendix XX. Respondents in this study will mainly be one employee and the OSHA officer in each of the manufacturing firms.

1.10 Operational Definition of Terms

OSHA Practice	Refers to the manifestation of a occupational, safety, health and administration orientation in an organization.
Effect	Something brought about by a cause or agent or a result. This research will focus on the impact of OSHA practices on the employee performance manufacturing firms in Mavoko Constituency.
Employee Performance	The outcome of an employee in terms of commitment, promotion, job satisfaction and specific job deliverables. In

	this research, it is the extent to which employees meet their specific scopes of work and objectives
Manufacturing Firm	An institution involved in the processing of any raw materials into finished goods.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter deals with the literature review of other researchers on the Occupational, Safety and Health Administration (OSHA) practices and their effects on employee performance. An attempt is made to critique the fundamental theories of recruitment and employees engagement as stated and discussed by various authors. The chapter comprises of conceptual definitions, theoretical literature review, empirical review and a summary which seeks to find gaps in the subject which empirical studies have not addressed.

2.2 Review of Theoretical Literature

The goal of the internal responsibility system is to have all employees working together to identify and control situations (hazards) that could cause harm. Its ultimate objective is to ensure everyone integrates health and safety into their work. It is the foundation of the OSHA Act. Organisations are expected to comply with the requirements of the OSHA Act 2009 that includes but is not limited to cleanliness, overcrowding, ventilation, lighting, drainage of floors, sanitary convenience, machine safety, fire prevention and emissions. How well the organizations comply with the provisions of this Act and how this affects the performance of the organization will be the focus of this study.

The World Health Organization (WHO) estimates that each year 1.1 million people across the globe die from occupational injuries and diseases, a figure roughly equivalent to the number of deaths from malaria. There are approximately 160 million new cases of occupational disease and 250 million accidents resulting in 300,000 fatalities per year. It is estimated that the annual overall economic losses from work-related diseases and injuries are approximately 4% of the world's gross national product (World Health Organization, 1999). It has been estimated that "deaths attributable to occupation are the eighth leading

cause of death in the US Making it greater than the annual number of motor vehicle deaths per year" (OSHA, 2009).

In Sub-Saharan Africa, the fatality rate per 100,000 workers is 21 and the accident rate is 16,000. This means that each year, 54,000 workers die and 42 million work-related accidents take place that cause at least three day's absence from work. In Latin America and Carribean, about 30,000 fatalities occur each year and 22.6 million occupational accidents cause at least three day's absence from work (Alli, 2008). The cost of occupational accidents in Vietnam for 2004 was estimated at US dollars 7.3 billion (GOV, 2006). Small and medium-sized enterprises especially in emerging economies are increasingly relying on chemical production and use. In these settings, the access to people with experience in assessing and controlling exposure to chemicals is limited. Therefore, a new approach to the control of chemicals, *control banding*, has been developed. It is a complementary approach to protecting worker health by focusing resources on exposure controls and bands chemicals in different groups according to their dustiness/volatility (ILO, 2008).

After analyzing information from various sources, researchers estimated that in a single year, "6,500 deaths from injury, 13.2 million non-fatal injuries, 60,300 deaths caused by occupational disease, and 857,500 illnesses resulted in estimated costs of $170.9 billion in 1992, roughly 3% of the gross domestic product." The researchers concluded that the costs of occupational injuries and illnesses are high, in sharp contrast to the limited public attention and societal resources devoted to their prevention and amelioration (OSHA, 2009).

In America (Congress 1970), it was discovered that more than 90 million Americans spend their days at the workplace or on the job. In fact, workers are the most valuable natural resources, yet until 1970, no uniform and comprehensive provision existed for their protection against work place safety and health hazards. In 1970, the congress considered annual figures such as these:- Job related accidents accounted for more than 14,000 worker deaths. Ten times as many persons days were lost from job-related disabilities as from strikes. Estimated new cases of occupational

diseases totalled 300,000. In terms of lost production and wages, medical expenses and disability compensation, the burden or the nation's commerce was staggering. Human cost was beyond calculation.

Therefore, the Occupational Safety and Health Act of 1970 was passed by the congress to assure so far as possible every working man and woman in the nation safe and healthful working conditions. In Kenya, the Occupational Safety and Health Act No. 15 of 2007 (OSHA Act), was published by the National Council for law reporting with the authority of the Attorney General Revised edition 2010 (2007) and was enacted by the Parliament of Kenya. It stated that the Act shall apply to all work place where any person is at work whether temporarily or permanent.

The purpose of the Act was to secure the safety, health and welfare of persons at work. It was also meant to protect other persons other than persons at work against risks to safety and health arising out of or in connection with the activities of person at work. The Act sought to ensure that the employer provides employees with employment a place of employment free from recognized hazards. The government of Kenya through the Ministry of Labor's Strategic Plan was to enforce the OSHA Act No. 15 of 2007 and also endeavour to collect, analyze and disseminate necessary information on OSHA to workers and employers. The Ministry of Labour was also supposed to spearhead the establishment of an Occupational Safety, Health and Injury Benefits Authority (OSHIBA) to be responsible for the administration of the Occupational Safety and Health Act 2007 and Work Injury Benefit Act (WIBA) of 2007. OSHA mission therefore was to help employers and employees reduce on the job injuries, illnesses and deaths.

Due to the changes in occupational distribution with development, many countries have experienced a shift from the hazards that characterize work in agriculture, mining and other primary industries, to those of manufacturing industries or service industries. Following such a shift, occupational injuries and diseases could be expected to fall in number and the severity of those that do occur to be less. But, in fact, new occupational disease problems have emerged, leading to an increased incidence of reported occupational disease in certain developed countries (WHO, 1999).

About 100,000 chemicals, some 50 physical factors, 200 biological factors and some 20 adverse ergonomic conditions, and an identical number of physical workloads associated with incalculable numbers and types of psychological and social problems have been identified as hazardous factors or conditions of work which usually occur in combinations and have several interactions. They contribute to the risk of occupational injuries, diseases and stress reactions, job dissatisfaction and absence of wellbeing. Most of such problems are in principle preventable and should be prevented in view of interest of health and well-being, but also from the economy and productivity point of view (World Health Organization, 1995, p 28). Lugah et al. (2010) noted that occurrence of accidents and diseases vary significantly among developed and developing countries and in preventing occupational injuries and diseases, awareness plays an important role and in order to fortify safe working behaviors and to reinforce positive attitudes, awareness activities are essential.

2.2.1 Control Theory / OSHA Awareness

Traditionally, the most frequent method for managing occupational safety has been by taking a control-oriented approach to human resources (Barling & Hutchinson, 2000), one that assumes workers are motivated to exert only as much effort as is necessary for task completion. As such, it is management's responsibility to use its legitimate authority to control employee behavior (Walton, 1985). In terms of occupational safety, the control-oriented approach emphasizes the use of rules to enforce behaviors and the use of punishment to increase rule compliance (Barling & Hutchinson, 2000). This implies that the organization develops rules that must be adhered to by all employees in order to increase OSH in the workplace.

According to Khdair et al (2011), safety at work is a difficult and complex phenomenon, and the subject of safety performance across the industries is hard and challenging to be achieved. It needs a lot of measures and policies to be applied. Moreover, safety performance is very complicated and sensitive concern of the organization to deal with, as

it's the matter lives of people and resources, and who involved in the project towards success. The second reason for implementing the effective management of health and safety is about the financial costs of a crash (Bakri et al, 2006).

Whether organizations are under the Act, the OSHA was created within the Department of Labour in Kenya to encourage employers and employees reduce work place hazards and to implement new or improve existing safety and health programmes. OSHA provides for research in occupational safety and health to develop innovate ways of dealing with occupational safety and health problems. OSHA was meant to establish separate but dependent responsibilities and rights for employers and employees for the achievement of better safety and health conditions. OSHA intends to maintain a reporting and record keeping system to monitor job-related injuries and illnesses. OSHA seeks to establish training programs to increase the number and competence of occupational safety and health personnel. It was envisaged to develop mandatory job safety and health standards and enforce them effectively. Finally, OSHA provides for the development analysis, evaluation and approval of state occupational safety and health programs.

2.2.2 Commitment Theory/ Safety Programmes

There has been a growing realization that human resources require high-involvement- high commitment oriented strategies in order to effectively achieve organizational objectives (Lawler, 1996). Wood (1999), noted that these approaches reflect a rejection of the traditional Taylor's model and a heightened focus on job-design theory. Rather than relying on compliance by means of rules, regulations, and monitoring to decrease costs and increase efficiency, high-commitment management creates conditions that encourage employees to identify with the goals of the organization and to exert effort to achieve them (Whitener, 2001). Similarly, high involvement management concentrates on empowering employees through increased information flows and devolution of decision making power, leading to greater productivity and higher OSH in the workplace.

High-involvement- high commitment work systems assume employees are a primary source of competitive advantage that is difficult for others to imitate and that workers are capable

of continuous improvement and will perform at higher levels if they are motivated to do so (Pfeffer, 2008). This is achieved by encouraging practices such as participative decision making, providing high-quality training, and sharing information. By treating workers with respect and as capable and intelligent individuals, organizations will find that workers will be more committed to the organization and more trusting of management, which will result in improved performance (Wheatley, 2007). Employees view human resource practices and trustworthiness of management as indicative of the organization's commitment to them. In turn, employees reciprocate with appropriate attitudes and behaviors expected to translate to greater safety behavior.

