PERCEIVED FACTORS AFFECTING EMPLOYEE HEALTH AND SAFETY AT
THE TEACHERS SERVICE COMMISSION IN KENYA

ODUK RITA AKOTH

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF MASTERS OF SCIENCE HUMAN
RESOURCE MANAGEMENT SCHOOL OF BUSINESS, UNIVERSITY OF
NAIROBI

2017
DECLARATION

This research project is my unique work and has not been submitted for a degree in this or some other College/university.

Signature ……………………………………….. Date ……………………………

ODUK RITA AKOTH

D64/77281/2015

This research project has been submitted for Examination with my approval as the University Lecturer.

Signature. ……………………………………….. Date. ……………………………

DR. Mercy Munjuri
School Of Business
University Of Nairobi
School Of Business
DEDICATION

I would like to express my appreciation to my family who have been very supportive all through the study.
ACKNOWLEDGEMENT

I thank God who is a source of all my inspiration in enabling me to undertake this study.
I am appreciative to my supervisor Dr. Mercy Munjuri for her guidance and patience in development of the proposal and writing of the project.
I will always be indebted to my classmates whom we shared critical discussions pertaining to our course work and the conceptualization of our research problems, academic writing and encouragement of each other.
Special regards goes to my family for their continued encouragement and support throughout the conceptualization of the proposal and writing of the project.

Thank you all.
TABLE OF CONTENTS

DECLARATION........................................................................................................................................ii

DEDICATION.........................................................................................................................................iii

ACKNOWLEDGEMENT..........................................................................................................................iv

LIST OF TABLES.....................................................................................................................................ix

LIST OF FIGURES..................................................................................................................................x

LIST OF ABBREVIATIONS AND ACRONYMS...................................................................................xi

ABSTRACT..............................................................................................................................................xii

CHAPTER ONE: INTRODUCTION........................................................................................................... 1

1.1 Background of the Study..................................................................................................................... 1

1.1.2 The Concept of Perception ........................................................................................................... 2

1.1.3 Employee Health and Safety ........................................................................................................ 2

1.1.4 Factors that affect employee Health and Safety .......................................................................... 3

1.1.5 The Teachers Service Commission .............................................................................................. 5

1.2 Research Problem............................................................................................................................ 6

1.3 Research Objective............................................................................................................................ 8

1.4 Value of the Study............................................................................................................................ 9
CHAPTER TWO: LITERATURE REVIEW...................................................... 10

2.1 Introduction .......................................................................................... 10

2.2 Theoretical Underpinning of the Study.................................................. 10

2.2.1 The Defense in Depth Theory .............................................................. 10

2.2.2 Heinrich Law Theory .......................................................................... 12

2.3 Factors affecting employee Health and Safety ...................................... 14

2.3.1 Working Conditions ........................................................................... 14

2.3.2 Training .............................................................................................. 15

2.3.3 Leadership Style ................................................................................ 16

2.3.4 Teamwork .......................................................................................... 17

2.3.5 Attitude ............................................................................................. 18

2.3.6 Motivation .......................................................................................... 19

2.4. Empirical Studies on Employee Health and Safety .............................. 20

2.5 Gaps in Empirical Studies on Employee Health and Safety .................. 22

CHAPTER THREE: RESEARCH METHODOLOGY ........................................ 23

3.1 Introduction ............................................................................................. 23

3.2 Research Design ..................................................................................... 23

3.3 Target Population ................................................................................... 23
3.4 Sample Size and Sample Design ................................................................. 23

3.5 Data Collection ............................................................................................. 24

3.6 Validity and Reliability of Data Instrument .................................................. 25

3.7 Data Analysis ................................................................................................. 25

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSION ........... 26

4.1 Introduction ..................................................................................................... 26

4.2. Response Rate ............................................................................................... 26

4.3 Respondents Profile ....................................................................................... 27

4.3.1 Gender ......................................................................................................... 27

4.3.2 Length of Service ......................................................................................... 28

4.3.3 Level of Education ....................................................................................... 29

4.4 Factors Affecting Employee Health and Safety ............................................. 30

4.4.1 Ever Fallen Sick at the Work Place ............................................................ 30

4.4.3 Measures Taken by the Employer ............................................................... 31

4.5 Analysis of Factors affecting Employee Health and Safety .......................... 32

4.5.1 Working Conditions ................................................................................... 32

4.5.2 Training ....................................................................................................... 34
LIST OF TABLES

Table 3.1 Sample Design ........................................................................................................ 24

Table 4.1 Response Rate ........................................................................................................ 26

Table 4.2 Working Conditions .............................................................................................. 33

Table 4.3 Training .................................................................................................................. 35

Table 4.4 Leadership Style ................................................................................................... 37

Table 4.5 Teamwork ............................................................................................................... 38

Table 4.6 Attitude .................................................................................................................. 40

Table 4.7 Motivation .............................................................................................................. 41

Table 4.8 Factor Analysis ..................................................................................................... 42
LIST OF FIGURES

Figure 4.1 Respondents’ gender profiles ................................................................. 27
Figure 4.2 Lengths of Service Percentages ................................................................. 28
Figure 4.3 Levels of Education Percentages ............................................................... 29
Figure 4.4 Ever Fallen Sick at Work Percentages ....................................................... 30
Figure 4.5 Relation of Sickness to Work Percentages ............................................... 31
Figure 4.6 Measures Taken by the Employer ............................................................. 32
LIST OF ABBREVIATIONS AND ACRONYMS

