



**INFLUENCE OF OCCUPATIONAL HEALTH AND SAFETY ON ORGANIZATIONAL PERFORMANCE IN THE  
MANUFACTURING SECTOR IN KENYA: A CASE STUDY OF KAPA OIL REFINERIES LIMITED**

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**ABSTRACT**

*Health and safety practices, programs and procedures are key components for organisational success and survival. For many organizations, link between health and safety programs and organisational performance has become a key challenge, and so firm's need to incorporate health and safety practices if they want the organization's survival. The general objective of the study was to establish the influence of occupational health and safety on organizational performance in manufacturing sector in Kenya, a case study of Kapa Oil Refineries Limited in Nairobi County. A case study design was used. The study targeted a population of 2000 employees of Kapa oil refineries, from which a sample of 100 respondents was drawn using 5% of the target population. This included the top management, middle level management and lower level management. The sample was selected using stratified sampling technique. The researcher collected primary data using a questionnaire while secondary data was collected through existing literature relevant to the current research topic under study. Quantitative data was analyzed using descriptive statistical tools namely frequencies, percentages, mean and standard deviation while inferential statistical tools such as correlation and regression was used to determine and explain variable relationship; through SPSS Version 22 computer program. A correlation analysis revealed a weak positive relationship between health and safety training and performance of Kapa Oil Refineries Limited. Regression analysis also indicated that 52.7 % of the variation of organization performance was explained by health and safety training. The study recommends the following; the management of Kapa Oil Refineries Limited should continually train its employees on health and safety issues. Training should also be carried out on health and safety and use of new equipment. The management should further conduct proper training to new staff and have efficient orientation programs. The management of Kapa Oil Refineries Limited and the Department of Occupational Health and Safety should come up with a safety design and preventive approach which mainly deals in what should be designed to employees so as not to cause harm to employees. The government of Kenya should conduct proper audits. The management of Kapa Oil Refineries should show support, commitment and facilitate all health and safety programs in the organization through clear and visionary leadership in occupational health and safety programs.*

**Key Words:** *occupational health and safety, training, audit, policy, leadership, Kapa Oil Refineries Limited*

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## **Background of the Study**

Occupational health and safety (OHS) at the workplace is important, not only for maintaining workers health and wellbeing, but as enabler for poverty reduction through employment, productivity, and economic efficiency of a country. Occupational health and safety is an area that mainly deals with the health, safety and welfare of employees. Its main objective is to foster a safe and healthy working environment. Occupational health and safety is argued to be important from moral, legal and financial perspectives. It is exemplified that employers have moral obligation to reasonably care for their employees. The government formulates statutory laws to regulate health and safety at the workplace. Appropriate health and safety practices can go a long way to minimize costs associated with employee injuries and illnesses and employee turnover (OSHA, 2007). According to ILO (2005) organizational health and safety focuses on the development of specific measures and programmes, aimed at protecting employees in the course of performing their duties to maximize productivity and improve overall organizational performance.

The safety programmes deals with the prevention of accidents and with minimizing the resulting loss and damage to persons and property while the occupational health programmes deal with the prevention of ill-health arising from working condition's employees health both physical and mental could be affected by diseases such as cancer, heart problems, ulcers, job stress, and strain as well as accidents (Armstrong, 2006). A good safety programme is an essential part of efficient management, designed to ensure that the whole of a company's assets remain continuously available for profit making (ROSPA, 2005). 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 Compensation Act which only covered selected group of workers; those earning sh.400,000 per annum. However employers are resisting implementation claiming it will increase labor costs. The ministry of labor reports that more than half of industrial accidents and injuries in Kenya go unreported. It estimates that reported occupational fatalities and injuries for the years 2000- 2014 were around 150,000.

This is viewed against the background that factories and other work places have to be registered by the department of Occupational Health and Safety. Health and safety programs, policies and practices, exist to protect employees and other people (public) against hazards arising from employment or their links with the company.( Armstrong,2009). Occupational health programs deal with the prevention of ill-health, arising from working conditions. They consist of two elements: occupational medicine, which is a specialized branch of preventive medicine concerned with the diagnosis and prevention of health hazards at work and dealing with any ill-health or stress that has occurred in spite of preventive actions; occupational hygiene, which is the province of the chemist and the engineer or ergonomist, engaged in the measurement and control of environmental hazards. Safety programs deal with the prevention of accidents, and with minimizing the resulting loss and damage to persons and property. They relate more to systems of work than the working environment, but both health and safety programs, are concerned with protection against hazards, and their aims and methods are clearly inter-linked (Armstrong, 2009).

It is estimated by the Health and Safety Executive (HSE) that in the UK about 500people are killed at work, every year and several more are injured or suffer ill-health. It is also estimated that, apart from

the pain and misery caused to those directly or indirectly concerned, the total cost to British employers of work-related injury and illness exceeds £4 billion a year. (Reuters). The achievement of a healthy and safe place of work, and the elimination to the maximum extent possible of hazards to health and safety are the responsibility of everyone, employed in an organization, as well as those working there under contract. But the onus is on the management to achieve, and indeed go beyond the high standards in health and safety matters, required by the legislation – the occupational safety and health Act (2007). The importance of health and safety policies and practices is, sadly, often underestimated, by those concerned with managing businesses and by individual managers within those businesses.

It cannot be emphasized too strongly that the prevention of accidents and elimination of health and safety hazards are a prime responsibility of management and managers in order to minimize suffering and loss (Cardy, 2012). The achievement of the highest standards of health and safety in the workplace is important because the elimination, or at least minimization, of health and safety hazards and risks is the moral as well as the legal responsibility of employers'. Close and continuous attention to health and safety, is important because ill-health and injuries inflicted by the system of work, or working conditions, cause suffering and loss to individuals and their dependents. In addition, accidents and absences through ill-health or injuries result in losses and damage for the organization. Managing health and safety at work is a matter of developing health and safety policies. In addition to this, conducting risk assessments which identify hazards and assess the risks attached to them; carrying out health and safety audits and inspections; implementing occupational health programs; managing stress; preventing accidents; measuring health and safety performance,

communicating the need for good health and safety practices; training in good health and safety practices; organizing health and safety (Armstrong, 2009).

According to Sang (2005), the physical place in which people work says a lot about the organization, its values and policies. Employees are more productive, and tend to stay in the firm where the working environment is comfortable, pleasant and efficiently organized for the tasks to be performed. The employees feel a sense of responsibility, when they see the management is putting extra efforts to make the working environment suitable and conducive. Better working conditions are a statutory requirement by law contained in the Constitution of Kenya, Osha Act (2010). Kayando (2009) concurs with this, and says that top performers want to work in a healthy and safe environment free from accidents, violence, harassment, layoffs and discrimination. Organizations' that support a safe, secure and healthy workplace will motivate their employees and this helps to attain set goals and objectives in the organization. Employees want organizations that focus on emergency and safety training, wellness programs, workplace-violence protection, disaster recovery programs, harassment training and policies and managing diversity training. The environment of a firm also plays a pivotal role in motivating, attracting and retaining top performers. Top performers want to work in environments that they can relate to, get along with and be challenged by their co-workers. They want to be surrounded by other top performers.

According to the Work injury and benefits Act, (2007) and the Occupational Health and Safety regulation, the employer is tasked with the responsibility to implement an occupational, health and safety program (OHS) program, to prevent injury, death or even occupational diseases which include, poisoning of lead, poisoning by benzene,

anthrax, dystrophy of the corneal, subcutaneous cellulites of the hand, decompression sickness, bursitis, silicosis (WIBA, 2007). Occupational health and safety programs, must meet certain standards. The employer must meet due diligence, in taking steps to meet the standards. Maintaining high standards of safety at workplace is therefore important because it eliminates or to the list eliminates risks and hazards at the workstation. It ensures that production time lost, when attending to injuries, is minimized (Dessler, 2004). Workers in high risk organizations are often exposed to several categories of hazards including, physical injuries, psychological and physiological hazards, chemical hazards and environmental hazards.