Arthur (2004) found that performance quantity (in terms of labor hours) and performance quality (as measured by scrap and turnover rates) were significantly better in mini-mills operating under a commitment-oriented system than in mini-mills managed in a control-oriented fashion. High-involvement- high commitment work systems can be applied to improving workplace safety just as well as firm economic performance. Safety should be considered a performance variable much like production, profits, sales, quality control, or customer complaints (Kivimaki, Kalimo, & Salminen, 1995). Pfeffer (1998b) stated that it is important for organizations to measure indicators that are important to their particular business and that successful companies often have performance standards that are unique and go beyond typical financial reporting measures. High-commitment employee systems will also influence occupational safety, by increasing employee trust in management and perceived safety climate. Some of the adherence measures may be exposure reduction by job rotation or limitation on hours worked.

Cole (2011) found that except in very small firms of fewer than 5 employees, every employer is required to prepare and keep up to date, a written statement of safety policy. This statement should reflect the employers' commitment to safety and health at work and should indicate what standards of behaviour are to be aimed at in health safety and welfare matters. Cole (2011) says that the policy statement should be drawn to the attention of all employees. In practice, this is achieved by issuing a safety policy document to all employees via their pay-packets or by issuing

company handbooks which include details of the policy. The important point is that the employer should be able to show that he has done more than just pin up a notice in various parts of his premises.

Derek Torrington (2011) at a time, when absence from duty is an increasing priority for employers, the London School of Economics report has created one of the most compelling investment cases to date for health and well-being policies. One of the United Kingdom's largest employers "Royal Mail Group" has invested £46 million over three years in approaches that address the biological, social and psychological causes of absence, delivering a return on investment of five to one.

ILO (2008) developed a risk management framework as useful diagnostic tool that enables enterprises to identify workplace hazards, assess the risks associated with each of them, and develop appropriate, customized solutions that fit within the wider health and safety policy of an enterprise. There are five core stages of the risk management process that include the identification of the hazards, assessment of the risks, establishment of measures for risk reduction and control, monitoring the effectiveness of the measures undertaken and appropriate adjustment of those measures through continuous improvement (ILO 2008). After designing an OSH policy, certain organizational measures need to be put in place. These include defining responsibilities and mechanisms for accountability, organizing appropriate training, and setting up documentation and communication infrastructures to make the policy effective. Enterprises/organizations can then move to the planning and implementation of the policy and related strategies, evaluating them and taking action to make improvements based on the evaluation results (ILO 2008).

2.3 Employee Performance

Employee performance is vital for business success. The literature identifies factors such as job security, workload, absenteeism, retention and on- and off-the-job training as affecting employee performance (Dibben and James, 2007). Employee turnover, satisfaction, commitment, esprit de corps and citizenship are some other determinants of employee performance (Baptise, 2008). Commitment refers to the degree to which employees sacrifice

for, identify with and involve themselves in achieving organizational objectives (Lancaster and VeLdeN, 2004). Employee attachment and loyalty are other measures of employee commitment (Ogba, 2008). Esprit de corps relates to teamwork and cohesion in the context of an organization (Al-Rawi, 2008). It signifies employee attachment to achieve common organizational objectives. Effective organizational leadership and behavior create pride, commitment and dedication in employees, which are important determinants of esprit de corps (Al-Rawi, 2008 and Ogba, 2008;).

Employee performance can be construed to mean the sales revenue per employee. While a number of outcome measures have been used to ascertain then effectiveness of HR systems, a primary focus on employee performance is warranted for a number of reasons. First, employee performance is a crucial organizational outcome. At a general level, employee performance, defined as "total output divided by labour inputs" (Samuelson & Nordhaus, 1989), indicates the extent to which a firm's labour force is efficiently creating output. Second, because connections between human capital and employee performance are relatively direct, the face validity for this measure of firm success is also relatively high (Dyer & Reeves, 1995). Third, SHRM theorists have identified employee performance as the crucial indicator of "work force performance" (Delery & Shaw, 2001). Finally, employee performance has been the most frequently used outcome variable in a large body of work in the SHRM literature (Boselie, Dietz & Boone, 2005).

Citing Guest's (1997) point that "we would expect the impact of HRM to become progressively weaker as other factors intervene" (p. 269), Boselie et al. (2005) advocate that future research focus on productivity as the "bridge in future research between the often labeled 'soft' HRM outcomes (e.g., employee satisfaction, commitment and trust) and 'hard' financial outcomes (e.g., sales, profits, ROI)." We obtained the components used to calculate workforce productivity (sales revenue, number of employees) from respondents to both the HR and General Management surveys. The estimates provided by the HR and GM respondents were used to calculate workforce productivity (log of sales per employee) and

this measure showed strong agreement across respondents and the mean of these estimates was used as the measure of labour productivity (ICC2 = .779).

Another aspect of workforce performance is the ability to efficiently generate revenue through the introduction of new products and services. Workforce innovativeness was operational zed using data on number of employees, sales revenue and responses to the question: "What proportion of your organization's total sales (turnover) comes from products or services introduced within the previous 12 months?" The response to this question was multiplied by total sales to yield an estimate of sales revenue generated by new sales. This sales figure was then divided by the number of employees to obtain our measure of workforce innovativeness – an indication of per capita sales derived from recently introduced products or services. The mean of the estimates provided by the HR and GM respondents were used as the measure of workforce innovation (ICC2 = .643).These two measures of employee performance (workforce productivity and innovation) capture a workforce's ability to work both smart (i.e., impacting organizational efficiency and innovation through process and product innovations) and hard (impacting revenue generation through increased effort).

Employee performance is measured as labor productivity, defined as value added per head. (Bartelsman and Doms, 2000). This implies that heterogeneity in employee performance has been found to be accompanied by similar heterogeneity in total factor productivity in the reviewed research where both concepts are measured. In a recent comprehensive survey, Chad (2011), argues that high-productivity producers will tend to look efficient regardless of the specific way that their productivity is measured. Furthermore, Foster, Haltiwanger and Syverson (2008), show that employee performance measures that use sales (i.e. quantities multiplied by prices) and measures that use quantities only are highly positively correlated. Employee performance is computed as value added per head = (total sales (w/o sales taxes) - costs for materials (w/o sales taxes)-other costs- taxes (w/o sales taxes)+ subsidies received))/ number of employees. This measure of employee performance will also be used to compliment other performance perceptions in this study.

There are three main approaches to employee performance including trait-based, behavior-based, and result-based systems. Trait-based systems require judgments on the degree to which a performer possesses certain desired personality characteristics deemed important for the job. Personality profiles, tests, and measurements are a common form of trait-based evaluation. Because it is difficult to define personality characteristics, this type of evaluation lacks validity and reliability and has little value for performance improvement (Bowman, 1999). Behavior-based evaluation attempts to discern what a performer actually does, and it provides a rating on his or her job activities (Dreyer, 1997). Behavioral competencies are work behaviors exhibited by performers and classified into categories rated on how well they exhibit the behavioral competencies required for their job, (Banner and Blasingame, 2008).

The critical-incident technique is used to attempt to evaluate an employee on instances in which his or her work behaviors are of high visibility in the organization or are critical to the success of the department. Data for critical incidents can be collected by conducting personal interviews, focus group interviews, and direct or participatory observation, (Edvardsson and Roos, 2001). It is important to note that this type of evaluation commonly ignores other aspects of the job that are critical to the success of the employee simply because the incident or activity has little or no visibility in the organization, Edvardsson and Roos (2001).

Results-based approaches attempt to evaluate an employee's contribution to the success of the organization based on set objectives. An example of this type of system is management by objectives (Mahoney and Sanchez, 2004). Introduced in the 1950s, this most common results-focused approach establishes corporate objectives, followed in cascading fashion with objectives for every department, all managers, and each employee. It attempts to achieve goal congruence between the objectives of the organization and individual performers. Management by objectives is ultimately concerned solely with business and financial results rather than the behavioral activities of the organization. Drawbacks of this type of system include conflicting cascading objectives, focus on short-term results, discouragement of teambuilding and preoccupation with personal objectives, (Mahoney and Sanchez, 2004).

2.4 Empirical Studies

Gopal and Rajendra (2012) in a study about awareness and knowledge about risk, practices on risk prevention in salons/parlors in India, noted that, these were adequate but the practices were different among the rural and urban salon workers. The study revealed that there was adequate ventilation, lighting system, toilet facility, provision for hand washing and safe drinking water in urban salons than the rural salons. They also found that sanitation and sterilization of equipment used in workplace, and the wearing of protective clothing were not satisfactory. Most of the rural and urban salon/parlor workers did not have proper knowledge of sterilization, so they reused towels and did not change aprons for each clients.