OSH    Occupational Safety and Health

TSC    Teachers Service Commission
ABSTRACT

With the rapid industrialization, organizations seek to improve on occupational safety and health (OSH). However, occupational health and safety is influenced by various factors. This study sought to determine the factors that affect health and safety of employees at Teachers Service Commission in Kenya. The study adopted descriptive research design. The study respondents were all the employees of the Teachers Service Commission who are 2000 in total. The population was sampled through stratified random sampling. Primary data was collected using structured and unstructured questionnaires. Data gathered was analyzed using descriptive statistics as well as factor analysis. The findings indicate the there was uncertainty on the effect of employee perspectives of working conditions, training, leadership style, teamwork, attitude, and motivation on the health and safety of employees. The findings further, revealed that the respondents agreed that diversity in gender roles may positively influence health and safety in an organization and were indifferent whether good leadership style is a recipe of health and safety environment; the respondents agreed that employees with positive attitude on health and safety rarely engage on unsafe behaviors and were indifferent whether work attitude has direct effect on employee safety. The study concluded that there is limited understanding of the importance of proper working condition, training on health and safety, an inclusive leadership style, teamwork, positive attitude towards health and safety and motivated employees in reducing ill health and accidents at the work place. The findings of the factor analysis concludes that the most relevant factor that affects employee health and safety is employee attitude followed by leadership, motivation, teamwork, being training and last being working conditions in that order. This indicates that the variables were of relevance to employee health and safety in the order of the objective with the highest mean to the one least mean. The study recommends that in order to ensure employee health and safety, employers should improve working conditions, train the employees on health and safety, adopt inclusive leadership styles, and ensure motivated employees with positive attitudes. The study also recommends the formulation of policies that ensure employers provide safe work environments for employees. Build the capacity of workers to understand the importance of health and safety. Compulsory working safety standards should be provided. Leadership Style in organizations should be effective in influencing and supporting others to follow them and to do willingly the things that need to be done. Organizations should strive to enhance the effectiveness of teamwork by eliminating power and authority conflicts, interpersonal and unusable relationships. To enhance health and safety, teamwork should empower employees by facilitating full potential realization despite the more critical perspectives being taken lately. Members of the team will gain essential gains from autonomy, job satisfaction, identification with work and greater skills development thereby promoting the health and safety of team members.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The recent trend of rapid industrialization in all respects of human activity has made occupational safety and health (OSH) a significant factor. OSH thus, has a significant contribution in the analysis of risk together with its related consequences. The safety and health should be the greatest concern in ensuring personnel health. This practice thus issues that there is maximum protection from accidents, hazards and heath related issues from daily activities. Despite these, working environments in developing countries are said to be highly hazardous, and greatly hampered by personnel costs due to high incidence rate of occupational injuries and job hazards (Armstrong, 2007).

Health and safety of employees in organizations is of great importance. Healthy workers are fundamental in overcoming poverty because healthy workers raise healthy families. Armstrong (2007) found out that solving the hazards in workplaces hazards helped to keep employees, through each work day working at their best, rather than taking time off to recover from an injuries or illnesses. Health workers reduce the amount of time spent in hospitals and as such the organizations experience high productivity and reduced medical expenses. Industrial processes are a cause of pollution and hazardous environmental exposure to health and can be positively influenced safety programs and occupational health. The common elements of the processes of worker protection, surrounding communities and the environment for future generations have important are control of pollution and reduction of exposure. Employability of workers can be improved by the contribution of occupational safety and health through (re)design of workplace, maintaining a safe and healthy working environment, training and retraining,
work demands assessment, medical diagnosis, health screening and functional capacities assessment (Dessler, 1994).

1.1.1 The Concept of Perception

Alan and Gary (2011) define perception as the ability to see, hear or become of aware of something by someone. It is also about thinking, noticing or understanding something using one’s senses. Pomerantz (2003) defines perception as the mental image of an individual or people towards a particular situation which is influenced by stimuli.

Perception comes in various ways and has diverse uses. There are many types of perception. In managerial management perception can be used in interpersonal working relationships, employee health and safety appraisals, impression management selection of employees and so much more (Alan & Gary, 2011).

Perception is a powerful tool when looking at factors that affect employee health and safety because all these factors depend on how an employee views, thinks about a certain factor that will be looked into in the study. The use of perception is of importance in the study as it lay out the different views of each and every employee (Pomerantz, 2003).

1.1.3 Employee Health and Safety

Occupational safety and health is a broad domain, covering various disciplines and several hazards of environment and place of work. In response to social, political, technological and changes economically, there has been gradual evolution in the range of occupational safety and health. In the work world, the world economy globalization and its consequence are perceived to be a great force of change, and subsequently in both positively and negatively, the range of occupational safety and health (Hannula, 2004).
Occupational health and safety is a multidisciplinary field concerned with safety of work, health, and welfare of people at work. Operation managers are responsible for improvement of health and safety since an accident or an injury will occur and there will be existence of health hazards in the unit of work. They should know about the considerations on health and safety and collaborate with experts to help decrease accident cases and occupational illness. The achievement of a safety program is based on the adherence of employees and managers to rules on safety and regulations. Many employees are not conversant to health and safety rules and regulation in the firm, hence end up being involved in serious accidents which can be avoided (Dessler, 1994).

According to Cole (2002), it is vital to have employee health and safety in an organization. There should be and enforcement of the systems of the organization for development and feedback system which can comprise of scrutiny of work environment. Safety is every ones responsibility but it should be incorporated as the culture of the organization. The commitment of the top management should be seen by their willingness to provide resources to acquire safety equipment, forming safety committees, meeting expectations and by evaluating the employee health and safety of employees, they will be held accountable for safety issues by evaluating their employee health and safety sends the message of seriousness concerning safety by the organization.

**1.1.4 Factors that Affect Employee Health and Safety**

Working conditions affects employee health and safety in the work place. As per Kodz et al (2002) work conditions, in some cases, fractions have been shown to reduce absenteeism, rise spirits and in increased satisfaction with ones job. Due to rising economic constraints of the workers possibly due to large families and inflation,
industries should provide transport facilities, medical help, subsidize the food the workers require.

Organizations that have had active unions have welfare activities such as working condition have been regarded where else in unorganized ones, employees have not been able to obtain adequate advantages from their employers. Amenities are provided by employers to undertake their social responsibility, raise the morale of employees, use the workforce more effectively and decrease yields and rates of absenteeism (Armstrong, 2005).