The manufacturing sector should ensure to motivate, attract, retain and improve on employee performance by taking necessary steps to ensure there is adequate health and safety programs in the workplace. The office environment must have quality lighting, good temperature controls, and better ventilation to boost employee morale and also safeguard on their health. Poor lighting can damage employee's sight and can also lead to accidents, resulting to, injury as a result of poor vision. Garavan (2005), suggests that maximum productivity can be realized by those businesses that invest in high performance health and safety practices. He also explains that, a healthy and happy workforce, is more productive, leading to increased investment in health and safety practices, to reduce accidents, which in turn leads to further productivity gains. In South Africa, in spite of excellent regulations regarding occupational health and safety, the level of compliance to the same is alleged not to be encouraging ( Joubert,2002). In line with the foregoing, there are other forms of government intervention that are argued to indirectly enhance working conditions. Such include workers compensation regulations and stipulations that employers of certain sizes must engage

professionals' in health and safety. It is also averred that occupational safety and health in Africa has brought on board partners across diverse ministries and broadly within and outside Africa with the object of working together in order to assist countries, workers, and employers in the formal and informal sectors (ILO, 2012).

In a case of Kenya research done by Ndirangu & Namusonge (2014), it established that attitude, leadership, motivation and organizational culture were significant factors affecting the implementation of occupational safety and health at Kenya vehicle manufacturers. Further, a study by Kaguathi (2013) revealed organization culture, structure, and resistance were the major factors affecting the successful implementation of occupational health and safety strategies at East African Portland Cement Company limited. Lukoko, Chege and Musiega (2014) analyzed the impact of occupational safety and health practices on employee performance at Mumias Company. Their study revealed that occupational hazards affect job performance; this was attributed to high levels of ignorance on occupational hazards at the workplace. Fast-moving consumer goods (FMCG) or consumer packaged goods (CPG) are products that are sold quickly and at relatively low cost. Examples include non-durable goods such as soft drinks, toiletries, over-the-counter drugs, toys, processed foods and many other consumables. In contrast, durable goods or major appliances such as kitchen appliances are generally replaced over a period of several years. The term was coined by Neil H. Borden in 'The Concept of the Marketing Mix' in 1965. FMCG have a short shelf life, either as a result of high consumer demand or because the product deteriorates rapidly. Some FMCGs—such as meat, fruits and vegetables, dairy products, and baked goods—are highly perishable. Other goods such as alcohol, toiletries, pre-packaged foods, soft drinks, and cleaning products have high turnover

rates. Though the profit margin made on FMCG products is relatively small (more so for retailers than the producers/suppliers), they are generally sold in large quantities; thus, the cumulative profit on such products can be substantial. FMCG is probably the most classic case of low margin and high volume business.

Kapa is proud to be the first company in the manufacturing sector to be HACCP UK certified for its edible oil processes. Kapa takes pride in manufacturing qualitative and affordable end products for its customers.” The name 'Kapa' is an acronym derived from the title 'Karanja Packers' which was established in the late 1960's as a salt packaging and baking powder manufacturing company. Karanja Packers grew steadily and within a short time, ventured into producing cooking fats and edible oils. As a result, it now became known as Kapa Oil Refineries Ltd. While trading in new territories, Kapa showed its commitment to innovation by being the first manufacturing company to introduce packing of cooking fats in reusable plastic containers, a norm that all cooking fat manufacturers now follow. As the industry quickly expanded, KAPA steadily acquired more market share. In succession to the cooking fat and edible oils, Kapa started manufacturing a premium detergent powder: –'Toss' that took the detergent powder market by storm. Toss has been and still is the market leader in the detergent powder category. With continual research and development, Kapa saw prospective opportunities in the FMCG margarine, glycerine and luxury toilet soaps. In 2003, Kapa cemented its commitment to quality by being certified the prestigious ISO 9001:2000 award for its 'Quality Management Systems' in the manufacture of cooking fats, edible oils, margarine, baking powder, laundry soaps and glycerine. Kapa is proud to be the first company in the manufacturing sector to be HACCP UK certified for its edible oil processes. Kapa takes pride in

manufacturing qualitative and affordable end products for its customers. Due to this factor, Kapa has always and keeps enjoying unmatched brand loyalty from satisfied customers. Kapa's products are now trusted household names, not only in Kenya but throughout East, Central, West and Southern Africa as we export our diverse range of products to over 14 African countries serving the COMESA and SADC markets. “We aim at providing our customers with premium quality consumer goods at competitive prices while operating in an environmentally sensitive and socially responsible manner.” Kapa Oil Refineries operations are based on the manufacture of edible oils, margarine, baking powder, detergent powder, laundry and toilet soaps and glycerine. It aims to lead the market in terms of quality and performance of our products and customer service. Kapa is committed to being the 'benchmark company' for quality products in Africa. Kapa focuses on 'value for money'. It aims at providing our customers with premium quality consumer goods at competitive prices while operating in an environmentally sensitive and socially responsible manner. All our processes and procedures are of the highest quality, designed to give results of premium quality. The mechanics and techniques behind Kapa Oil Refineries processes and procedures give zero allowance for error therefore producing high quality products and ensuring quality consistency.

### **Statement of the Problem**

There has been tremendous increase of accidents and injuries of workers, in the manufacturing sector in Kenya, where fatalities were reported. In the year 2007- 2013, about 240,000 workers, have been reported to be injured, lost their limbs as a result of poor machines in the organization, and some have died, due to the intoxication of benzene and other toxic gases in the industry ( WHO, 2010). In Kenya's manufacturing sector, Occupational safety

and Health (OSH) risk assessment was carried out by the Ministry of Industrialization Kenya in collaboration with the relevant stakeholders across the country between 2013 and 2014 revealed that the manufacturing sector especially firms dealing in manufacturing and production of goods and services, lacked an all-inclusive occupational safety and health program. This study will determine the influence of health and safety policy on the performance of Kapa Oil Refineries Limited. It is important to have a health and safety policy.

A Risk Assessment Report (GOK-M.I-M.L 2013) on OSH risk assessment identified serious gaps within the manufacturing sector. These gaps included lack of job hazard analysis, inadequate OSH training needs assessment for new and existing members of staff, and the absence of displayed safety and health related standard operating procedures in the manufacturing sector. The OHS risk assessment that was carried out in Kenya further revealed that the training on current occupational safety and health practices among members of staff in Kapa Oil Refineries Limited was inadequate. The employees were not trained on the use of equipment to use in their production capacity, lack of protective clothing such as gloves, gas masks, protective eyewear, and inadequate training on health and safety, has made the company to lag behind in its production capacity and it is undergoing heavy losses, as a result of paying damages to its injured employees and also the high cost incurred when taking the employees for medical treatment in and out of the country, as a result of this inadequacies.( GOK-MOH 2013 OSH Risk Assessment Report). This study will be undertaken to establish the influence of health and safety training on the performance of Kapa Oil Refineris Limited.

Kayando (2009) concurs with this, and says that top performers want to work in a healthy and safe environment free from accidents, violence, harassment, layoffs and discrimination.

Organizations' that support a safe, secure and healthy workplace will motivate their employees and this helps to attain set goals and objectives in the organization. Employees want organization's that focus on health and safety training, wellness programs, workplace-violence protection, disaster recovery programs, harassment training and policies and managing diversity training. The environment of a firm also plays a pivotal role in motivating, attracting and retaining top performers. Top performers want to work in environments, which they can relate to, get along with and be challenged by their co-workers.

Health and safety of employees at the workplace is a strategic component of any business survival. Organizations have to ensure that the necessary rules and regulation measures are in place in order to avoid injuries, fatalities and loss of life and thus improve the overall organizational performance. This study will determine whether health and safety policy influences the performance of Kapa Oil Refineries Limited. In a case of Kenya, Mbakaya et al (1999) noted that there is a general impression among those working in the country that the level of regulation and enforcement of occupational health and safety regulations is grossly inadequate especially when compared to developed countries. Chullen (2012) delved into occupational health and safety in the sugar industry of Kenya. The researcher observed that occupational health and safety (OHS) is one crucial area of trade union work that incorporates several aspects. It is said to be a worker's right to work in a safe environment, devoid of hazards and conducive to increasing productivity. Moreover, coming up with a safer workplace is asserted to be a continuous task that calls for both management and employees' participation, in a bipartite model based on knowledge and effective actions to get rid of hazardous and / or reduce risks.

### **General Objective**

The general objective of the study was to establish the influence of occupational health and safety on organizational performance in the manufacturing sector in Kenya, a case study of Kapa Oil Refineries Limited in Nairobi County.