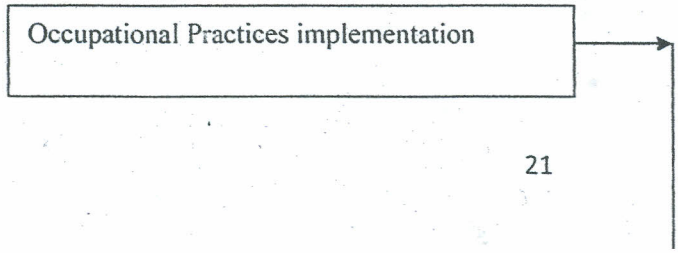
Their study focused on one segment of the economy with people performing work that did not involve heavy machinery. However their research can be related to the manufacturing sector especially in terms of wearing of safety equipment such as gloves when applying chemicals, use of gas masks to protect themselves from fumes from the chemicals, equipment decontamination with emphasis on the use of correct procedure and potent decontaminant. Their study revealed that most of the workers did not wear gloves, gas masks, aprons and goggles to protect their eyes (Gopal and Rajendra 2012).

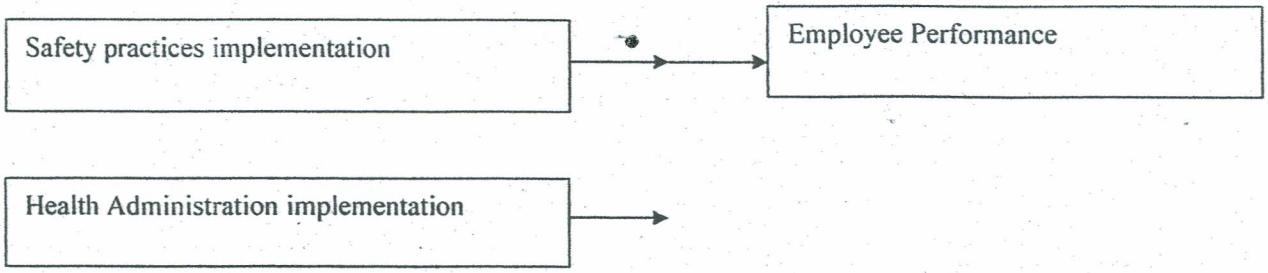
2.5 Conceptual Framework

The conceptual framework shows the relationship between the key variables that will be measured to determine the effect of OSHA practices on employee's performance in manufacturing firms in Mavoko Constituency within Machakos County. The conceptual framework shows the independent variable as OSHA practices implemented by the manufacturing firms within the Constituency while the dependent variable is employee's performance. The solid arrow line is an indicator of the influence of one variable on the other.

Figure 1.1 shows influence of OSHA practices and employee performance.

Independent Variable **Dependent Variable**





Source (Author, 2013)

2.6 Summary and Gaps to be filled by the Study

Ensuring a risk-aware culture in the organization is vitally important. A risk-aware culture will be achieved when all members of staff and management understand and accept the important of adequate risk management. In addition, management and staff need to understand the role they will play in the successful management of risks and have a desire to fulfill that role enthusiastically (Hopkin, 2010).

OSHA Act is a relatively new Act in Kenya especially to the manufacturing firms. Implementers and users of this act have not been able to fully implement the provisions of this act to ensure its benefits in enhancing employee performance. Understanding what that is and what knowledge, experience and tolls the users should have, will reduce the unknowns and facilitate the full implementation of OSHA Act in Kenya. Therefore, this research study seeks to fill this research gap by examining the extent to which people are aware of the Act and the level of adherence to provisions of the Act.

CHAPTER THREE
METHODOLOGY

3.1 Introduction

This chapter will present the research design, location of the study, target population, sample size and sampling techniques, research instruments, piloting of research instruments, validity and reliability of research instruments, data collection procedure and data analysis plan.

3.2 Research Design

The study will adopt an ex-post facto design. Ex-post facto research design is systematic and empirical inquiry in which the independent variables have already occurred and are not manipulated by the researcher. Borg and Gall (2010) define ex-post facto research as a systematic empirical inquiry in which the scientists does not have any control of independent variables because their manifestations have already occurred or because they are inherently not manipulable. Inferences about relations among variables are made without direct intervention from concomitant variation of independent and dependent variables.

3.3 Research Variables

The independent variable in this study was OSHA practices individually whereas the dependent variable was employee performance in Mavoko Constituency within Machakos County.

3.4 Location of the Study

This study was done in Mavoko Constituency, Machakos County. It is approximately 18 kilometers to the North East of Nairobi town. The location was suitable for the study since there were many manufacturing firms within the Constituency which have employed a significant number of employees. The area was accessible to the researcher. According to Singleton (2007) the ideal setting for any study should be easily accessible to the researcher.

3.5 Target Population

Target population consists of items or people under consideration in any field or enquiry (Orodho, 2009) .The target population of this study was drawn from all the manufacturing firms Mavoko Constituency within Machakos County as shown by appendix I. There are 30 manufacturing firms within Mavoko constituency and due to their small number all of them were used in the study. The list of manufacturing firms in Mavoko constituency was sourced from the County offices licensing department.

3.6 Sample Size and Sampling Techniques

Sampling is the process of selecting a sub set of cases in order to draw conclusions about the entire lot (Orodho 2009) .Gay (2011) asserts that in descriptive research 30% of the population may be required for consideration of the study where the population is small. Purposive sampling was done where 60 respondents were chosen to represent the entire population. The sample comprised of one employee and the officer in charge of OSHA in each of the manufacturing firms as shown in Table 3.1. This was attributable to the fact that there was a likelihood of hostility from some of the respondents as they are mainly private sector organizations. Sampling increased efficiency of results, lowered the costs of the research and decrease the duration of data collection.

Table 3.1 Sample Size

Category	Organizations	Sample
Employee	30	30
OSHA officer	30	30
Total	**30**	**60**

3.7 Instrumentation

This research mainly relied on primary data which was collected by use of a semi-structured questionnaire and a checklist. The semi-structured questionnaire comprised of open-ended and close-ended questions. Open-ended questions obtained qualitative data while close-ended questions obtained quantitative data. The questionnaires comprised of five sections: Section A captured the background information of the respondents and their organizations, section B captured aspects of occupational practices, section C aspects on safety practices, section D aspects on health administration and section E aspects on employee performance. According to Mouly (2009), the questionnaires normally add more value to research because it allows the selection of a representative sample. It can be used in a wide geographical area than most other techniques and facilities. Confidentiality, which is the key to the study, is observed. It also enables easy and quick gathering of information from respondents. The questionnaires contained both closed and open ended items. The researcher also used an observation checklist on OSHA aspects to obtain information from the firms.

3.8 Pilot Study

Piloting was done in three manufacturing firms in Mavoko constituency where three questionnaires will be administered. The firms were still included in the study sample but the piloted respondents were excluded in the main study. The aim of carrying out a pilot study was to eliminate ambiguity and check the language used in the data collections instruments.

3.8.1 Validity of the Study Instrument

According to Mugenda and Mugenda (2008), validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study. To ascertain the content and criterion validity of the instrument, the researcher sought the assistance of the supervisors and other professionals in the field. The instruments of data collection was tested to verify both internal and external validity. The researcher checked whether they produced results that had not been interfered with by an intervening variable.

3.8.2 Reliability of the Study Instrument

Nacmias and Nachmias (1996) state that an instrument is reliable when it can measure a variable accurately and consistently and obtain the same results under the same conditions over time. The idea behind reliability is that any significant result must be more than a one-off finding and be inherently repeatable (Scott L. Hershberger, 2013). Other researchers must be able to perform exactly the same experiment under the same conditions and degenerate the same results. This reinforced the findings and ensured that the wider scientific community accepted the hypothesis. The researcher used the test retest method at an interval of one week.

3.9 Data Collection Procedure

The researcher visited all the manufactured firms in Mavoko constituency and administered questionnaires to the OSHA officers in each organization. The researcher also used three trained research assistants who helped in data collection. This provided an opportunity to seek clarification on items that may prove difficult. The questionnaires were given in the morning and collected in the evening. The respondents were encouraged to answer all questions truthfully as their anonymity was assured. A brief introduction on how the respondents are expected to fill in the questionnaires was given. This included the definition of OSHA practices.

3.10 Data Analysis

Data analysis is the process of bringing order, structure and meaning to the mass of information collected (Mugenda &Mugenda, 1999). The questionnaires were edited for completeness before coding. Once coded the questionnaires were entered into the Statistical Package for Social Sciences (SPSS) version 17 computer package. Both descriptive and inferential statistics were used in this study. Descriptive statistics was used to describe and make sense of the data. The descriptive statistics included frequencies, percentages and means and standard deviations. Inferential statistics like regression analysis were used to establish the extent to which OSHA practices affected employee performance in Mavoko constituency. The research findings were presented using tables and graphs.

3.11 Logistical and Ethical Consideration

Permission from the Ministry of Education Science and Technology, introductory letter from Kenyatta University and County Education offices in Mavoko County was sort by the researcher. Protocol was observed by following the chain of command in respective manufacturing departments. A preliminary visit to the firms to inform them and set dates to administer the questionnaires and interviews was done by the researcher. Only consenting OSHA officers in the manufacturing firms within Mavoko constituency were involved in the research.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents the analysis of data collected from the administered questionnaires. 30 questionnaires in total were administered but the researcher managed to obtain 25 completed questionnaires representing an 83.3% response rate. The questionnaire contained questions that addressed the objectives of the study.