Training is another factor that has effect on the health and safety of employees. Employees learn about first-aid principles, wise use of tools and machinery, precaution methods for prevention of accidents cause by fire, hand tools usage and protection of the eyes and other body parts. In accident prevention, training is a vital factor. For the success of safety programme to be attained, personnel in the whole organization should undergo the training and education offered. The consciousness of safety is developed among employees and results in safety handling of equipment. Armstrong (2004) claims that training program should begin in the orientation. When there is transfer to a new place of work or alteration in methods of work, safety training should be done. Trainings on safety, highlight rules and gives information of probable hazards and ways to avoid them. Additional trainings should be conducted to and special courses done to cover all aspects of health, safety or area in which safety problems have emerged.

As far as health and safety is concerned, team advance towards managing organizations is having varied and a substantial impact on organizations and individuals. A progressive
management and a future that is foreseen is promised by teams (Kreitner, 2006). A small group of people with skills that are complementary, who commit to a common objective employee health and safety aims, and ways of approaching them to which they are accountable mutually is known as a team.

Teams are a task group that has matured to the performing stage. Effective teams are enhanced by forming work place and urging the employees to be good team players. There will be intrinsic reward gain from autonomy. There are expectations of high performances due to reduced accidents improvement of communications within the team (Taylor, 2005).

1.1.5 The Teachers Service Commission

Teachers Service Commission is traced back to colonial times when there were various bodies for employment of teachers. The bodies included the missionaries and the government for teachers in primary schools; the African Teachers Service and the Government for both African and European secondary school teachers. The Kenya National Union of Teachers was set up in 1957 as teachers’ umbrella body. It was not necessary to have a system that was decentralized in handling the affairs of the teachers. It pressed for teachers’ employment by a central body and leading to the launch of Teachers Service Commission (TSC) under an Act of Parliament (Cap 212) of the Laws of Kenya in 1967.

The commission is set up effectively into several departments and divisions that undertake precise functions to execute the authority of the commission as required. At its creation, there were a total of 100 employees in the Secretariat in a single department
who undertook services of consulting and coordination. At this time, there were policy formulations ongoing and consequently the first draft of Code of Regulations for teachers 1972 was drawn. Later on, it was brought to the parliament and was first published in 1976 and then a revision was done in 1986. The commission has grown to 2,900 members of staff from the 100 that had three commissioners and with Mr. John Malinda as a chairman and also Director of Personnel Management. It now has seven directorates: Accounts, Finance, Teacher Management, Administration, Information Communication Technology, Human Resource Management Development and Internal Audit. To meet the dynamic challenges of our economy, the procedures of management have undergone series of changes. This is achieved through the continued development of staff and service expansion and leadership of the nine commissioners as required by the Constitution of Kenya (Teachers service commission journal, 2015). The number of commissioners was 24 before dropping to nine.

1.2 Research Problem

Health and safety is very important aspect to each and every individual in an organization. The key to a worker’s health, productivity and wellbeing is safety. There is more to health and safety than just accident and incident prevention. It is strategically creating workplaces that are supportive with wellbeing as an integral point. Accidents caused by machines and other equipment may lead to loss of life and disabilities which is a problem being experienced by many organizations today. Human resources are dynamic and improving their health and safety in workplace translates to smooth flow of activities resulting from job satisfaction due and reduction of accidents. Some of the factors that have been found to affect health and safety are working conditions, training,
leadership styles, and team work and employee attitude (Tyson, 2006). The issue of perception is of importance in the study as it lay out the different views of each and every employee (Pomerantz, 2003).

In the TSC, the policies and standards on work health and safety are there to ensure every person in the organization knows their rights and responsibilities at work. To keep the workforce safe, transparency, open reporting and accountability culture have been put in place. The commission’s safety strategy has a provision for continued betterment of safety employee health and safety through application of the four employee health and safety of safety. These are, Safety Leadership; Wellbeing and Engagement; Risk Management and Employee health and safety Measurement. The commission’s safety and health policy supports for improvement of the wellbeing of its employees by creating a safe working environment not only to the employees but also to the neighboring environment.

Curtis (2016) conducted a study on Safety and Health Empowerment for Women in Trades, at the University of Washington in conjunction with groups within the community serving tradeswomen in Washington State. Her findings were that, 68% represented women and 32% represented men. In comparison with men, women perceived higher stress levels. At work places, there is high tendency of women to put extra effort to complete their work than men. The highest record of injuries at work place is usually from women in the past one year.

Adams (2008) did a study the impact of worker Safety Training on Workers’ compensation claims in construction companies in Makadara Constituency of Nairobi.
County. In his study, he found that Training resulted in a 13% reduction in injury rates, though this finding was not statistically significant. Direct workers’ compensation costs per hour of work were substantially lower among workers who had received training in the previous five years.

Makori (2007) carried out a study in western province of Kenya on the impacts of occupational health and safety programmes on the productivity of employees in manufacturing firms. His findings revealed a positive but less significant relationship between health and safety and employee productivity in manufacturing firms. This indicated employee productivity in firms was affected in terms of commitment, compliance, meeting goals, stress level, burnout and aggressiveness. Firm management put policies in place and structures for improvement of occupational health and safety but it was not much effective due to lack of proper communication in some firms. Most of the Organizations had put in place active health and safety committees with the mandate of drafting policies, rules and safety precautions to reduce accidents.

This study intend to fill the gap in knowledge by attempting to answer the research question: what factors affect health and safety of employees at the Teachers Service Commission in Kenya?

1.3 Research Objective

The main objective of this study was to determine the factors that affect health and safety of employees at Teachers Service Commission in Kenya.
1.4 Value of the Study

This research is of great significance to other researchers as they will use it as basis for further research and come up with other ideas. Because health and safety topic is wide and there are more areas that need to be researched on, this study will assist in information on why health and safe workplace is important to employees as far employee health and safety is concerned.

This study will be important to the management in policy making because they will be able to identify the effects of health and safety in work place and best methods to improve the health and safety of their employees. This will improve the efficiency and productivity of the employees hence maximizing its profit due to reduced injuries and accidents at work place.

The study will be of help in the human resource practice as the human resource department will gain knowledge concerning health and safety explained out in this study and this will help them come up with effective health and safety policies with in the organization. This will make the employees know of how they are expected to behave while at the work place as much as their health and safety is concerned.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter presents the theoretical underpinning of the study, the factors affecting employee health and safety and empirical studies conducted on employee health and safety.