### **Specific Objectives**

The study was guided by the following specific objectives:-

- To determine the influence of health and safety training on the performance of Kapa Oil Refineries Limited.
- To examine the influence of health and safety audit on the performance of Kapa Oil Refineries Limited.
- To establish the influence of health and safety policy on the performance of Kapa Oil Refineries Limited.
- To examine the influence of leadership in health and safety on the performance of Kapa Oil Refineries Limited.

## **LITERATURE REVIEW**

This chapter presents a review of literature based on the research topic and the study objectives.

It contains theoretical framework, conceptual framework and empirical review.

### **Theoretical Framework**

The study was based on the, social cognitive theory, safety climate theory and the domino theory/sequence of events theory.

### **Social Cognitive Theory**

This theory is associated with concept of self-efficacy and outcome expectancy. Bandura (2001) asserted that the aforementioned concept has been widely employed in a variety of health-related settings. It is further argued that self-efficacy is chosen in context of social cognitive theory due to the fact that it has many applications in a variety of

settings and also due to significant overlap of determinants between social cognitive theory and similar health related theories.

The Social Cognitive Theory has two tenets. The first describes how psychology needs to incorporate the social context within the study of human behavior since people are essentially social in nature. The second tenet outlines how people employ their cognition for avenues of thinking and communicating to adapt to social contexts. In other words, this theory construes cognition as part of social acts (Barone et al., 2006).

It is argued that people strive to have control over the various aspects that define their environment. Every individual seeks to have control over desired outcomes and achieve control over the undesired events. Bandura (2001) stated that from a social cognitive point of view, people are exposed to different interdependent circumstances everyday, determine the best approach to these situations, assess their perceived competence (self-efficacy) to execute their intentions, determine if the behavior they perform will produce the desired outcome (outcome expectancy), and finally decide the vitality of obtaining the outcome (outcome value). In his study Peterson (2000), observed that safety-related education occurs in industrial settings almost reflexively. The scholar posited that, from a social cognitive perspective, the foregoing can essentially have a variety of effects. It is exemplified that, typical safety education sessions focus either on giving employees information regarding hazardous conditions or employ scare tactics to warn employees about dangerous safety-related situations. Bandura (2001) advised that in order to have the greatest impact on employees' self efficacy, a shift in emphasis is required. Instead of trying to scare employees into health and safety, they should be provided with requisite tools so as to exercise personal control over their health habits. Thus, in order to have an effect on employee's



safety self efficacy, safety education ought to focus on providing employees with training to give them much needed skills to perform their work tasks safely. It is reasoned that while a typical safety education session might fail to impact employees' self-efficacy, it could possibly influence their outcome expectancies.

It is exemplified that, if employees watch a safety video which depicts a finger amputation occurring as a result of an employee failing to turn off the power to a machine; a shift in the viewer's outcome expectancies could change towards that particular type of injury. The severity of the injury is argued that it would lead to expectancies concerning the physical disability (physical outcome expectancy) from amputation, adverse social reactions from family, friends, and workmates (social outcome expectancy), and if the person held safety as a core value this will result in a negative self-evaluation. It is as such deducted that from a social cognitive perspective the combination of safety training and safety education could increase employees' self-efficacy and therefore shape their outcome expectancies if they had quality training and believe they can have input in the safety process. Arguably, safety interventions that focus on providing practical tools and methods for improving safety ought to enhance employees' safety self- efficacy regarding injury prevention.

### **Safety Climate Theory**

According to Law et al. (2011), psychological safety climate (PSC) is defined as shared perceptions of organizational policies, practices, and procedures for the protection of employees' psychological health and safety that emanates largely from management practices. The PSC theory extends that the job demands-resources framework and suggests that organizational level PSC influences work conditions and subsequently psychological safety climate draws upon perspectives from the work of

stress, psychological risk, and organizational climate literatures.

In their study, Dollard and Bakker (2010) noted that PSC is a facet - specific component of organizational climate relating to freedom from psychological harm at work. It is further said that it reflects management commitment to worker's psychological health and the priority they give to safeguarding psychological health as opposed to production demands. PSC is likened to organizational climate in that it is conceived as a property of the organization, consisting of aggregated perceptions of individuals within that organization regarding management commitment to protecting their psychological health and safety. According to James et al. (2008), the PSC constructs stems largely from the idea that individuals ascribe meaning to te their work environment, that is, their working conditions, management systems, pay, co-worker relationships, and treatment equity.

### **Domino Theory /Sequence of Events**

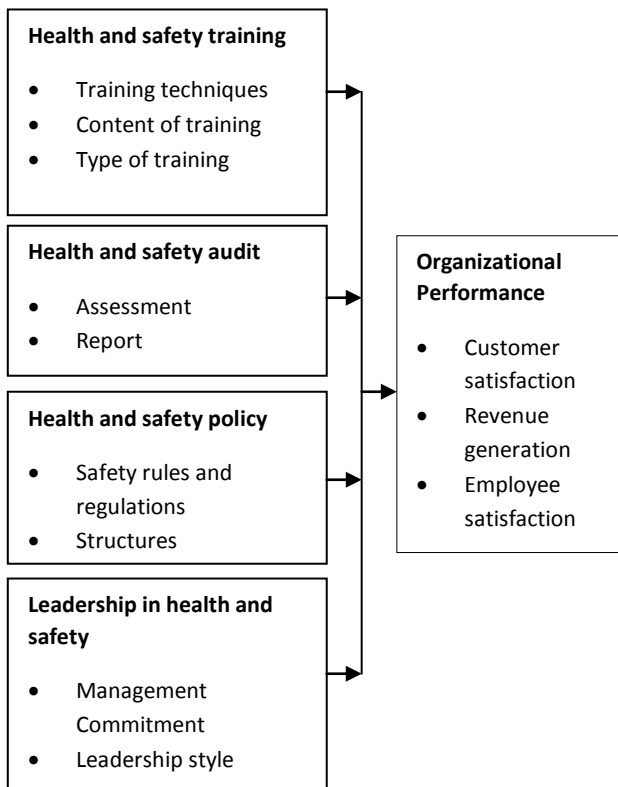
Heinrich (1959) developed this theory from industrial accidents data that have shaped much of the subsequent industrial engineering work of accidents and injuries. The author was among the first to point out that the conditions that lead to accidents and injuries are in fact those that lead to excessive costs in production and poor quality of products. Though many industrial engineering models of occupational accidents and injuries have been proposed over the years, Heinrich's–Domino model has been among the most widely discussed and applied since the 1930's.

According to Micah and Atkins (2002), Heinrich-Domino theory that was developed in 1931 stipulates that an incident is one factor in a sequence of events that may result in an injury. The theory states that: - 1) A potential injury (the final domino) occurs as a result of an incident. 2) An incident occurs only as a result of a personal unsafe act or mechanical/physical hazard. 3) Personal or

mechanical hazards exist only because of faults of people. 4) Faults of people are inherited or acquired as a result of their social environment in which they were born, bred or educated.

The converse of these statements is not true and for an injury or damage to property to occur, all four factors are involved. It therefore follows that if one of the factors in the sequence leading to an accident can be removed, then the loss can be prevented. Attention should be mainly focused on the factor preceding the accident. Heinrich stated that the unsafe acts of persons constituted a dominant source of accidents. Control of individual employees was therefore the key to the prevention of these accidents.

**Conceptual Framework**



**Independent variables    Dependent variable**

**Figure 1 Conceptual Framework**

**Health and Safety Training**

Studies by Cole (2007) defined training as a learning process which is aimed at impacting knowledge and skills to enable the employee to execute their task better. This will help the employee to acquire new information in relation to new technological knowhow and other external forces emerging. Training has been recognized as a central role of management by leading researchers. It is for this reason still, that the study seeks to establish whether job training should be based on accumulated seniority or extra relevant qualifications and whether based on the right criterion, leads to employee performance. Doeringer & Piore (2007), say that in order to develop skills and abilities specific to the company, it's significant from an organizational perspective to train employees in accordance with their company's specific skills and abilities (Armstrong, 2009).

Organizations can create and enhance the quality of the current employees by providing comprehensive training and development. Indeed, research indicates that investments in training employees in problem-solving, teamwork and interpersonal relations result in beneficial firm level outcomes, Russell and Powers (2005). Jacob (2004) and Morishima (2006), indicate that training opportunities increase the level of individual performance and organizational commitment among workers in their career advancement, influences the workers behaviors and attitudes such as motivation and organizational commitment, particularly in the case of stable employment (Njiru,2008). In upholding the views of Jacoby (2004) and Morishima (2000), Pigors and Myers (2008), submitted that training should encourage those employees who make a successful effort to increase their knowledge or skill. Bramley (2001) indicates that training is a component of staff development and if carried out effectively, it can lead to improvement in the performance of employees (Njiru, 2008).