4.2 Data Analysis and Presentation

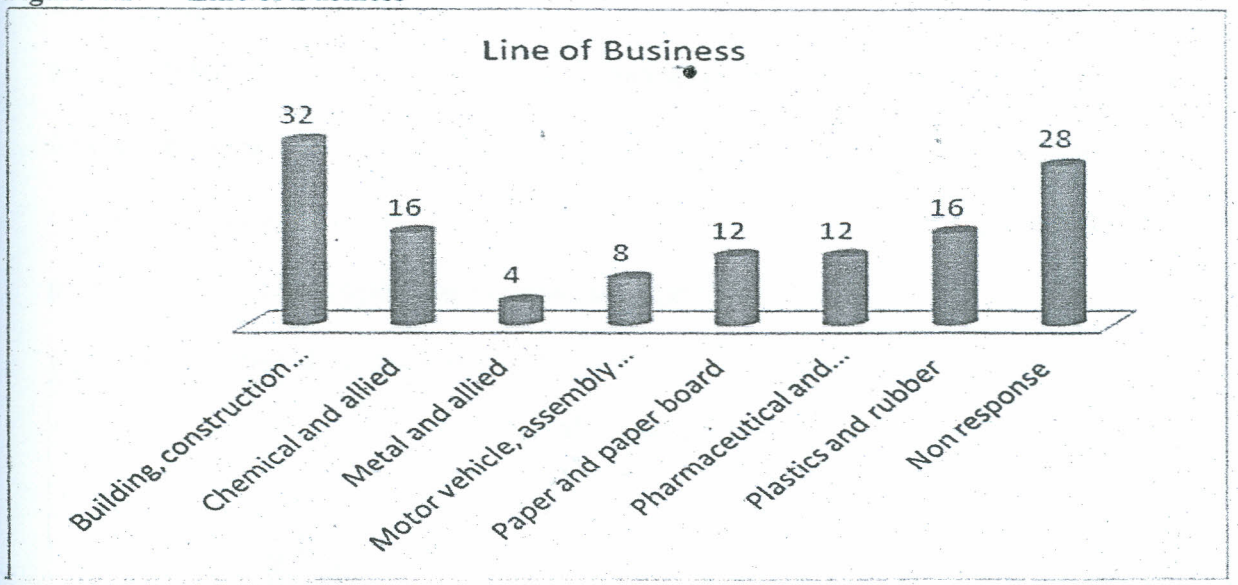
The collected questionnaires were edited and cleaned for completeness in preparation for coding. Once the questionnaires were coded, they were entered into the Statistical Package for Social Sciences (SPSS) version 17 computer package for analysis.

Descriptive statistics such as mean, standard deviation and frequency distribution were used to analyze data. Quantitative technique was used to analyze the closed-ended questions and qualitative technique was used to analyze the open ended questions, content analysis was used to categorize common answers according to their commonality. Inferential statistics (regression analysis) was also used to establish the effect of occupational, safety and health administration practices on employee performance in Machakos County.

4.2.1 Line of Business

Respondents were required to indicate their sector of operation within the industry. Majority (32.0%) of the respondents were from building and construction, followed by those from chemical and allied at 16.0%. A significant 28.0% of them did not indicate their sector of operation. The findings are as shown in Figure 4.1.

Figure 4.1 Line of Business

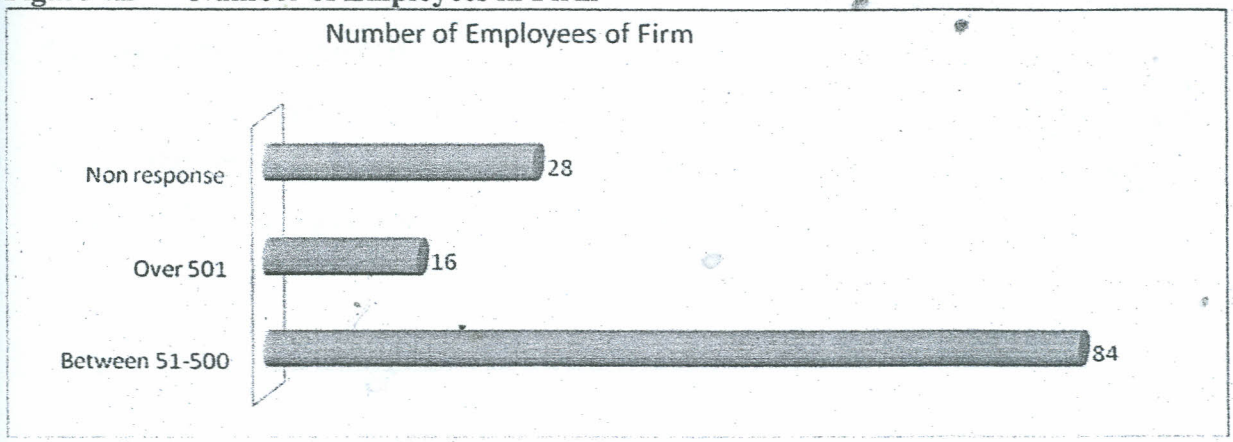


Source: Research Data (2013)

4.2.2 Number of Employees in Firm

Majority (84.0%) of the respondents in this research indicated that their firms had between 51-500 employees, 16.0% of them had over 502 employees and the remaining 28.0% of them did not indicate the number of employees their firms had as shown in Figure 4.2.

Figure 4.2 Number of Employees in Firm

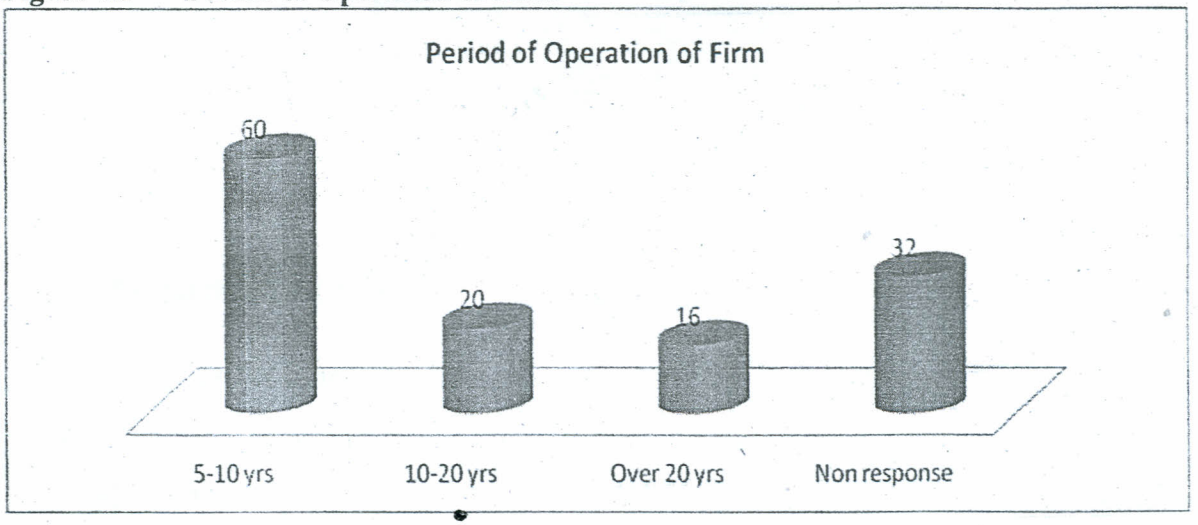


Source: Research Data (2013)

4.2.3 Period of Business Operation

Majority (60.0%) of the firms had been in operation for a period of between 5-10 years, followed by those who had been operation for a period of between 10-20 years and those in operation for over 20 years. The remaining 32.0% of the respondents did not indicate the period they had been in operation as shown in Figure 4.3.

Figure 4.3 Period of Operation of Firm

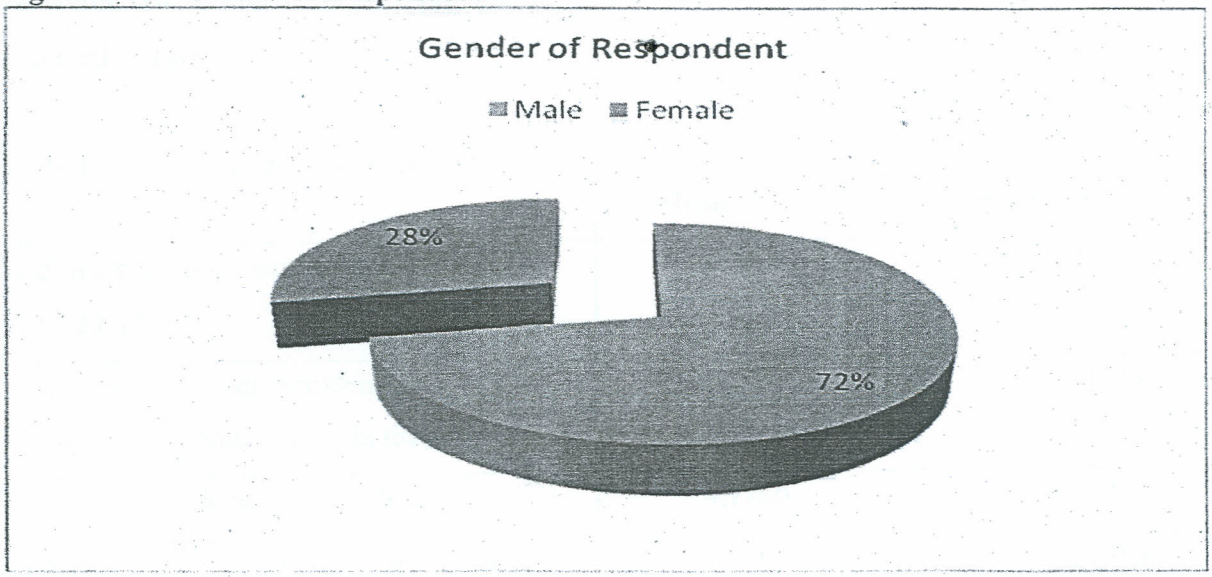


Source: Research Data (2013)

4.2.4 Gender of Respondent

72.0% of the respondents in this study were male and the remaining 28.0% of them were female. This implies that majority of the employees working in the manufacturing industry were male. The findings are as shown in Figure 4.4.