2.2 Theoretical Underpinning of the Study

This study is anchored on Defense in depth theory which focuses on the causes of accidents and how the accidents can be prevented. The Henrich’s law theory is also relevant to the study because it discusses the common root causes of accidents in workplaces, how intense these injuries can be, how the root causes can be eliminated as well as how injuries can be prevented at the workplace.

2.2.1 The Defense in Depth Theory

At the University of Manchester, Dante Orlandella and James Reason originally came up with the theory model in the year 1990. This theory equates human system to several slices of Swiss cheese, piled side by side, in which the mitigation of the risk of threats becoming real occurs by different layers and types of defenses which are layered behind each other. Therefore, breakdowns and weaknesses in a single defense do not allow materialization of a risk, since other defenses also exist to prevent a single point of weakness. The hypothesis of Reason was that most accidents could be traced to one of the four failure domains: Organizational influences, supervision, preconditions and specific acts.
In the model of the Swiss cheese, a series of barriers represented by slices of cheese are modeled as a defense of the organization against failure. The weaknesses of individual parts of the system are represented by the holes whose sizes and positions across the slices vary continually. Momentarily, holes in each slices align momentarily leading to production of failure by the system and permitting an accident opportunity trajectory, such that hazards pass through the holes in all the slices causing failure. In this context, failure means notifiable injuries, productivity loss due to illnesses or post-employment claims.

There are active failures and a latent condition that combines and causes poor health and productivity outcomes hence the human risk factors essentially follows the same trajectory. Unsafe acts that are linked directly to an accident is known as active failures. Factors that lie dormant for long before contributing to an accident are called latent failures.

The Defense in Depth theory in an occupational health setting can be explored using four critical health defense layers that can improve the ability to control health risks: health screening before employment, management of health, compensation of workers and exit medicals. All these four fundamental layers of defense have the ability to “catch, retard or retire risk” such than a trajectory error is not attained and there is significant reduction in the likelihood of failure more importantly.
For most organizations, the challenge of applying this theory is that there are separate departments managing each of the four critical layers and hence information remains in the “silo” remains unused in improving health holistically. There is therefore, little opportunity for the organization to prevent direct flow through to a health failure since there is unavailability of data and learning from each area.

2.2.2 Heinrich Law Theory

This theory was founded by Herbert William Heinrich, a pioneer of safety in the American industries from the 1930s. What came to be known as Heinrich’s law is an empirical finding from that book. He stated that for every accident causing a major injury, there are accidents causing minor injuries and 300 accidents causing no injuries.

Most accidents that occur at a workplace share common causes and preventing accidents that cause no injuries will in the long run prevent accidents that cause injuries. This conclusion was reached by Heinrich after he reviewed various reports on accidents that supervisors had completed, who blame the accidents on employees without carrying out the investigations in details into the initial causes. Heinrich’s figure that 88% of all accidents and injuries/illnesses that happen at workplaces are as a result of “man-failure” is probably the most cited conclusion, his book required employers to not merely focus on worker but control hazards. A safety procedure is only complete and satisfactory if it provides for correction or elimination of physical hazards despite the emphasis on personal faults and imperative need for trainings by statistics.
There was a lot of safety work done by Heinrich across numerous industries, with data that was published, giving guidelines of ways of scaling up from incidences and near misses to a good estimate of the probability of real accidents. He reviewed 75,000 injuries and 12,000 illnesses case from records of insurance and 63,000 from plant managers and also actuarial and engineering reports in his book. He came up with five factors that he believed must be present for an accident to occur, i) Ancestry and social environment ii) Fault of person, iii) acts that are unsafe, mechanical and physical hazard, iv) the accident and v) the injury. Heinrich states that 88% of the accidents are a result of unsafe acts of persons and 10% by machines that are unsafe and 2% being unavoidable accidents.

However, the theory has misled safety professions into believing that prevention of minor accidents will subsequently prevent occurrences of major incidents. In fact, according to James Howe (2007), some companies that have won awards for low injury rates have experienced some deadly incidents in the past years. The ratio of accident causation 88-10-2 has the most influence and causes the most harm to the profession of safety because basing the efforts of safety on premise when man failure leads to accidents and efforts of prevention are directed to the workers instead of the operating system where the work is done. Additionally, attribution of 88% of accidents to unsafe act fails to consider that accidents usually have various causes and factors that contribute.

The Heinrich law is found on probability and does not take into account the number of accidents inversely proportional to the severity of those accidents. It concludes that reduction of minor accidents will prevent major accidents and it is not necessarily the case.
2.3 Factors Affecting Employee Health and Safety

A number of factors have been found to affect employee health and safety. These include: working conditions, staff training, leadership style, teamwork, attitude and motivational levels of employees. These factors have been discussed as follows:

2.3.1 Working Conditions

There exist numerous hazards in the working environment to which a workplace has a crucial bearing on health. The hazards may relate to vast ranges of physical agents, chemical agents and biological agents. In some areas, guidance and approved Codes of Practice help in maintenance of good working practices although most aspects are regulated. The human factors in workplaces include environment of work, organizational and job factors and human and personal qualities which can have an effect on how individuals behave. Consequences of human failures can be rigorous despite the fact that everyone, however well trained or motivated, makes errors. Employers, bearing that in mind, should certain aspects of human failure, when trying to prevent accidents and ill health at work (Armstrong, 2005).

The Kenya Employment Act (2007) highlights some of the working conditions which a firm must practice. Health and safety and welfare of workers are put into consideration and regulations put in place on the working conditions of employees. Proper cleanliness, to properly dispose wastes and effluents, proper ventilation and temperature, proper management of dust to prevent inhalation and accumulation in any work room, avoiding overcrowding, lighting, drinking water areas as well as proper accommodation of latrines and urinals are well figured in the Act.
Different sections on compulsory working safety standards are provided for by the employment Act. They include fencing and covering of dangerous machinery parts in operation, provide suitable striking gears, casing of new machinery, self-acting machines, hoists and lifts, lifting chains and lifting tackle, revolving machinery, pressure plant, floors and means of access, excessive weights, protection of eyes, explosive or inflammable gas, precautions in case of fire and many others (Employment Act, 2007).