According to Bogonko and Saleemi (1997), cited by Njiru (2008) training is effective only when it is properly planned and effectively executed. Training methods must be appropriate to the level of employees, the nature of tasks and purpose of training. The effectiveness of a training program should be evaluated so that necessary improvements may be made in it from time to time. Hence, training must be carefully planned and evaluated and employees must be purposively selected. Coaching can be defined as the helping relationship which is formed between a client who has managerial authority and responsibility in an organization and a professional coach. Typically, the coach uses a wide variety of behavioral science techniques and methods to help clients achieve a mutually identified job-related set of goals to improve his or her professional and personal performance (Dai & De Meuse, 2007).

Coaching is about developing and enhancing the performance of the individual, which has a direct impact on the performance of the business. The value of coaching is that it is a way of learning that is highly personal, flexible and individualized. It can be tailored at one and the same time to the needs of the individual and the needs of the organization (Schaefer, 2002). Thus businesses or organizations that apply coaching as a staff development tool will not only benefit the individual but also the organization as a whole in the long run as there will be improved performance. Developing competent people and ensuring that those people have the opportunity to exert competent influence from top to bottom in an organization are the keys to making full use of an organization's mental resources.

Coaching develops competent people and extends their influence. It gives people new knowledge, skills, new confidence and commitment (Kinlaw, 2000). Coaching seems to be the new buzzword in development. Professional coaches are springing up in great numbers and in various guises – Executive

Coaches, Business Coaches, Performance Coaches etc. These people come from a range of backgrounds (HR, Training, Psychology, Sports coaching, for example) and can have differing approaches. (Thorne, 2004). According to Frazier (2011) training as a program that includes all the necessary safety information, adequate practice and consistency.

Training is an ongoing process that is continually reviewed and modified to take account of changing conditions, past experience and new developments. Much as it is a tool for creating awareness, training is a basic and cost-effective preventive measure that needs to be implemented as part of an institutional agenda, since an effective training program can reduce the number of injuries and deaths. Grimaldi and Simonds (2003) pointed out that safety training needed to be carried out in three settings: at induction, on the job and in refresher courses supplemented by poster or other safety awareness campaigns and communication, and disciplinary action for breaches of safety rules.

Training for all levels of management personnel and employees is important for successful safety programs. Mamoria & Gankar (2011) noted that training was concerned with providing immediate job knowledge, skills and methods of work and creating awareness on the hazards that are likely to be encountered in the course of work. The process also enables understanding the causes of accidents and how they may be prevented, importance of good house-keeping and handling materials safely. O'Toole (2002) stated that insufficient safety training was the root cause of accidents at the workplace since employees did not have the knowledge and skills to recognize potential hazards.

### **Health and Safety Audit**

Risk assessments identify specific hazards and quantify the risks attached to them. Health and safety audits provide for a much more

comprehensive review of all aspects of health and safety policies, and procedures and practices programs. As defined by Saunders (1992), a safety audit will examine the whole organization in order to test whether it is meeting its safety aims and objectives. It will examine hierarchies, safety planning processes, decision-making, delegation, policy-making and implementation as well as all areas of safety programme planning. Safety audits can be conducted by safety advisers and/or personnel specialists but the more managers, employees and trade union representatives are involved, the better. Audits are often carried out under the auspices of a health and safety committee with its members taking an active part in conducting them.

Managers can also be held responsible for conducting audits within their departments and, even better, individual members of these departments can be trained to carry out audits in particular areas (Armstrong, 2009). The conduct of an audit will be facilitated if check lists are prepared and a simple form used to record results. Some organizations also use outside agencies such as the British Safety Institute to conduct independent audits (Cole, 2007). A health and safety audit should cover: Policies; Do health and safety policies meet legal requirements? Are senior managers committed to health and safety? How committed are other managers, team leaders and supervisors to health and safety? Is there a health and safety committee? If not, why not? How effective is the committee in getting things done? (Armstrong, 2009). Procedures: How effectively do the procedures support the implementation of health and safety policies?

Others are to communicate the need for good health and safety practices? Provide for systematic risk assessments? Ensure that accidents are investigated thoroughly? Record data on health and safety which are used to evaluate performance and

initiate action? Ensure that health and safety considerations are given proper weight when designing systems of work or manufacturing and operational processes (including the design of equipment and work stations, the specification for the product or service, and the use of materials)? Provide safety training, especially induction training and training when jobs or working methods are changed?

According to Cole (2007) organizations need to ask themselves the following questions. To what extent do health and safety practices in all areas of the organization conform to the general requirements of the Health and Safety at Work Act and the specific requirements of the various regulations and codes of practice? What risk assessments have been carried out? What were the findings? What actions were taken? What is the health and safety performance of the organization as shown by the performance indicators? Is the trend positive or negative? If the latter, what is being done about it? How thoroughly are accidents investigated? What steps have been taken to prevent their recurrence? What is the evidence that managers and supervisors are really concerned about health and safety? The audit should cover the questions above but its purpose is to generate action. Those conducting the audit will have to assess priorities and costs and draw up action programs for approval by the Board.

According to Williamson (2011), safety inspections are designed to examine a specific area of the organization – operational department or manufacturing process in order to locate and define any faults in the system, equipment, plant or machines, or any operational errors that might be the source of accidents. Safety inspections should be carried out on a regular and systematic basis by line managers and supervisors with the advice and help of health and safety advisers. The steps to be taken in carrying out safety inspections are as

follows: Allocate the responsibility for conducting the inspection. Define the points to be covered in the form of a checklist. Divide the department or plant into areas and list the points to which attention needs to be given in each area. Define the frequency with which inspections should be carried out – daily in critical areas. Use the check lists as the basis for the inspection. Carry out sample or spot checks on a random basis. Carry out special investigations as necessary to deal with special problems such as operating machinery without guards to increase throughput. Set up a reporting system (a form should be used for recording the results of inspections). Set up a system for monitoring that safety inspections are being conducted properly and on schedule and that corrective action has been taken where necessary (Armstrong, 2006).

### **Health and Safety Policy**

Health and safety programs, policies, exist to protect employees and other people (public) against hazards arising from employment (Armstrong, 2009). Health and safety concerns everyone in the organization although the main responsibility lies with management in general and individual managers in particular. The management should develop and implement health and safety policies and ensure that procedures for carrying out risk assessment, safety audits and inspections are implemented (Armstrong, 2009). Importantly, the manager has the duty of monitoring health and safety performance and taking corrective action where necessary. Managers can greatly influence health and safety because they are in authority and it's up to them to constantly check on unsafe conditions and take action as they are also responsible for ensuring employees are aware of health and safety hazards and they do not take risks (Cole, 2007).

While the management are required to communicate and train, individual employees have a duty to take into account what has been communicated and what they have learnt on safety and health as they carry out their duties. Health and safety advisors guide on health and safety policies, procedures and on health and safe methods of working (Armstrong, 2006). Health and safety committees consist of health and safety representatives' advice on health and safety policies and procedures, help in conducting risk assessment and safety audits and make suggestions on improving health and safety performance (Cole, 2007). According to Armstrong (2009), all organizations are required to have a written health and safety policy, it is a legal requirement. It's a moral obligation and it makes economic sense in any organization.

When this policy document exists, it demonstrates that top management is committed in protecting the employees and the public from various hazards. The typical health and safety policy has 3 components; 1) general policy statement which just declares an intention to ensure health and safety in the organization; 2) The organization of health and safety-this defines the means by which the policy will be realized; 3) statement of guidelines to be followed by everyone in the organization in trying to maintain health and safety (do's and don'ts).

The general policy statement should be a declaration of the intention of the employer to safeguard the health and safety of employees. It should emphasize four fundamental points that the safety of employees and the public is of paramount importance; that safety takes precedence over expediency; that every effort will be made to involve all managers, team leaders and employees in the development and implementation of health and safety procedures; that health and safety legislation will be complied with in the spirit as well as the letter of the law. This section of the policy

statement should describe the health and safety organization of the company through which high standards are set and achieved by people at all levels in the organization. This statement should underline the ultimate responsibility of top management for the health and safety performance of the organization. It should then indicate how key management personnel are held accountable for performance in their areas. The role of safety representatives and safety committees should be defined, and the duties of specialists such as the safety adviser and the medical officer should be defined too (Cole, 2007).