Figure 4.4 Gender of Respondent



Source: Research Data (2013)

4.2.5 Occupational Practices

Respondents were required to indicate the extent to which various statements were true regarding occupational practices in their organizations based on a Likert Scale of 1 to 5, where 1- Not at all and 5 – To a very great extent. Means of between 1.9600 – 4.5600 and standard deviations of between 0.01980 - 0. 87178 were registered. The study findings therefore reveal that majority of the respondents were of the opinion that employers designate employees who are trained in first aid to be first aid respondents, there were directional signs to guide movement of people and employees were allowed to have paternity and maternity leaves to a great extent. This was common in the following companies: Bamburi Cement Ltd., Top Tank, NMG and East African Portland Cement. On the other hand it was clear that employees of majority of the organizations had not undergone training on potential hazards at their place of work and how to handle them. The study findings also revealed that in the event of an accident on duty majority of the employees were not compensated in time. Majority of the organizations had not posted evacuation diagram within their organizations. This non compliance was common among the following companies: DOSHI Industries Ltd, Galsheet Reshincott Ltd, KAPA Oil

Refineries, SICNODE Company limited and Athi River Steel Plant. The findings are as presented in Table 4.1.

Table 4.1 Occupational Practices

	Mean	Std. Deviation
Employers respect employees rights and responsibilities	3.2400	.72342
In the event of an accident on duty, employees are compensated in time	2.2800	.61373
You know a work-related accident	4.1200	.83267
Employees undergo training on potential hazards at their place of work and how to handle them	1.9600	.01980
Employers provide protective gear to employees	2.7600	.16476
Employers designate employees who are trained in first aid to be first aid respondents	4.5600	.50662
Working equipment are properly guarded	3.5200	.87178
Equipment are certified before installation	3.3200	.80208
Employees use defective equipment	2.8800	.09240
Employees follow procedures in or around machines or equipment	3.0000	.70711
My organization has posted an evacuation diagram within the organization	2.0400	.84063
Employees work for the designated period of time i.e. No overworking	2.9600	.78951

Employees are compensated for any overtime	3.2000	.35401
Employees are allowed to have paternity and maternity leaves	4.3600	.63770
Working environment is considered safe by our employees	2.8800	.78102
Employees are aware of safety measures in case of fire	2.8000	.70711
In case of emergency there are clearly marked fire exits	2.7600	.66332
There are adequate fire-fighting equipment in place	2.1200	.83267
Employees have been trained on fire fighting skills	3.5200	.12250
There is a continuous review of accident prevention measures	2.8000	.81650
There are directional signs to guide movement of people	4.4400	.50662
Floors are kept clean and dry to reduce chances of falls and slips	3.1600	.10604
There is adequate fire-fighting equipment in place	2.8800	.66583

Source: Research Data 2013

4.2.6 Safety Practices

Respondents were further required to indicate the extent to which their firms considered various factors on safety issues based on a Likert Scale of 1 to 5, where 1- Not at all and 5 – To a very great extent. Thirteen aspects ranging from fire, floors, lifts, stair cases, trailing wire, bombs, workload, work pace, work environment, chemical exposure, improper illumination, improper ventilation and waste disposal. Means of between 3.2800 – 4.6000 and standard deviations of between 0.55678- 0.93452 were registered. It was clear from the research findings therefore reveal that majority of the organizations considered the nature of stair cases, floors they had in place in their organizations. However, bombs, waste disposal and proper ventilation were considered to a less extent by a majority of the manufacturing firms under study. This was common among the following companies: Athi River Steel Plant, FOAM Mattresses Ltd., Scrap Plastics Processing Plant and Mastermind Ltd. The study findings also revealed that majority of the employees were exposed to chemical substances in their organizations. The findings are as shown in Table 4.2.

Table 4.2 Safety Practices

	Mean	Std. Deviation
Fire	4.2000	.64550
Floors	4.3200	.62716
Lifts	4.2400	.59722
Stair cases	4.6000	.64550
Trailing wire	4.0400	.93452
Bombs	2.2400	.66332
Workload	3.5600	.58310
Work pace	3.5600	.86987
Work environment	3.9200	.70238
Chemical exposure	2.2800	.67823
Improper illumination	3.7600	.72342
Proper ventilation	3.3200	.55678
Waste disposal	3.2800	.61373

Source: Research Data 2013

4.2.7 Health Administration Practices

Respondents were further required to indicate the extent to which their firms considered various factors as health hazards based on a Likert Scale of 1 to 5, where 1- Not at all and 5 – To a very great extent. Eleven aspects ranging from company having adequate health and safety policies, employees understanding the company's health and safety policies, employees are aware of the existing laws on health and safety, presence of adequate first aid and medical services, presence of enough toilet facilities separate for male and females, employees being satisfied with the standard of cleanliness in the washrooms, presence of adequate waste disposal equipment, conduction of medical checkups for employees regularly, existence of an aids awareness programme, availability of enough clean drinking water for all employees and many health hazards. Means of between 3.9200 – 4.5200 and standard deviations of between 0.58595- 0.95394 were registered. It was clear from the research findings that there were many health hazards in manufacturing firms, there was enough drinking water for employees and that there were enough toilet facilities separate for male and female employees. However, majority of the respondents were categorical that their organizations did not conduct medical check-up for their employees regularly and that they did not have adequate health and safety policies. The findings further revealed that majority of the manufacturing firms in Mavoko Constituency did not have adequate waste disposal equipment. The companies which had not complied to many of the health administration practices included: Mastermind Ltd., DOSHI Industries Ltd., East African Portland Cement and SIGNODE Company Ltd. The findings are as shown in Table 4.3.

Table 4.3 Health Administration Practices

	Mean	Std. Deviation
The company has adequate health and safety policies	2.5200	.58595
Employees understand the company's health and safety policies	3.4400	.58310
Employees are aware of the existing laws on health and safety	3.4000	.64550

There are adequate first aid and medical services	3.4400	.58310
There are enough toilet facilities separate for male and female	4.2400	.72342
Employees are satisfied with the standard of cleanliness in the washrooms	3.3600	.63770
The waste disposal equipment are adequate	3.2400	.66332
Our firm conducts medical check-up for employees regularly	1.2400	.72342
The firm has an AIDS awareness programme	3.4800	.58595
There is enough clean drinking water for all employees	4.3600	.56862
Health hazards are very many	4.9200	.95394

Source: Research Data 2013

4.2.8 Employee Performance

Respondents were further required to indicate the extent to which various aspects on employee performance as a result of OSHA applied in their organization. Twelve aspects on performance ranging from sufficient commitment by employees in their duties, positive employee attitude towards work, following of organizational rules by employees, ability and willingness of employees to meet their targets, removal of safety guards by employees to speed up production, high burn out rate of employees due to stress, signs of aggressiveness, high employee absenteeism, high employee turnover, employee satisfaction with work, loyal attachment of employees to work and increased sales revenue as a result of employee commitment to the organization. Means of between 3.4800 - 4.5200 and standard deviations of between 0.59722-0.87178 were registered. The research findings revealed that majority of the employees in manufacturing firms in Machakos County were aggressive towards work and were willing to meet their targets. However they were also categorical that there was high employee turnover in many manufacturing firms. Further, the research findings indicated that employee absenteeism was not a major problem for a majority of the

manufacturing firms attributable to the fact that they were private enterprises hence better internal controls. The findings are as shown in Table 4.4.