2.3.2 Training

It is through training where workers learn the principles of first aid, how use tools and machines wisely, precautious methods of fire prevention, proper use of hand tools and eye protection and other parts of the body. Training is aimed at creating change in the thoughts and actions of individuals and to allow them to carry out their work in more effective ways. It entails conveying of technical knowledge, manipulating skills, problem solving ability and positive attitudes. Training and education is required for the entire organization personnel for success of safety programs. It develops consciousness of safety among employees and results in safety in equipment (Smith, 2007).

Armstrong (2004) claims that training program should begin in the orientation. When there is transfer to a new place of work or alteration in methods of work, safety training should be done. Trainings on safety highlight rules and gives information of probable hazards and ways to avoid them. Additional trainings should be conducted to and special courses done to cover all aspects of health, safety or area in which safety problems have arose (Kleinler, 2004).
The benefits of training to the organization and individual employee include; improved production and quality of work, satisfaction by the job is increased, more employee flexibility, seeks to improve and develop the knowledge, skills and attitude of employees and the organization need not to fear consequences of new technology. Training also purposes to change the behavior of employees and accomplishment of fundamental objectives through positive change in knowledge, skills and attitude of employees, thus improving the quality and quantity of work with a safe working environment.

2.3.3 Leadership Style

Leadership involves influencing and supporting others to follow you and to do willingly the things that need to be done. The actions requested by a leader should be reasonable, relevant and ethical. They should represent appropriate action that will advance depths towards its goals of higher productivity, improved quality or service and conservation of resources with reduced accidents in the work place. (Newstrom & Luster, 2002)

Leadership is basically an influence process, free-reign style, directive style and participative style. In directive style the leader makes major decisions and is thoroughly involved in the operation of the unit. Activity is considered leader-centered because all work revolves around the leader who is task-oriented and shows limited concern for subordinates feeling. Communication is generally one way, from leader to the followers (Armstrong, 2007).

Participative style is concerned with obtaining group involvement. Most major decisions are made after discussions with group members with a two-way communication which is open. The leader strives to maintain a good rapport within the group. Free reign style
people are permitted to function essentially on their own. Once the goals are set, the leaders’ primary role is to support the workers to effectively accomplish the assigned task. Person’s interests are taken into consideration since subordinates make most of the decisions and communication is open. The emphasis is on encouraging individual employee health and safety by providing an unrestricted environment (Armstrong, 2007).

Every firm needs leaders at every level of production stage (Cole 2002). The type of leadership adopted in an organization will affect the health and safety of employees either positively or negatively. In order to manage accidents in the work place, participative leadership should be encouraged because both employees and management can discuss and together come up with health and safety policies.

2.3.4 Teamwork

As stated by Tuchman’s theory of group development, the development stages range from forming, storming, and norming, performing and adjourning. A task group that has matured to a performing stage is referred to as a team. Most groups at work never qualify as a real team because of power and authority conflicts, and interpersonal, unusable relationships. Smith’s clarification is that team essence is common commitment without which groups perform individually but with a team, they succeed and become a powerful unit of combined performance. Effective teams are enhanced by formation of teams and encouraging good team playing. To enhance health and safety, teamwork is used to empower employees facilitating full potential realization despite the more critical perspectives being taken lately. Members of the team will gain essential gains from autonomy, job satisfaction, identification with work and greater skills development thereby promoting the health and safety of team members. Higher employee health and
safety is expected due to reduced accidents and communication within teams (Taylor, 2005).

The key ingredient of teamwork is trust. No one can construct trust or authorize it in to being. Leaders can however invest deliberately in trust by giving people reasons to trust each other rather than watch their backs by failing to remunerate achievements based on behaviors of trust. They can portray trustworthiness in their activities, individually and on the company’s behalf. Some guidelines such as communication, support, respect, predictability and competence are important for building and maintain trust. There are different types of teams ranging from cross-functional, virtual team, self-managed and others. Cross functional teams are made up of technical specialists from different areas. Through this kind of teams, workers are able to acquire different skills and knowledge from different disciplines which will reduce the chances of accidents and injuries at the work place.

Luthans (2005) defines teams that are self-managed as employees responsible for management and employee health and safety of tasks that are technical resulting in delivery of either a product or a service to a customer, internal or external. Studies on the empowerment of self-managed teams found increase in job satisfaction, service to customers, and organizational team commitment.

2.3.5 Attitude

Attitude creates personal opinion development and prejudices and also positive contribution to the judgment exercise of an individual. Some attitudes held close are unlikely to be altered in the lifetime of an individual. Values are wider in concept than
attitudes hence attitudes are narrow and concentrate on certain component of the external world of an individual (Lussier, 2000). Attitude, like personality is a complex psychological process. The difference lies in that personality is a person as a whole while attitude makes up personality. Attitude employed by employees may play a number of roles in an organization; it helps employees to adjust to work environment which reduces cases of accidents and injuries, helps them to defend their self-image, and provides people with basis for expressing their values on health matters, while to the organization it helps in creating good public image.

A cause of workplace accident is carelessness. It starts with poor attitude about concerning work. Individuals with bad attitudes towards work are likely to cause or be involved in an accident because they are inattentive. They are distracted by the thoughts of the wrongs they have undergone at homes or workplaces. Ignoring safe work habits puts the worker and others at risk when working with or around machines and equipment that are dangerous. Negative attitudes make people not think about safety work practice while an individual with positive attitude is open to fresh opinions, pays detailed attention and has an open mind, and is always looking for ways to improve. With positive attitude towards safety, one can discover hazards that occur and react accordingly leading to effective employee health and safety (Dessler, 2007).