### **Leadership in Occupational Health and Safety**

The goal of any organization is not only to survive, but also to sustain its existence by improving performance. In order to meet the needs of the highly competitive markets, organizations must continually increase performance (Arslan & Staub 2013). Prior literature suggests that role of leadership is critically important for achieving the performance of organizations (e.g. Boal and Hooijberg 2000; Peterson, Smith, Martorana and Owens 2003). However, the findings of prior studies about the role of leadership in increasing organizational performance are mixed. Some studies (e.g. Finkelstein & Hambrick, 1996; Katz & Kahn, 1978; Peterson, Smith, Martorana and Owens 2003) suggest that the role of leadership is critically important for an organization to achieve a high level of performance. However, some other studies (e.g. Pfeffer 1977; Meindl, Ehrlich and Dukerich 1985) suggest that role of leadership is not so important in achieving the organizational performance. Strong, effective and visible leadership is vital to good workplace safety and health. And, in turn, good safety and health is essential to the success of a business. Protecting employees from accidents and ill health is not only a legal and ethical duty — it is a sign of a business that is likely to grow and thrive.

An enterprise's leaders — senior management, directors and/or the board — are in a position to prevent accidents and ill health in the workplace. They can do this by: Committing to and communicating an effective OSH management strategy, Developing robust safety and health management systems, Monitoring the performance of those systems, Setting a good example by following all safety procedures at all times, Motivating staff to participate in ensuring good safety and health (Armstrong, 2009). Leadership strikes to reach goals. Leadership can be described as the goal-oriented design of working conditions. In this process, different tasks of leadership can be distinguished: leadership regarding tasks, organization and control; and leadership related to social aspects and other resources within the company (Ali, 2004). Zimber differentiates between the reduction of existing work load due to organizational and environmental aspects and the enhancement of resources. Bad leadership can result to occupational safety and health risks that can lead to work accidents. However, there is also evidence that leadership behavior is associated with sick leave and employees' wellbeing. It has been shown that the number of staff getting ill also depends on the manager. When managers are transferred to another unit, the average sick leave of the staff the manager is responsible for does not change even if the staff has changed (Kamau, 2015). Managers are key persons in an enterprise to design and improve the working conditions and thus influence the health of subordinates. They plan, lead, coordinate and control work organization and work activities. They also have a large impact on general working demands, control and social support, which are known to strongly influence employee health. Accordingly they are the ones primarily influencing working conditions and deciding on changes in the workplace and work environment. All these aspects contribute to

determining the level of safety and health at work (Kamau, 2015). Most literature is unanimous in identifying leadership commitment as a prerequisite for safety (Yule, Flin & Murdy, 2007; Zohar, 2000). These authors note that managers demonstrate commitment through their knowledge of the existing problems, their conviction that the firm can achieve high levels of safety, their ability to exhibit a lasting positive attitude towards safety, and their ability to promote safety actively at all levels in the organization. Management's attitudes and decisions can also directly or indirectly affect employees' attitudes and consequently their behaviours (Rundmo & Hale, 2003).

Yule et al., (2007), assert that leadership commitment to safety is an important factor in influencing the workers' attitudes towards following safety practices. In a study in 42 industrial plants in the United States of America, workers who perceived their management as having a higher level of commitment to safety had low accident rates. HSE (2000) avers that organizations should manage health and safety risks with the same degree of expertise and to them same standards as other core business activities. Fuller and Vassie (2004) stated that since the key function of a given management was to maintain and develop an organization, the role of the former ought to have been both as housekeeper and entrepreneur. They argued that the management should demonstrate leadership by providing resources, motivation, priorities, and accountability for ensuring the safety and health of its workforce. In addition, they advocated for the integration of safety and health concerns into the everyday management of the organization, just like production, quality control, and marketing as this ensured a proactive approach to accident prevention.

The findings of a study by Ndegwa, Guyo, Orwa and Ng'ang'a (2014), revealed that there was a positive

correlation between OSH programmes and leadership support. Findings of the study also indicated that leadership support created enhanced work environments that reinforced the implementation of OSH programs, which were required to enhance both employees and organizational productivity. This was as a result of improved work satisfaction due to reduced workplace accidents and injuries. Mearns et al. (2003) contended that supervisors' commitment to safety might improve safety performance, since supervisors play a role as trainers and instructors at the front line. Supervisors are important in instilling safety awareness and supporting safe behaviour within an organization (Barling et al., 2002 ; Zohar & Luria, 2003) .

O'Toole (2002), conducted an employee safety perception survey over a 45 month period at a Concrete producer within the United States of America. The study found that leadership commitment to safety generated the strongest positive perception and that this perception was closely associated with a reduction in the workplace injury rate. A supervisor as the immediate hierarchical position for the worker plays a pivotal role in a company's health and safety practices. Most of the safety procedures and monitoring means, which are formulated by the senior management, are usually implemented by supervisors. Griffin and Neal (2000) noted that when supervisors engage in safety-promoting behavior's, employees perceive a positive safety climate and get more involved in appropriate safety behavior's thus avoiding more injuries and pain, due to increased awareness and focus on safety. Employees who observe their leaders behaving safely at work will more likely behave in a safe manner, while regarding their leaders as role models (Hofmann & Morgeson, 2004).

Leadership is a condition for success. A preventive approach is only likely to be fruitful if it is supported by the management. A strong and visible leadership and engaged managers at all levels can provide direction and input to this preventive approach. This makes it clear for everyone that safety and health are strategic questions within the company (Armstrong, 2006). Management can show leadership on preventing safety and health risks at the workplace. Three underlying management principles are key for enhancing safety and health. These are: effective and strong leadership; involving workers and their constructive engagement; ongoing assessment and review. Management commits itself to occupational safety and health as a core value of the organization and communicates this to the employees; managers have an accurate picture of the risk profile of the organization. Management leads by example and demonstrates leadership integrity, for example, by following all occupational safety and health rules at all times (Cole, 2002). The roles and responsibilities of different actors in preventing and managing health and safety risks at the workplace are clearly defined and planned and monitored proactively; **OSH** can feature in the company's sustainability and/or corporate social responsibility strategy and may be encouraged throughout the supply chain.

### **Organizational Performance**

Organizational performance is described as an organization's ability to acquire and utilize its scarce resources and valuables or expeditiously as possible in the pursuit of its operational goals. (Griffin, 2006). Performance management can be defined as a systematic process for improving organizational performance, by developing the performance of individuals and teams. It is a means of getting better results by understanding and managing performance, within an agreed framework of planned goals, standards and competency

requirements. Processes exist for establishing shared understanding about what is to be achieved, and for managing and developing people in a way that increases the probability that it will be achieved in the short and longer term. It focuses people on doing the right things by clarifying their goals. It is owned and driven by line management (Armstrong, 2009).

Excellent performance can be achieved through the human resources department, by ensuring to link effective human resource practices and organizational performance to attain the set goals and objectives in the firm. Organizational performance in any organization is reflected in the effectiveness and efficiency with which goals and objectives are achieved (Wright, 2005).

Efficient organizational performance means that the employee will carry out duties effectively and efficiently to meet agreed job objectives. To improve performance, organization ought to link human resource practices and performance, to motivate, attract and retain top performers. The ability to effectively manage employee performance can lead to positive outcomes which include: reduced turnover, increased profit margins, cost savings, customer satisfaction, growth and increased market share (Kirkpatrick, 2006).

Job performance entails the way the employees actually perform the job, duties and responsibilities given to him and the result of the effects in achieving the overall organizational objective.(Armstrong, 2006). Performance can also be measured through a performance measure programme and tools such as reports, 360-degree feedback, balance score card and other tools to determine progress.( Armstrong, 2006).

A performance measurement programme is designated to measure input, output, outcome,



efficiency or effectiveness. It is very important to measure performance because of better decision making, promotes accountability and allows organizational learning and improvement, and it provides means of performance comparison. The measurement of organizational performance is not easy for business organizations with multiple objectives of profitability, employee satisfaction, productivity, growth, social responsibility and ability to adapt to the ever changing environment among other objectives. Although performance has been traditionally conceptualized in terms of financial measures, some scholars have proposed a broader performance construct that incorporates non-financial measures including among others, market share, product quality, customer satisfaction, customer loyalty and company image.