Table 4.4 Employee Performance

	Mean	Std. Deviation
There is sufficient commitment by employees in their duties	4.1600	.68799
Employees attitude to work is very positive	4.2400	.66332
Employees follow organizational rules	4.2400	.59722
Employees are able and willing to meet their targets	4.4800	.65320
Some employees remove safety guards to speed up production	3.6800	.62716
Burnout rate of employees is high due to stress	4.0400	.78951
Some employees show signs of aggressiveness	4.5200	.50990
Employee absenteeism is high	3.7200	.61373
Employee turnover is high	4.3200	.69041
Employees are satisfied with their work	3.4800	.87178
Employees are attached and loyal to the organization	4.3600	.63770
There is increased sales revenue as a result of employee commitment to the organization	4.0800	.70238

Source: Research Data 2013

4.2.9 Regression Analysis

The research study wanted to evaluate the effect of occupational, safety and health administration practices on employee performance in Machakos County. The research findings indicated that there was a very strong positive relationship (R= 0.932) between the variables. The study also revealed that 86.9% of employee performance of manufacturing firms in Machakos County could be explained by the variables under study. From this study

it is evident that at 95% confidence level, the variables produce statistically significant values and can be relied on to explain employee performance for manufacturing firms in Machakos County. The findings are as shown in the Tables 4.5, 4.6 and 4.7.

Table 4.5 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.932	.869	.398	.95469

Source: Research Data 2013

Table 4.6 ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.518	47	.138	.746	.004
Residual	.185	1	.185		
Total	1.702	48			

Source: Research Data 2013

Table 4.7 Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.131	.138	.156	.947	.350
Occupational practices	.880	.198	.069	.403	.031
Safety practices	.799	.232	.258	.289	.016
Health administration	.648	.131	.192	.123	.029

Source: Research 2013

From this study it was evident that at 95% confidence level, the variables produce statistically significant values for this study (high t-values, $p < 0.05$). A positive effect is reported for all the variables under study hence influence employee performance in manufacturing firms in Machakos County. The results of the regression equation below

shows that for a 1- point increase in the independent variables, employee performance is predicted to increase by 2.131, given that all the other factors are held constant.

The equation for the regression model is expressed as:

$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + £$

$Y = 2.131 + 0.880X_1 + 0.799X_2 + 0.648X_3$

Where

$\beta 1$, β_2 and β_3 are correlation coefficients

Y= Employee performance

X_1= Occupational practices

X_2= Safety practices

X_3= Health administration practices

4.3 Summary and Interpretation of Findings

This research sought to evaluate the effect of occupational, safety and health administration practices on employee performance of manufacturing firms in Machakos County. Majority of the respondents were from the building and construction sector. 84% of the respondents indicated that their firms had between 51-500 employees. 72.0% of the respondents in this study were male and the remaining 28.0% of them were female. This implies that majority of the employees working in the manufacturing industry were male.

As pertains to occupational practices, majority of the respondents were of the opinion that employers designate employees who are trained in first aid to be first aid respondents, there were directional signs to guide movement of people and employees were allowed to have paternity and maternity leaves to a great extent.

It was clear from the research findings that majority of the organizations considered the nature of stair cases, floors they had in place in their organizations. However, bombs, waste

disposal and proper ventilation were considered to a less extent by a majority of the manufacturing firms under study. The study findings also revealed that majority of the employees were exposed to chemical substances in their organizations.

Respondents further indicated that with regards to health administration practices, there were many health hazards in manufacturing firms, there was enough drinking water for employees and that there were enough toilet facilities separate for male and female employees. However, majority of the respondents were categorical that their organizations did not conduct medical check-up for their employees regularly and that they did not have adequate health and safety policies.

The research findings further revealed that majority of the employees in manufacturing firms in Machakos County were aggressive towards work and were willing to meet their targets. However they were also categorical that there was high employee turnover in many manufacturing firms. Further, the research findings indicated that employee absenteeism was not a major problem for a majority of the manufacturing firms attributable to the fact that they were private enterprises hence better internal controls.

The inferential statistics revealed that there was a very strong positive relationship (R= 0.932) between the variables. The study also revealed that 86.9% of employee performance in Machakos County could be explained by OSHA practices in place. The research findings indicated that there was a very strong positive relationship (R= 0.932) between the variables. The study also revealed that 86.9% of employee performance of manufacturing firms in Machakos County could be explained by the variables under study. From this study it is evident that at 95% confidence level, the variables produce statistically significant values and can be relied on to explain employee performance for manufacturing firms in Machakos County. The research findings are similar to those of Gopal and Rajendra (2012) who established that proper OSHA practices impact on employee performance positively.

CHAPTER FIVE

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the study, discussions and conclusions. The researcher then presents the major limitations of the study and the recommendations for both the research and for the policy and practice.

5.2 Summary

This research sought to evaluate the effect of occupational, safety and health administration practices on employee performance of manufacturing firms in Machakos County. An ex-post facto design was adopted where independent variables have already occurred and are not manipulated by the researcher. Purposive sampling was done where 30 manufacturing firms in Machakos County were considered.

This research relied on primary data which was collected using a semi-structured questionnaire which contained both open-ended and close-ended questions. The questionnaire was structured in such a way to capture information from OSHA practices and employee performance. Drop and pick later method was used as it was appropriate and convenient for both the researcher and the respondents. This gave the respondents time to fill the questionnaires and also allowed the researcher the opportunity to review the questionnaires for completeness before picking. The questionnaires contained questions that addressed the objective of the study.

A total of 30 questionnaires were administered but the researcher managed to obtain 25 completed questionnaires representing a response rate of 83.3%. This research sought to evaluate the effect of occupational, safety and health administration practices on employee performance of manufacturing firms in Machakos County. Majority of the respondents

were from the building and construction sector. 84% of the respondents indicated that their firms had between 51-500 employees. 72.0% of the respondents in this study were male and the remaining 28.0% of them were female. This implies that majority of the employees working in the manufacturing industry were male.

As pertains to occupational practices, majority of the respondents were of the opinion that employers designate employees who are trained in first aid to be first aid respondents, there were directional signs to guide movement of people and employees were allowed to have paternity and maternity leaves to a great extent.

It was clear from the research findings that majority of the organizations considered the nature of stair cases, floors they had in place in their organizations. However, bombs, waste disposal and proper ventilation were considered to a less extent by a majority of the manufacturing firms under study. The study findings also revealed that majority of the employees were exposed to chemical substances in their organizations.

Respondents further indicated that with regards to health administration practices, there were many health hazards in manufacturing firms, there was enough drinking water for employees and that there were enough toilet facilities separate for male and female employees. However, majority of the respondents were categorical that their organizations did not conduct medical check-up for their employees regularly and that they did not have adequate health and safety policies.

The research findings further revealed that majority of the employees in manufacturing firms in Machakos County were aggressive towards work and were willing to meet their targets. However they were also categorical that there was high employee turnover in many manufacturing firms. Further, the research findings indicated that employee absenteeism was not a major problem for a majority of the manufacturing firms attributable to the fact that they were private enterprises hence better internal controls. These study findings are similar to those of Dibben and James (2007) who argue that employee turnover, satisfaction,

commitment, esprit de corps and citizenship are some other determinants of employee performance (Baptise, 2008).

The inferential statistics revealed that there was a very strong positive relationship (R= 0.932) between the variables. The study also revealed that 86.9% of employee performance in Machakos County could be explained by OSHA practices in place. The research findings indicated that there was a very strong positive relationship (R= 0.932) between the variables. The study also revealed that 86.9% of employee performance of manufacturing firms in Machakos County could be explained by the variables under study. From this study it is evident that at 95% confidence level, the variables produce statistically significant values and can be relied on to explain employee performance for manufacturing firms in Machakos County. The research findings are similar to those of Gopal and Rajendra (2012) who established that proper OSHA practices impact on employee performance positively.

5.3 Conclusion

From the study findings, it would be safe to conclude that occupational, safety and health administration practices have a positive effect on employee performance of manufacturing firms in Machakos County. The conclusion is supported by both descriptive and inferential statistics which showed that there was a very strong positive relationship (R= 0.932) between the variables. The study also revealed that 86.9% of employee performance of manufacturing firms in Machakos County could be explained by the variables under study. From this study it is evident that at 95% confidence level, the variables produce statistically significant values and can be relied on to explain employee performance for manufacturing firms in Machakos County.

However, occupational practices had more explanatory power on employee performance than the other practices. This was followed by safety practices and health administration practices respectively.

5.4 Recommendations for Policy and Practice

With due regard to the ever increasing desire to have better employee performance in manufacturing firms in Kenya, there is need to invest in proper OSHA practices so as to meet these expectations. This should be done in a manner in which all the stakeholders are happy. This therefore calls for embracing proper OSHA practices which are acceptable, accessible, ethically sound, have a positive perceived impact, relevant, appropriate, innovative, efficient, sustainable and replicable.

The management of manufacturing firms should ensure that they carry out a research on employee needs so as to establish employee motivation aspects. This will go a long way in motivating employees to perform better.

The government should enact legislation which regulates the OSHA practices in manufacturing firm. This legislation should ensure that manufacturing firms comply with best OSHA practices. Stringent OSHA legislation should be enacted to protect employee from employers.

5.5 Limitations of the Study

The researcher encountered quite a number of challenges related to the research and most particularly during the process of data collection. Some respondents were biased while giving information due to reasons such as privacy and busy schedules at their places of work.

Due to inadequate resources, the researcher conducted this research under constraints of finances and therefore collected data from manufacturing firms in Machakos County.

The research was constrained by time factor and therefore longitudinal methods study could not be used.

The study used purposive sampling making sampling restrictions a limitation. Some respondents were suspicious and hence giving inaccurate information.