2.3.6 Motivation

A positive way of meeting regulations and protecting employees is by offering incentives, tied down with safety programs. Incentive is a show that you value worker’s safety and opt to recognize exceptional actions. The incentive can facilitate enforcement of regulations since they are a motivation to workers to be exceptional at ensuring they
are safe and healthy. Awarded workers can be models for outstanding behaviours at places of work and acknowledging their achievements is a positive reflection on the organization (Armstrong, 2004).

Engaging employees in improving the safety processes can be a great way of motivating workers and connecting them to links pertaining to safety function. When workers are connected with the jobs they are doing intellectually, emotionally, physically and creativity. This can be attained by allowing employees’ participation of personal protective equipment; be on problem solving committees; make suggestions pertaining to safety, make safety suggestions; and conduct assessments regarding safety (Cole, 2001).

2.4. Empirical Studies on Employee Health and Safety

Rose (2014) did a study on the Relationship between health and safety programmes and employee health and safety of manufacturing firms in Mombasa County of Kenya. The factors considered were health and safety measures, social welfare programmes, accident prevention programmes and occupational health programmes. The results showed that each of the four factors had a positive and significant correlation with employees’ performance. She then concluded that the implementation of these measures at work place have had a positive impact on employees performance.

Gaceri (2015) did a study on the factors affecting the health and safety execution health and safety in Kenyan supermarkets. The study found out that leadership influences the implementation of health and safety measures. The study also concluded that training influenced the execution health and safety measures. Participation of employees was
shown by the study to influence the execution of health and safety measures in supermarkets to a great extent.

Charles (2014) did as study on the relationship between employee attitude and employee health and safety, a study carried out in Kapa Oil Refineries Limited along Mombasa road. In the research findings, 92% of the total respondents indicated employee attitude was key factor to employee safety and healthy. Researcher concluded that employee attitude goes hand in hand with health and safety. Negative job attitude led to increased chances of accidents and injuries and vice versa.

Njeru (2014) did a study on the effect of stress on health and safety of employees in private sector organizations in Nakuru County of Kenya. In the findings, above 80% of the respondents were of the opinion that stress related jobs posed high risks of involvement in accidents that could cause injuries in the work place. It was also evident that stressed employees had a higher risk of accidents involvement as compared to stress free employees.

2.5 Gaps in the empirical studies on Employee Health and Safety

According to Rose (2014), implementation of health and safety measures at work place have a positive impact on employee’s performance. While this is true, the researcher did not show those factors that affect employee health and safety and this study therefore seeks to fill that gap. According to Gaceri (2015) the health and safety execution is in one way or the other influenced by leadership, training and employee participation. However, the researcher did not come out clearly on how these affect employee health and safety and this study seeks to fill that gap. Charles (2014) on the other hand found out that
employee attitude goes hand in hand with health and safety. However, he did not research on how attitude affects employee health and safety and this study seeks to fill on this gap by researching on how several factors attitude included affects employee health and safety. Njeru (2014) in his study found out that stress related jobs posed high risks of involvement in accidents that could cause injuries in the work place. This may be true, but, the researcher narrowed his research to only one factor and this study intends to research further by including other factors such as teamwork, leadership, training, motivation and working conditions.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The research methodology utilized in the study is presented in this chapter. It includes research design, target population, sampling design, collection of data methods and data analysis.

3.2 Research Design

Descriptive research design was used in collection the data from the respondents. A systematic empirical enquiry over which the researcher has no direct control of the independent variable as their manifestation has already occurred or cannot be manipulated inherently, is known as descriptive research (Mugenda & Mugenda, 1999). The researcher used this study design because the study is not incarcerated to the data collection or description but seeks to find the existence of certain relationship of variables under investigation hence bringing the need of descriptive research design.

3.3 Target Population

The study targeted all the employees of the Teachers Service Commission who are 2000 in total (Teachers Service Commission Journal, 2015). The place of study was at the Teachers Service Commission Headquarters in Nairobi’s upper hill area.

3.4 Sample Size and Sample Design

The researcher used stratified random sampling in the study. The required sample size was selected using the random sampling technique after the population is divided into unique groups (strata). The three strata used for the population was top level
management, middle level management and support staff. Sample size was 10% of the sample population.

**Table 3.1 Sample Design**

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Sample Size (10% of population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management</td>
<td>198</td>
<td>20</td>
</tr>
<tr>
<td>Middle Management</td>
<td>762</td>
<td>76</td>
</tr>
<tr>
<td>Support Staff</td>
<td>1040</td>
<td>104</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2000</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

*Source (HR Department, 2017)*

**3.5 Data Collection**

The researcher used primary data. To collect the data, structured and unstructured questionnaires was designed and administered to respondents. Questionnaires with predetermined questions was given to the respondents, they were delivered by hand and collected after a week. There were both open and closed ended questions. Section A of the questionnaire majorly dealt with general information as filled in by the interviewee. This was on education background, years he/she has worked for Teachers Service Commission and educational background among other general information. Section B looked at the factors affecting employees’ health and safety as perceived by the employees who are the interviewees in this study.
A questionnaire allows for effective collection of elaborate data on large samples within a short period of time and can be analyzed easily (Mugenda, 1999).

3.6 Validity and Reliability of Data Instrument

There was a pre-test on the research instrument at the Commission with five respondents to test the reliability and validity of other responses. Mugenda and Mugenda (2003) suggests that pre-testing allows for discovery of errors and also acts as a research team training tool before the commencement of the actual data collection. Pre-testing can be used in checking for participation, modification of the questions, examination of question continuity and flow, collecting early warning data on items, variability and fixing the length and timing of the instruments.

3.7 Data Analysis

All questions were checked for reliability and verification adequately after fieldwork before analysis. The editing, coding and tabulation was done. Analysis of the data was done using descriptive statistics such as frequencies, percentages, means, standard deviations, coefficient of variance as well as factor analysis. The data was presented in tabulated forms, graphs, cones and pie charts.
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter focuses on analysis, interpretation and presentation of the data collected in the study. The study aimed at determining the factors that affect health and safety of employees at Teachers Service Commission in Kenya. The study targeted 200 respondents who are employees of the Teachers Service Commission and work at the commission’s headquarters in Upper Hill Nairobi. This chapter contains the findings, data analysis through descriptive statistics, interpretations and presentation.