## **RESEARCH METHODOLOGY**

In this chapter, the researcher described the methods that were used to conduct the study.

### **Research Design**

The research adopted a case study since it provides a detailed examination of a single subject group or phenomena to understand the study area and make conclusions. In the case of this research, Kapa Oil Refineries Limited was studied in details.

### **Target Population**

Kapa Oil Refineries Limited, which is the focus of the study, had a total of 2,000 employees comprising of top management, middle management and lower level management.

### **Data Collection Instruments**

The researcher used a questionnaire consisting of both close and open ended questions. Secondary data was collected using document analysis guide.

### **Data Collection Procedure**

Primary and secondary sources of data were used for the study. Primary data was collected through a self-administered questionnaire that was delivered to one hundred respondents and collected after one week by the researcher. Secondary data was sought from various sources such as journals, books, the internet and Kapa Oil documents such as policy documents.

### **Data Analysis and Presentation**

Data collected was sorted, classified, and coded for ease of analysis. It was then keyed in a computer for summarizing and analysis to determine frequency of emerging themes. Data was analyzed using descriptive statistical tools.

## **RESEARCH FINDINGS AND DISCUSSION**

This chapter presents the research findings and discussion of the study.

### **Response Rate**

A total of 100 questionnaires were distributed, a total of 80 questionnaires were returned representing a response rate of 80%.

### **Gender of the respondents**

The study sought to find out the gender of the respondents. According to the findings, majority of the respondents 66% were males while 34% were female.

### **Length of Service**

According to the study findings; majority of the respondents 60% had worked in the company for 10 to 15 years; 22.5% had worked for 5 to 10 years. 10.0% of the respondents had worked for less than 5 years while 7.5% had worked for 15 years. It is therefore evident that Kapa Oil Refineries Limited is a good employer since it's able to retain its employees and also implies that having been in the company for a long time, the information provided

may be assumed to be credible based on experience.

### **Level of Education**

From the study findings; majority of the respondents 46.3% were graduates; 26.3% had attained master's degree. 16.3% were diploma holders while 11.3% had attained certificate education. Majority of the respondents at Kapa oil refineries limited, were graduates thus meaning they encompassed human capital in order to attain relevant knowledge, skills and abilities for efficient employee performance.

### **Training relating to current job**

All the respondents 100% had attained training relating to their current job.

### **Health and Safety Training**

The study sought to establish the influence of health and safety training on the performance of Kapa Oil Refineries Limited. The study findings indicate that respondents strongly agreed that they are trained on health and safety issues in the organization as indicated by a mean of 4.99 and standard deviation of 0.112; they strongly agreed that the management of their organization ensures employees attend health and safety workshops by a mean of 4.96 and a standard deviation of 0.191. They also strongly agreed that Frequent health and safety training leads to increased performance as indicated by a mean of 4.93 and standard deviation of 0.112; further they strongly agreed that there is a health and safety training policy in the firm by a mean of 4.99 and standard deviation of 0.115. The respondents strongly agreed that new employees are trained on health and safety to enable them learn the safety rules and procedures by a mean of 5 and a standard deviation of 0.000; they also strongly agreed that through health and safety training, they acquire relevant knowledge and skills which enable them to perform their duties

efficiently by a mean of 4.99 and standard deviation of 0.000.

### **Health and Safety Audit**

The study sought to establish the influence of health and safety audit on the performance of Kapa Oil Refineries Limited. According to the study findings; the respondents strongly agreed that the organization conducts health and safety audits by a mean of 4.70 and a standard deviation of 0.461; they strongly agreed that the managers conduct risk assessment to ascertain hazards in the organization by a mean of 4.58 and a standard deviation of 0.497. The respondents strongly agreed that the working conditions in the organization are checked periodically by a mean of 4.60 and a standard deviation of 0.493; they also strongly agreed that the managers communicate any possibility of hazards in the firm by a mean of 4.56 and a standard deviation of 0.499.

They also strongly agreed that accidents and hazards are investigated thoroughly in the firm by a mean of 4.61 and a standard deviation of 0.490; they agreed that audit reports are made available for employees to read them by a mean of 4.48 and a standard deviation of 0.551.

### **Health and Safety Policy**

The study sought to establish the influence of health and safety Policy on the performance of Kapa Oil Refineries Limited. According to the study findings; the respondents agreed that the organization has a health and safety policy by a mean of 4.44 and a standard deviation of 0.499; they strongly agreed that the organization provides protective equipment such as gloves and gas masks to its employees by a mean of 4.53 and a standard deviation of 0.503. They strongly agreed that they like the organization due to its health and safety policies and they have no intention of quitting by a mean of 4.65 and a standard deviation of 0.480; the

also strongly agreed that everybody is encouraged to develop and apply their own skills and knowledge in order to enhance organizational safety by a mean of 4.64 and a standard deviation of 0.509. They agreed that there is an Occupational Health and Safety Office available by a mean of 4.46 and a standard deviation of 0.526; they strongly agreed that they adhere to safety regulations in the performance of their duties by a mean of 4.53 and a standard deviation of 0.551. They further strongly agreed that their ideas and suggestions are incorporated in the safety policy by a mean of 4.51 and a standard deviation of 0.551.

### **Leadership in OHS**

The study sought to establish the influence of leadership in occupational health and safety on the performance of Kapa Oil Refineries Limited. According to study findings, the respondents strongly disagreed that the leadership of this organization is committed in ensuring good health and safety practices by a mean of 1.26 and a standard deviation of 0.938; the strongly disagreed that management consults with employees regularly about work place health and safety issues by a mean of 1.16 and a standard deviation of 0.719. They strongly agreed that managers/supervisors do not show interest in the safety of workers by a mean of 4.76 and a standard deviation of 0.889. The respondents strongly disagreed that Management considers safety to be equally important as production by a mean of 1.15 and a standard deviation of 0.718; the strongly agreed that Members of the management do not attend safety meetings by a mean of 4.85 and a standard deviation of 0.713. They disagreed that they feel that management is willing to compromise on safety for increasing production by a mean of 4.21 and a standard deviation of 1.589. Lastly they strongly disagreed that Leaders are proactive on

matters of Occupational Health and Safety by a mean of 1.10 and a standard deviation of 0.628.

### **Organizational Performance**

Respondents were asked to state if the employee satisfaction levels in the firm was adequate or not, and the respondents strongly agreed that employees satisfaction is very high at Kapa Oil Refineries Limited by a mean of 5.00 and a standard deviation of 0.000; they strongly agreed that Employees are satisfied with health and safety programs at Kapa Oil Refineries Limited by a mean of 4.93 and a standard deviation of 0.309. The respondents strongly agreed that Customer satisfaction is generally high in this organization by a mean of 4.89 and a standard deviation of 0.318; they strongly agreed that Customers are satisfied with the products and services they offer by a mean of 4.89 and a standard deviation of 0.157. They strongly agreed that their main goal is to make their customers happy and satisfied through exemplary services by a mean of 4.95 and a standard deviation of 0.21; they strongly agreed that their customer base has increased tremendously by a mean of 4.953 and a standard deviation of 0.265; they further strongly agreed that the management of their organization shares its profits with employees.

### **Correlation Analysis**

Multiple correlation measures indicate the degree of association between two or more variables simultaneously. In this study the aim was to establish whether there is linear relation between the dependent variable (Organization Performance) and independent variables that is (Health and Safety Training, Health and Safety Audit, Health and safety Policy and Leadership in OHS), at 5% level of significance. As stated above if the significance value is less than 0.05 ( $p < 0.05$ ) then it is considered statistically significant. If the significance value is greater than 0.05 ( $p > 0.05$ ) the relationship is not statistically significant.