5.6 Suggestions for Further Studies

Arising from this study, the following directions for further research in occupational health and human resource management are as follows: First, this study focused on manufacturing firms located in Machakos County and therefore, generalizations cannot adequately extend to other Counties outside Machakos County. Future research should therefore focus on all Counties in Kenya.

A broad based study on OSHA practices adoption and performance of both private and public business enterprises should also be carried out to give broader picture on the same.

REFERENCES

Al-Rawi K. (2008). *Cohesiveness within teamwork:* The relationship to performance effectiveness-case study. Educ. Bus. Soc. Contemp. Mid. East. Iss. 1(2): 92-106.

Baptiste N. R., (2008). *Tightening the link between employee well being at work and performance:* A new dimension for HRM. Manage. Dec.[Online]. Available: www.emeraldinsight.com). (Accessed 26 December 2008) 46(2): 284-309.

Barling, J., & Hutchinson, I. (2000). *Commitment vs. control-based safety practices, safety reputation, and perceived safety climate*. Canadian Journal of Administrative Sciences, 17, 76–84

Boselie, P., Dietz, G., and Boone, C., (2005). *Commonalities and contradictions in HRM*

Casio, W., (1996). *Managing Human Resources: Productivity, Quality and Working Life and Profits;* United States; Mc Graw Hill

Cooper, R.D, & Schindler, P., (2003). *Business Research Methods.* Third Edition. New York. McGraw- Hill Publishers.

Delery, J.E. and Shaw, J.D., *The strategic management of people in work organizations*: Review, synthesis and extension, In Rowland, K.M. and Ferris, G.R. (eds.) Research in Personnel and Human Resource Management, JAI Press: Greenwich, CT, 2001, 165-197.

Dibben P., James, P (2007). *Introduction: Is 'modern' necessarily better*? In Dibben, P., James, P., Roper, I. and Wood, G. (Eds.), Modernising Work in Public Services: Redefining Roles and Relationships in Britain's Changing Workplace (pp. 1-2). Basingstoke: Palgrave Macmillan.

Dyer, L and Reeves T., *Human resource strategies and firm performance:* What do we know and where do we need to go? The International Journal of Human Resource Management, 6, 2005, 656-670.

Goetzel RZ, Ozminkowski RJ. *Disease management as a part of total health and productivity management.* Dis Manage Health Outcomes. 2000;8:121–128.

Gopal, P. S. and Rajendra A., (2012). *Occupational Health and Safety Awareness, Knowledge of the Risks and Practices of Risk prevention of Hair and Beauty Salon Workers in Rural and Urban Areas of Western Nepal Himalayan.* Journal of Sociology & Antropology-Vol. 5,

Greenberg, P. E., Finkelstein, S. N., Berndt, E. R., (1995). *Economic consequences of illness in the workplace.* Sloan Manage Rev.;36: 4,26.

Guest, D.E., (1989).*The nature and causes of effective human resource management*: A review and research agenda, The International Journal of Human Resource.

Hopkin, Paul (2010). *Fundamentals of Risk Management* – British Library Cataloguing-in-Publication 1st Edition.

Hussain, N. H. (2010). *The Critical Success Factor in Implement Occupational Safety and Health.* Master of Science (Management) Thesis, College Of Business, Universiti Utara Malaysia, Malaysia. International Labour Organisation, (2008). World of Work, 63, August 2008

Joppe, P., (2000). *Research Design and Methodology.* Second Edition. New York. Pearson Publishers.

Kenei, L. B., (1995). *An Investigation of the Probable Factors contributing to Industrial Accidents among Manufacturing Firms in Kenya*: an Empirical Study; Unpublished MBA Project, University of Nairobi

Khdair W. A., Subramanim C. and Shamsudin M. S. (2011) *Improving Safety Performance by Understanding Relationship between Management Practices and Leadership Behavior in the Oil and Gas Industry in Iraq:* A Proposed Model. College Of Business, Universiti Utara Malaysia, 06010 Uum Sintok. International Conference on Management and Artificial Intelligence IPEDR vol.6 pp. 85-93

Kivimaki, M., Kalimo, R., & Salminen, S. (1995). *Perceived nuclear risk, organizational commitment, and appraisals of management:* A study of nuclear power plant personnel. Risk Analysis, 15, 391–396

Lancaster G, Velden H. V. D., (2004). *The influence of employee characteristics on employee orientation.* Int. J. Bank Markt. 22(5): 343-365.

Lawler, E. E., III. (1996). *From the ground up*: Six principles for building the new logic corporation. San Francisco: Jossey-Bass

Lloyd L. Byars and Leslie W. Rue (1997) fifth edition. *Human Resource Management*. Library of Congress cataloguing-in-Publication

Lugah, V. et al. (2010) *Training of occupational safety and health: knowledge among healthcare professionals*. In Malaysia, Singapore Med J 2010: 51(7): 586-591

Mberia AM (2001). *A Survey of the Occupational Health and Safety Programmes Adopted by the Banking Industry in Kenya;* An Empirical Study; Unpublished MBA Project; University Of Nairobi

Munjuri, Mercy (2011). The *Effects of Human Resources Management Practices in Enhancing Employee Performance in Catholic Institutions of Higher Learning in Kenya.*

Nyakang'o JB (2005). *Status of Occupational Health and Safety in Kenya*; Workshop on the IUPAC-UNESCO-UNIDO Safety Training Program, part of the IUPAC Congress in Beijing, on Wednesday, August 17, 2005

Ogba, I. E., (2008). *Commitment in the workplace*: *The impact of income and age on employee commitment in Nigerian banking sector*. Manage. Res. News. 31(11): 867-878.

Pfeffer, J. (1998a). *The human equation: Building profits by putting people first*. Boston: Harvard Business School Press

Pfeffer, J. (1998b). *The real keys to high performance*. Leader to Leader, 8, 23–29

Pike A (2000). *Tough Targets and Heavy Penalties*: Financial Times: Business Health and Safety

Ron, Z. G., Arlene M. G., Jeffrey T., Ronald J. O., (2001), *Health and Productivity Management: Establishing Key Performance Measures,* Benchmarks, and Best Practices, JOEM Vol 43

Samuelson, P.A. and Nordhaus, W.D., *Economics* (13th ed.), McGraw-Hill: New York, NY.

Schuler R, Huber V (1993). *Personnel and Human Resource Management*; West Publishing Company

Sekeran, U., (2003). *Research Methods for Business*: A Skill Building Approach. 4th ed. New York. John Willy & Sons Inc.

Terry and Smithson, S. (20012). *Employee empowerment in manufacturing:* a study of organizations in the UK, New Technology, Work and Employment, 17(2):132-48.

Torrington Derek & Hall Laura, Taylor Stephen, Atkinson Carol. *Human Resource Management* (2011) British Library Cataloguing-in-Publication 8th Edition

Walton, R. E. (1985). *From control to commitment in the work place.* Harvard Business Review, 63(2), 77–84

Warr, P. B. (1987). *Work, unemployment, and mental health.* Oxford, London

Way, S. A (2002). *High performance work systems and intermediate indicators of firm performance within the U.S. small business sector.* Journal of Management, 28, 765–785

Wheatley, M. (1997, Summer). *Goodbye, command and control.* Leader to Leader, 5, 21–28

Whitener, E. M. (2001). *Do "high commitment" human resource practices affect employee commitment?* A cross-level analysis using hierarchical linear modeling. Journal of Management, 27, 515–535.

Wood, S. (1999). *Getting the measure of the transformed high-performance organization.* British Journal of Industrial Relations, 37, 391–417.

Wood, S., & Wall, T. D. (2002). *Human resource management and business performance.* In P. Warr (Ed.), Psychology at work (pp. 351–374). London: Penguin.

APPENDICES

Appendix 1: Introduction Letter to Respondents

Selerina Samba Mwaruta,

Kenyatta University

P.O BOX 43844-00100.

NAIROBI

Mobile: 0726028186

Sept 26th, 2013

TO WHOM IT MAY CONCERN

Dear Sir/Madam

RE: REQUEST TO PARTICIPATE IN DATA COLLECTION

I am a Masters student at Kenyatta University, School of Business. As part of my degree requirements, I am required to conduct a research on **Effects of Occupational, Safety and Health Administration Practices on Employee Performance.**

I am pleased to let you know that you have been randomly selected as an employee of your company to participate in this exercise. This is therefore to kindly request you to assist me collect data by filling the accompanying questionnaire. On behalf of the University, my supervisors and I promise that the information gathered will strictly be used for academic purpose only and that no information shall be divulged to the third party without your consent or prior authority for that matter. The copy of the final report will be made available to you on demand.

Thank you in advance for your co-operation

Sincerely

Selerina Samba Mwaruta .....