4.2. Response Rate

The questionnaires were issued to 200 employees of the Teachers Service Commission. Of the 200 questionnaires, 168 duly filled questionnaires were obtained representing 84%. According to Mugenda and Mugenda (1999) a sample size that is 50 percent of the population is good enough since it takes into account the maximum variability in a population. The response rate is illustrated in table 4.1 below.

Table 4.1 Response Rate

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Population</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Response Rate</td>
<td>168</td>
<td>84</td>
</tr>
</tbody>
</table>

Source: Research data (2017)
The study targeted 200 respondents. However, 168 duly filled questionnaires were obtained representing a response rate of 84%, a number large enough for its results to be drawn as inference for the entire population.

**4.3 Respondents Profile**

In order to come up with a comprehensive respondents profile the study inquired varied aspects from the respondents. These included: gender, length of service and highest level of education.

**4.3.1 Gender**

One of the key pieces of background information that the researcher sought to determine was the gender profile of the respondents. The results are presented in the figure below.

**Figure 4.1 Respondents’ gender profiles**

[![Gender Profile Chart](chart.png)](chart.png)

**Source:** Research data (2017)

The study tried as much as possible to achieve a gender balance of the respondents. This is clearly illustrated in the pie chart above. Nevertheless a majority of the respondents
were male contributing 57.7% of the respondents and their female counterpart comprising of 42.3% of the respondents.

4.3.2 Length of Service

In order to establish the length of service of the respondents, the researcher classified the length of service into four categories that is, below 1 year, 1-5 years, 6-10 years, and above 10 years. The findings are as shown below.

**Figure 4.2 Lengths of Service Percentages**

![Length of service percentages chart]

Source: Research data (2017)

A majority of the people working at the TSC have served for a period between 6 and 10 years. This is captured by the study. 40.5% of the respondents have served for 6-10 years, followed by those that have served 1-5 years at 27.4%. Those that have served at the TSC below 1 year are 19% and those that have served above 10 years are the least at 13.1% of the respondents.
4.3.3 Level of Education

To determine the highest level of education of the respondents the study divided the education category into 3 levels; secondary, college and the university levels. The findings are shown below.

**Figure 4.3 Levels of Education Percentages**

![Bar Chart](chart.png)

**Source:** Research data (2017)

A majority of the respondents, at 50%, have university education. 42.9% of the respondents have college education and 7.1% of the respondents have secondary education as their highest level of education.
4.4 Factors Affecting Employee Health and Safety

In order to determine the health and safety state for the respondents the researcher sought to find out whether individual respondents had ever taken ill at the work place, whether they related their sickness to the work they do and whether any measures were taken by their employer.

4.4.1 Ever Fallen Sick at the Work Place

Of the 168 questionnaires issued, 162 valid responses were received as to whether the individual respondents had ever fallen sick at the work place, representing 96.4%, while 6 were missing, representing 3.6%. The findings were as shown below.

Figure 4.4 Ever Fallen Sick at Work Percentages

Source: Research data (2017)

A majority of the respondents, 63.1%, had never fallen sick at the work place. 33.3% of the respondents however had ever fallen sick at the work place while 3.6% of the respondents did not give any response to this question.
4.4.2 Relation between Sickness and Nature of Work Done

The researcher also sought to find out whether the individual respondents who had fallen sick at the work place attributed the sickness to the work they do. The findings obtained are as shown below.

**Figure 4.5 Relation of Sickness to Work Percentages**

Source: Research data (2017)

From the study findings, a majority of the respondents at 59.4% did not relate their sickness at the work place to their work, while 40.6% attributed their sickness to their work.

4.4.3 Measures Taken by the Employer

Of those who related their sickness to the work they do the researcher sought to find out if any measures were taken by the employer. The findings are as shown below.
39.8% of the respondents that fell sick at the work place were taken to the hospital closely followed by 38.9% who were given first aid by the employer. 21.3% of the respondents however saw no action taken by the employer.

4.5 Analysis of Factors affecting Employee Health and Safety

The researcher also sought to find out the effect of certain aspects of working conditions, training, leadership style, teamwork, attitude, and motivation on the health and safety of employees.

4.5.1 Working Conditions

To establish the effect of working conditions on employee health and safety the study employed a likert scale to rate certain aspects of working conditions. The scale was divided into five as follows; 5- strongly agree, 4- agree, 3- neither agree/disagree, 2- disagree, and 1- strongly disagree. The table below shows the findings.
Table 4.2 Working Conditions

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working environment conducive for all workers</td>
<td>168</td>
<td>3.107</td>
<td>1.199</td>
</tr>
<tr>
<td>Hazardous machines and equipment are clearly marked</td>
<td>160</td>
<td>3.031</td>
<td>1.266</td>
</tr>
<tr>
<td>Employees are provided with protective clothing at workplace</td>
<td>168</td>
<td>2.970</td>
<td>1.080</td>
</tr>
<tr>
<td>Regular servicing of office machines and equipment</td>
<td>168</td>
<td>2.857</td>
<td>1.175</td>
</tr>
<tr>
<td>Adequate space for free movement at work place</td>
<td>168</td>
<td>2.792</td>
<td>1.392</td>
</tr>
<tr>
<td>Adequate lighting at the workplace</td>
<td>168</td>
<td>2.786</td>
<td>1.229</td>
</tr>
<tr>
<td>Defined system of reporting defective machines/equipment</td>
<td>168</td>
<td>2.649</td>
<td>1.179</td>
</tr>
</tbody>
</table>

**Source:** Research data (2017)

The respondents were asked to rate some aspects of working conditions at their workplace. The findings indicate that the responses differed on whether the working environment was conducive for all workers as indicated by the mean of 3.107 and a small standard deviation of 1.199 that indicates a state of indifference among the respondents. The respondents were not of a unanimous decision whether the hazardous machines and equipment were clearly marked as indicated by the mean of 3.031 and a small standard deviation 1.266.
The respondents were not conclusive whether employees are provided with protective clothing at workplace as indicated by the mean of 2.970 and a small standard deviation of 1.080 that indicates that the respondents have little variance on their response. The respondents did not answer satisfactorily whether regular servicing of office machines and equipment was undertaken as indicated by the mean of 2.857 and a small standard deviation 1.175. On adequate space for movement and adequate lighting, the response did not come out clearly as indicated by the means of 2.792 and 2.786 and small standard deviations of 1.392 and 1.229 respectively. The respondents were indifferent on whether there was a defined system of reporting defective machines/equipment as indicated by the mean of 2.649 and a small standard deviation of 1.179. The standard deviation of factors show that the opinion of the respondents were almost since they had small disparity.