There is strong positive relationship which is statistically significant between Health and Safety Audit and Organization Performance at Kapa Oil Refineries of Kenya( $r=0.578$ ,  $p=0.013<0.05$ ). There is strong positive relationship which is statistically significant between Health and safety Policy ( $r=0.544$ ,  $p=0.029<0.05$ ). There is strong positive relationship which is statistically significant between Leadership in OHS and Organization Performance at Kapa Oil Refineries of Kenya( $r=0.580$ ,  $p=0.012<0.05$ ). The study findings were statistically significant between the dependent variable organizational performance and the independent variables, health and safety training, Health and safety audit, Health and safety policy and leadership in OHS. This means that with health and safety training, employees will acquire relevant knowledge, skills and abilities resulting to efficient

performance, leads to task expertise, and also reduction of accidents and mistakes in the workplace. Through health and safety audits, it will mean that the management will scrutinize all potential hazards in the workplace and eliminate them thus ensuring an amicable working environment in the firm boosting productivity. Through enactment of a health and safety policy in the firm, it will result to formation of safety rules and regulations, practices and procedures that will guide employees in what is expected of them in the firm thus boosting productivity in the firm. Efficient leadership in OHS programs in the firm, will mean that the top management should be committed, facilitate and support the OHS programs in order to inspire employees and show them a sense of direction within the firm, leadership motivates, inspires and encourages followers to action.

**Table 1: Correlation Matrix**

		Organization Performance	Health and safety Training	Health and Safety Audit	Health and Safety Policy	Leadership OHS
Organization Performance	Pearson Correlation Sig. (2-tailed)	1				
Health and safety Training	Pearson Correlation Sig. (2-tailed)	.417	1			
Health and Safety Audit	Pearson Correlation Sig. (2-tailed)	.578*	.015	1		
Health and Safety Policy	Pearson Correlation Sig. (2-tailed)	.544*	.103	.835**	1	
Leadership OHS	Pearson Correlation Sig. (2-tailed)	.580*	.032	.244*	.151	1
	N	80	80	80	80	80

\*. Correlation is significant at the 0.05 level (2-tailed).

Table 1 indicates the correlation between the independent variables (Health and Safety Training, Health and Safety Audit, Health and safety Policy and Leadership in OHS) and Organization Performance at Kapa Oil Refineries of Kenya. The findings revealed that there is weak positive relationship which is not statistically significant between Health and safety Training, Organization Performance at Kapa Oil Refineries of Kenya ( $r=0.417$ ,  $p=.879>0.05$ ).

**Table 2: Model Summary**

Model	R	R Square	Adjusted R Square
1	.726 <sup>a</sup>	.527	.479

R-square is the Coefficient of determination that explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (Organization Performance) that is explained by all the four independent variables (Health and Safety Training, Health and Safety Audit, Health and Safety Policy and Leadership in OHS). From Table 2, the value of

**Regression Analysis**

Regression analysis was undertaken to determine statistical significance between the independent variables (Health and Safety Training, Health and Safety Audit, Health and safety Policy and Leadership in OHS) and dependent variable Organization Performance at Kapa Oil Refineries of Kenya.

R-Square is 0.527. This implies that, 52.7% of variation of Organization Performance was explained by Health and Safety Training, Health and Safety Audit, Health and Safety Policy and Leadership in OHS. From the findings, 47.3% implies that there are factors not studied in this study that influences Organization Performance at Kapa Oil Limited of Kenya.

**Table 3: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.273	4	.068	2.682	.038
	Residual	1.882	74	.025		
	Total	2.155	78			

a. Dependent Variable: Organization Performance

b. Predictors: (Constant), Leadership in OHS, Health and Safety Training, Health and Safety policy, Health and Safety Audit

The ANOVA test is used to determine whether the model is important in predicting the Organization Performance. At 0.05 level of significance the ANOVA test indicated that in this model the independent variables namely; Health and Safety Training, Health and Safety Audit, Health and Safety Policy and Leadership in OHS are important in predicting Organization Performance as indicated

by significance value=0.038 which is less than 0.05 level of significance ( $p=0.003<0.05$ ). Therefore there is significant relationship between independent variables (Health and Safety Training, Health and Safety Audit, Health and safety Policy and Leadership in OHS) and the dependent variable (Organization Performance)

**Table 4: Coefficient of Multiple determinations of the variables**

Model	Unstandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Coefficients Beta		
(Constant)	0.914	1.368		4.325	.000
Health and Safety Training	.087	.264	.036	.329	.023
Health and Safety Audit	.076	.103	.145	.732	.006
Health and safety Policy	.047	.106	.087	.447	.036
Leadership in OHS	.106	.051	.233	2.070	.042

a. Dependent Variable: Organization Performance

From the findings in Table 4 above, at 5% level of significance, Health and Safety Training was a significant predictor of Organization Performance at Kapa Oil Limited of Kenya where (p=0.023<0.05). Health and Safety Audit was a significant predictor of Organization Performance at Kapa Oil Limited of Kenya where (p=0.006>0.05). Health and safety Policy was a significant predictor of Organization Performance at Kapa Oil Limited of Kenya where (p=0.036<0.05). Leadership in OHS was a significant predictor of Organization Performance at Kapa Oil Limited of Kenya where (0.042<0.05).

Where, is Y the dependent variable (Organization Performance at Kapa Oil Limited),  $X_1$  is Health and Safety Training,  $X_2$  is Health and Safety Audit and  $X_3$  is Health and safety Policy and  $X_4$  is Leadership in OHS. As per the SPSS generated regression Table 4.10 the equation

( $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$ ) becomes:

$$Y = 0.914 + 0.087X_1 + 0.076X_2 + 0.047X_3 + 0.106X_4$$

According to the equation taking all factors constant; the Organization Performance at Kapa Oil Limited was 0.914. A unit increase of Health and Safety Training would lead to a 0.087 increase in Organization Performance at Kapa Oil Refineries

Limited; a unit increase of Health and Safety Audit would lead to 0.076 increase in Organization Performance at Kapa Oil Refineries Limited; a unit increase in Health and safety Policy leads to 0.047 increase in Organization Performance at Kapa Oil Refineries Limited and a unit increase in Leadership in OHS leads to 0.106 increase in Organization Performance at Kapa Oil Refineries Limited. Therefore according to the study findings Leadership in OHS contributes more to the increase of Organization Performance at Kapa Oil Refineries Limited. The findings of this study relate with those of Yule & Flin (2007). These authors note that managers demonstrate commitment through their knowledge of the existing problems, their conviction that the firm can achieve high levels of safety, their ability to exhibit a lasting positive attitude towards safety, and their ability to promote safety actively at all levels in the organization. Management’s attitudes and decisions can also directly or indirectly affect employees’ attitudes and consequently their behaviours (Rundmo & Hale, 2013).

**SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

This chapter presents summary of key findings, conclusions from the findings and recommendations made based on specific objectives of the study. Areas for further research are also provided.

### **Summary**

The purpose of this study was to investigate the influence of occupational health and safety on organizational performance in manufacturing sector in Kenya. A case study of Kapa Oil Refineries Limited in Nairobi County and investigated four objectives, which included: To determine the influence of health and safety training on organizational performance in Kapa Oil Refineries Limited, To examine the influence of health and safety audit on organizational performance in Kapa Oil Refineries Limited. To determine the influence of health and safety policy on organizational performance in Kapa Oil Refineries Limited. To examine the influence of leadership in health and safety on organizational performance in Kapa Oil Refineries Limited

### **Influence of Health and Safety Training on Organizational Performance**

Under this objective the study discovered that respondents strongly agreed that they were trained on health and safety issues in the organization as indicated by a mean of 4.99 and standard deviation of 0.112; they strongly agreed that the management of the organization ensured employees attend health and safety workshops as shown by a mean of 4.96 and a standard deviation of 0.191. They also strongly agreed that frequent health and safety training leads to increased performance as indicated by a mean of 4.93 and standard deviation of 0.112; further they strongly agreed that there is a health and safety training policy in the firm as shown by a mean of 4.99 and standard deviation of 0.115. The respondents

strongly agreed that new employees were trained on health and safety to enable them learn the safety rules and procedures as shown by a mean of 5 and a standard deviation of 0.000; they also strongly agreed that through health and safety training, they acquired relevant knowledge and skills which enabled them to perform their duties efficiently as shown by a mean of 4.99 and standard deviation of 0.000.

A correlation analysis revealed a weak positive relationship between health and safety training and performance of Kapa Oil Refineries Limited. Regression analysis also indicated that 52.7 % of the variation of organization performance was explained by health and safety training. Analysis of Variance findings revealed that health and safety training was important as indicated by a significance value of 0.038. This shows a significant relationship between health and safety training and performance of Kapa Oil Refineries Limited.