Masters Candidate

Appendix II: List of Manufacturing Firms in Mavoko Constituency

1. National Cement Company Limited (Simba Cement)
2. Athi River Steel Plant Limited
3. ISL Kenya Limited
4. Kenya Meat Commission
5. Blue Triangle Cement co. Limited
6. Mombasa Cement
7. Bamburi Cement Limited
8. Athi River Mills
9. Allpack Industries Limited
10. KAPA Oil Refineries
11. NORDA Industries Limited
12. Mastermind Limited
13. Nation Newspaper Printing Limited
14. Steelwool Company Limited
15. SIGNODE Company Limited
16. Galsheet Resincott Co. Limited
17. DOSHI Industries Limited
18. SEMCO Company Limited
19. SAHRIN Industries Limited
20. East African Portland Cement
21. FOAM Mattresses Limited
22. London Distillers
23. KENCHICK Limited
24. Scrap Plastics Processing Plant
25. Rhino Cement Limited
26. VISTA Windows Limited
27. Primarose Flower Firm
28. TOP Tank Co. Limited
29. Export Processing Zone

30. SAJ Ceramics Limited

Appendix III: Questionnaire

I am an MBA student in Kenyatta University currently doing my research to complete my Studies. I am researching on The Effect of Occupational, Safety and Health Practices on Employee Performance of Manufacturing Firms in Machakos County. You have been randomly selected to participate in this study. Kindly complete the questionnaires with honesty.

SECTION A: BACKGROUND INFORMATION

(i) Name of the firm.....

(ii) Line of the business.....

(iii) For how long has your firm operated? .....

(iv) How many employees does your firm have?.....

(v) For how long have you worked in this firm?.....

(vi) Gender of respondent Male [ ] Female [ ]

(vii) Age 18 to 25 years [ ] 26 to 35 years [ ] 36 to 45 years [ ] 46 years and above [ ]

SECTION B: OCCUPATIONAL PRACTICES

Please indicate with a tick the extent to which the following statements are true regarding occupational practices in your organization. The statements are rated using a scale of 1 to 5. Where 5 = To a Very Great Extent; 4 = To a Great Extent; 3 = To Some Extent; 2 =Not at All; 1 = Not Sure

Occupational Practices	Not sure	Not at all	To some extent	To a great extent	To a very great
Employers respect employees rights and responsibilities					
In the event of an accident on duty, employees are compensated in time					
You know a work-related accident					
Employees undergo training on potential					

hazards at their place of work and how to handle them					
Employers provide protective gear to employees					
Employers designate employees who are trained in first aid to be first aid respondents					
Working equipment are properly guarded					
Equipment are certified before installation					
Employees use defective equipment					
Employees follow procedures in or around machines or equipment					
My organization has posted an evacuation diagram within the organization					
Employees work for the designated period of time i.e. No overworking					
Employees are compensated for any overtime					
Employees are allowed to have paternity and maternity leaves					
Working environment is considered safe by our employees					
Employees are aware of safety measures in case of fire					
In case of emergency there are clearly marked fire exits					
There are adequate fire-fighting equipment in place					
Employees have been trained on fire fighting skills					
There is a continuous review of accident prevention measures					
There are directional signs to guide movement of people					
Floors are kept clean and dry to reduce chances of falls and slips					
There is adequate fire-fighting equipment in place					

SECTION C: SAFETY PRACTICES

Please indicate with a tick the extent to which your firm considers the following factors as safety issues. The factors are rated using a scale of 1 to 5. Where 5 = To a Very Great Extent; 4 = To a Great Extent; 3 = To Some Extent; 2 =Not at All; 1 = Not Sure

Safety Practices	Not sure	Not at all	To some extent	To a great extent	To a very great extent
Fire					
Floors					
Lifts					
Stair cases					
Trailing wire					
Bombs					
Workload					
Work pace					
Work environment					
Chemical exposure					
Improper illumination					
Improper ventilation					
Waste disposal					

SECTION D: HEALTH ADMINISTRATION PRACTICES

Please indicate with a tick the extent to which your firm considers the following factors as health hazards. The factors are rated using a scale of 1 to 5. Where 5 = To a Very Great Extent; 4 = To a Great Extent; 3 = To Some Extent; 2 =Not at All; 1 = Not Sure

Health Practices	**Not sure**	**Not at all**	**To some extent**	**To a great extent**	**To a very great extent**
The company has adequate health and safety policies					
Employees understand the company's health and safety policies					
Employees are aware of the existing laws on health and safety					
There are adequate first aid and medical services					
There are enough toilet facilities separate for male and females					
Employees are satisfied with the standard of cleanliness in the washrooms					
The waste disposal equipment are adequate					
Our firm conducts medical check-up for employees regularly					
The firm has an AIDS awareness programme					
There is enough clean drinking water for all employees					
Health hazards are very many					

SECTION E: EMPLOYEE PERFORMANCE

Please indicate with a tick the extent to which the following statements apply to you organization pertaining to employee performance. The statements are rated using a scale of 1 to 5. Where 5 = To a Very Great Extent; 4 = To a Great Extent; 3 = To Some Extent; 2 =Not at All; 1 = Not Sure

Employee Productivity	Not sure	Not at all	To some extent	To a great extent	To a very great
There is sufficient commitment by employees in their duties					
Employees attitude to work is very positive					
Employees follow organizational rules					
Employees are able and willing to meet their targets					
Some employees remove safety guards to speed up production					
Burnout rate of employees is high due to stress					
Some employees show signs of aggressiveness					
Employee absenteeism is high					
Employee turnover is high					
Employees are satisfied with their work					
Employees are attached and loyal to the organization					
There is increased sales revenue as a result of employee commitment to the organization					

Appendix IV: Observation Checklist on Occupational Health and Safety.

Please rate the following aspects on a scale of 1-5 where 1 is very low and five is very high

Area of observation

Health Practices	Very low	Not at all	To some extent	To a great extent	To a very great extent
Reception					
Check for general cleanliness					
Check if lighting is adequate					
Check if there is adequate ventilation					
Check that entrance is kept free from obstruction					
Check for the presence/display of firm's safety policy					
Check the decoration and indoor plants					
Check for adequacy of space					
Check for directional signs					
Computer screen					
Offices –enclosed and in the open					
Check if lighting is adequate					
Check if there is adequate ventilation					
Check if all exit doors are marked and kept free from obstruction					
Check if the sitting arrangement allows for easy access to doors in the event of emergency					
Check availability of lockable cabinets					
Check existence of emergency facilities, e.g. hose/fire extinguisher and that they are not obstructed					
Check for general cleanliness					

Floor surfaces and walls					
Check for dirt and stains on the wall surfaces					
Check for any slippery material on the floor surfaces					
Stairways					
Check if safety hand rails exist as appropriate, and are adequately secured					
Check if stairways and immediate surrounding are kept clear of obstruction					
Check if lighting is adequate					
Equipment (pc's, computers, electrical cables, telephones)					
Check electrical cables are well insulated and protected					
Check that electrical cables and extensions running across floors do not impede movement					
Check whether the area around the machines/equipment is free of obstruction					
Tea Rooms					
Check for general cleanliness					
Check for plumbing disorders, blocked drains					
Check conditions of electrical plates and burns and connecting cables and switches					
Check that bins are in place					
Check for adequate ventilation					
Wash rooms					
Check for general cleanliness Check that waste paper bins are in place					
Check in ladies wash rooms whether sanitary bins					

are in place					
Check that hand driers are in working condition					
Check if plumbing disorders, blockage drains					
Check if there are water leaks					
Check if there is adequate lighting					
Stores					
Check for general cleanliness					
Check if there is adequate lighting					
Check if there is adequate ventilation					
Check if material is safely stacked					
Check if hazardous/flammable material is segregated from non-hazardous and clearly labeled					
Check if there is adequate emergency equipment					
Check if appropriate personal protection equipment (PPE) is in use					
Check if all exits are free of any obstruction					
Check if floor markings are visible and the material is kept within the markings					
Check if FIFO is in operation					
Production Areas					
Enough Fire exits available					
Clean drinking water					
Slippery floor					
Chemical emissions					
Availability of Smoking zone					
Wearing boots & helmets					
Guarding of machines Ventilations					
Disposal of waste					

Lighting					

THANK YOU

Appendix IV: Budget

Item	UNIT COST KSHS.	TOTAL COST Kshs.
Per Diem for 3 research assistants	1,500x3x5	22,500
Stationery.2 reams of paper, 2dozen of pens,3 clipboards	5,000	5,000
Meals	500x3x5	7,500
Travel expenses	300x3x5	4,500
Fuel	1,000x5	5,000
Miscellaneous	3,000	3,000
TOTAL	**47,000**	**47,000**

Appendix V: Work Plan

Activity	Time	Responsible party	Expected outcome	Critical Assumptions
Develop terms of reference	By 18th Sept	Researcher	Terms of reference	Availability of research funds
Development of draft questionnaire	By 20th Sept	Researcher	Draft questionnaire	Draft instrument developed on time
Development of Sampling frame	By23rd Sept	Researcher	Sampling Frame	Sampling frame not available
Training research assistants	By 24th Sept	Researcher	Trained research assistants	Research assistants not trained
Pre-testing instrument using trained research assistants	By 2nd Oct	Researcher	Pre-tested instrument	Training of enumerators conducted
Collect data in the field	By 3rd Oct	Researcher and research assistants	Raw Data	No constraints in the field
Data Analysis and interpretation	By 5th Oct	Researcher	Draft report	Data analysis done on time
Writing of draft research report	By 7th Oct	Researcher	Review revisions to the research report	Report writing completed
Submit final report in hard copies and soft copies	By 10th Oct	Researcher	Final Report	Research work completed