### **Influence of Health and Safety Audit on Organizational Performance**

This objective aimed at determining whether Health and Safety Audit had an influence on organization performance by examining if health and safety audits were conducted, if managers carried out risk assessment to ascertain existence of hazards, working conditions were checked periodically, managers communicated any possibility of hazards, accidents and hazards were thoroughly investigated and if audit reports were made available for employees to read.

According to the study findings in Table 4.3; the respondents strongly agreed that the organization conducted health and safety audits as indicated by a mean of 4.70 and a standard deviation of 0.461; they strongly agreed that the managers conducted

risk assessment to ascertain hazards in the organization as indicated by a mean of 4.58 and a standard deviation of 0.497. The respondents strongly agreed that the working conditions in the organization were checked periodically as indicated by a mean of 4.60 and a standard deviation of 0.493; they also strongly agreed that the managers communicated any possibility of hazards in the firm as indicated by a mean of 4.56 and a standard deviation of 0.499. They also strongly agreed that accidents and hazards were thoroughly investigated in the firm as indicated by a mean of 4.61 and a standard deviation of 0.490; they agreed that audit reports were made available for employees to read them as indicated by a mean of 4.48 and a standard deviation of 0.551.

#### **Influence of Health and Safety Policy on Organizational Performance**

This objective sought to establish how health and safety policy influenced organizational performance at Kapa Oil Refineries Limited. The aspects examined included availability of health and safety policy, if the organization provided protective clothing, if employees liked the organization due to its safety policy, whether staff were encouraged to develop and apply their own skills and knowledge in enhancing organizational safety, if the organization had an occupational health and safety policy and if employees ideas and suggestions were incorporated in the safety policy.

According to the study findings in Table 4.4; the respondents agreed that the organization had a health and safety policy as indicated by a mean of 4.44 and a standard deviation of 0.499; they strongly agreed that the organization provided protective equipment such as gloves and gas masks to its employees as indicated by a mean of 4.53 and a standard deviation of 0.503. They strongly agreed that they liked the organization due to its health

and safety policies and they had no intention of quitting as indicated by a mean of 4.65 and a standard deviation of 0.480; they also strongly agreed that everybody was encouraged to develop and apply their own skills and knowledge in order to enhance organizational safety as indicated by a mean of 4.64 and a standard deviation of 0.509. They agreed that there is an Occupational Health and Safety Office available as indicated by a mean of 4.46 and a standard deviation of 0.526; they strongly agreed that they adhere to safety regulations in the performance of their duties as shown by a mean of 4.53 and a standard deviation of 0.551. They further strongly agreed that their ideas and suggestions were incorporated in the safety policy as shown by a mean of 4.51 and a standard deviation of 0.551

#### **Influence of Leadership in OHS on Organizational Performance**

Managers should be committed to organizational health and safety programs by ensuring to be at the forefront by championing health and safety practices, programs, audits and inspection, in order to ensure employees are motivated, attracted and will be retained in the organization due to provision of health and safety adequacies in the organization. The leadership of this organization should ensure to fully support employees in the health and safety management, in order to foster smooth employee relations between the management and employees.

According to study findings in Table 4.5, the respondents strongly disagreed that the leadership of this organization is committed in ensuring good health and safety practices as shown by a mean of 1.26 and a standard deviation of 0.938; they strongly disagreed that management consults with employees regularly about work place health and safety issues as shown by a mean of 1.16 and a standard deviation of 0.719. The strongly agreed



that managers/supervisors do not show interest in the safety of workers as shown by a mean of 4.76 and a standard deviation of 0.889. The respondents strongly disagreed that Management considers safety to be equally important as production as shown by a mean of 1.15 and a standard deviation of 0.718; the strongly agreed that Members of the management do not attend safety meetings as shown by a mean of 4.85 and a standard deviation of 0.713. They disagreed that they feel that management is willing to compromise on safety for increasing production as shown by a mean of 4.21 and a standard deviation of 1.589. Lastly they strongly disagreed that Leaders are proactive on matters of Occupational Health and Safety as shown by a mean of 1.10 and a standard deviation of 0.628.

### **Conclusions**

From the research findings presented in chapter four and summary above the study concludes the following:

#### **Influence of Health and Safety Training on Organizational Performance**

Employees agreed that they are trained on health and safety training, and also they agreed that the management ensures that all employees attend health and safety workshops and that the training they receive has boosted employee performance due to acquisition of knowledge, skills and attitudes. Employees also agreed that there is a health and safety policy in check, which incorporates health and safety training needs for employees thus boosting their performance.

#### **Influence of Health and Safety Audit on Organizational Performance**

Employees agreed that the firm conducts a health & safety audit and that the management conducts risk assessment to ascertain hazards in the organization.

The employees also agreed that the management assess working conditions periodically and that managers communicate any possibility of hazards in the firm. The employees of Kapa oil limited, agreed that hazards and accidents are investigated thoroughly and audit reports are made available for the employees to read.

#### **Influence of Health and Safety Policy on Organizational Performance**

Kapa Oil Refineries Limited employees agreed that the organization has a health and safety policy and that the organization provides protective equipment as gloves and gas masks to its employee's, and the employees like the organization due to its health and safety policies and they have no intention of quitting this organization. The employees also agreed that everybody is encouraged to develop and apply their own skills and knowledge to enhance organization safety. The employees also agreed that there is an occupation health and safety office available and they adhere to laid rules and regulations on health and safety.

#### **Influence of Leadership in OHS on Organizational Performance**

Employees of Kapa Oil Refineries Limited, strongly disagreed that the leadership of this organization is committed in ensuring good health and safety practices and strongly disagreed that the management consults with employees regularly about workplace health and safety issues and they strongly agreed that managers don't show interest in the safety of workers and the employees disagreed that management considers safety to be equally important as production. The employees also strongly agreed that the management does not attend safety meetings and also disagreed that the management is willing to compromise on safety for increasing production.

## **Recommendations**

Recommendations of this study include the following:

The management of Kapa oil refineries limited should ensure to consult its employees through suggestion schemes, decision working teams in order to improve on the occupational health and safety programs in the organization thus boosting productivity and worker participation in OHS programs.

The management of Kapa oil refineries should attend safety meetings, workshops and seminars with their employees in order to show solidarity with their employees on OHS programs thus boosting productivity and the management should also be proactive on matters of OHS by providing solutions to problems on OHS programs thus ensuring efficient employee performance which will lead to organizational productivity.

The management of Kapa Oil Refineries Limited should conduct proper training to new staff and efficient orientation programs in the organization, in order to reduce newness anxiety, and foster productivity in the workplace.

The management of the Kapa oil limited and the department of occupational health and safety, should come up with a safety design and preventive approach which mainly deals in what should be designed to employees so as not to cause harm to employees. It involves, installing protective gloves for machines and equipment's, safety rules approach, colour codes warning in dangerous areas, inspection of the workstations with goal of reducing accidents, and death. Through this approach, productivity will be maintained.

The Government of Kenya through its department of occupational health and safety, should conduct proper audit and inspection to organizations premises to ensure that the working environment is

up to standards, there are health and safety policies, provision of equipment and that all hazards are assessed and proper mitigation measures in place to ensure employees well-being in the organization is catered for through an amicable working environment.

The management of Kapa Oil Refineries Limited, should show support, commitment and facilitate all health and safety programs in the organization, through clear and visionary leadership in occupational health and safety programs. Leaders inspire followers and so the managers and supervisors should inspire employees to attend health and safety training and workshops in order to attain knowledge, skills and attitudes for efficient performance.

The study also recommends that employees at Kapa Oil Refineries Limited should be provided with adequate equipment and clean working environment as previous studies recommends that ensuring adequate facilities are provided to employees is critical to generating greater employee performance.

## **Suggestions for Further Research**

This study was limited to influence of occupational health and safety on organizational performance in manufacturing sector in Kenya. A case study of Kapa Oil Refineries Limited in Nairobi County and it brought out this four factors, health and safety training, health and safety audit, health and safety policy and leadership in OHS. Future researchers should focus on other variables that may influence employee performance in OHS programs, such as recruitment and selection in OHS, employee involvement, empowerment, work-life balance. This study was limited to the manufacturing sector in Kenya using Kapa oil limited as a case study. A similar study could be carried out in other sectors such as energy sector, mining sector etc to find out whether the same results shall be obtained.

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