4.5.2 Training

To establish the effect of training on employee health and safety the study employed a likert scale to rate certain aspects of training. The scale was divided into five as follows; 5- strongly agree, 4- agree, 3- neither agree/disagree, 2- disagree, and 1- strongly disagree. The table below shows the findings.
Table 4.3 Training

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training of staff necessary to reduce risks</td>
<td>168</td>
<td>3.155</td>
<td>1.19</td>
</tr>
<tr>
<td>Regular training audit carried at the commission</td>
<td>168</td>
<td>3.083</td>
<td>0.97</td>
</tr>
<tr>
<td>Large number of staffs aware of safety and health signs</td>
<td>168</td>
<td>3.024</td>
<td>1.28</td>
</tr>
<tr>
<td>Health and safety signs are placed at visible places at the commission</td>
<td>168</td>
<td>3.006</td>
<td>1.19</td>
</tr>
<tr>
<td>Employees supplied with health and safety manuals on 1st</td>
<td>168</td>
<td>2.976</td>
<td>1.01</td>
</tr>
<tr>
<td>appointment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commission hires professionals to train on health and safety</td>
<td>168</td>
<td>2.905</td>
<td>1.02</td>
</tr>
<tr>
<td>Workplace accidents reduced as a result of training</td>
<td>168</td>
<td>2.786</td>
<td>1.27</td>
</tr>
</tbody>
</table>

**Source:** Research data (2017)

The findings indicate that the respondents were indifferent on whether training of staff was necessary to reduce risks as indicated by the mean of 3.155 and a small standard deviation of 1.189. The respondents did not answer well the question on whether regular training and audit was carried out at the commission as indicated by the mean of 3.083 and a small standard deviation 0.969 this clearly gave a disparity in opinion.

On whether staff is aware of safety and health signs at the commission, the respondents were indifferent as indicated by the mean of 3.024 and a small standard deviation 1.276. This was replicated on the question on whether health and safety signs are placed visibly at the commission as indicated by the mean of 3.006 and a small standard deviation 1.186. The mean of the above two factors show that the respondents were of an indifferent opinion.
Whether employees were supplied with health and safety manuals on 1st appointment, the response gave a mean of 2.976 and a small standard deviation 1.015 that indicates closeness of opinion amongst the respondents. This response did not give a clear answer though. The respondents were indifferent on whether the Comission hires professionals to train on health and safety as indicated by the mean of 2.905 and a small standard deviation 1.022. Whether workplace accidents reduced as a result of training wasn’t conclusive as indicated by the mean of 2.786 and a small standard deviation 1.272.

4. 5.3 Leadership Style

To establish the effect of leadership style on employee health and safety the study employed a likert scale to rate certain aspects of leadership style. The scale was divided into five as follows; 5- strongly agree, 4- agree, 3- neither agree/disagree, 2- disagree, and 1- strongly disagree. The table below shows the findings.
Table 4.4 Leadership Style

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity in gender roles may positively influence health and safety in</td>
<td>168</td>
<td>4.452</td>
<td>0.53</td>
</tr>
<tr>
<td>an organization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good leadership style is a recipe of health and safety environment</td>
<td>168</td>
<td>3.131</td>
<td>1.4</td>
</tr>
<tr>
<td>Combination of leadership may positively impact on safety and health</td>
<td>168</td>
<td>3.071</td>
<td>1.14</td>
</tr>
<tr>
<td>Leadership should involve employees in safety and health policies making</td>
<td>168</td>
<td>3.054</td>
<td>1.2</td>
</tr>
<tr>
<td>Leadership style directly influence safety and health of employees</td>
<td>168</td>
<td>2.798</td>
<td>1.34</td>
</tr>
</tbody>
</table>

**Source:** Research data (2017)

The finding indicate that the respondents agreed that diversity in gender roles may positively influence health and safety in an organization as indicated by the mean of 4.452 and a small standard deviation 0.525. The respondents were indifferent on whether good leadership style is a recipe of health and safety environment as indicated by the mean of 3.131 and a small standard deviation of 1.399. The respondents were indifferent whether combination of leadership positively impact on safety and health as indicated by the mean of 3.071 and a small standard deviation 1.399. All the standard deviation were less than 1.5 indicating the opinion among the respondents was close to the mean.
On whether leadership should involve employees in safety and health policies making there was a slight difference in opinion as indicated by the mean of 3.054 and a small standard deviation 1.201. The respondents neither agreed nor disagreed on whether leadership style directly influences safety and health of employees as indicated by the mean of 2.798 and a small standard deviation 1.338 that indicates indifference of opinion among the respondents.

4. 5.4 Teamwork

To establish the effect of teamwork on employee health and safety the study employed a likert scale to rate certain aspects of teamwork. The scale was divided into five as follows; 5- strongly agree, 4- agree, 3- neither agree/disagree, 2- disagree, and 1- strongly disagree. The findings are as shown below.

Table 4.5 Teamwork

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork a good measure for health and safety practices</td>
<td>168</td>
<td>3.393</td>
<td>1.08</td>
</tr>
<tr>
<td>Teamwork reducing staff conflict</td>
<td>168</td>
<td>3.304</td>
<td>1.07</td>
</tr>
<tr>
<td>Employees envisaged teamwork as work paradigm</td>
<td>168</td>
<td>2.905</td>
<td>1.26</td>
</tr>
<tr>
<td>Welfare strong as a result of teamwork</td>
<td>168</td>
<td>2.869</td>
<td>1.17</td>
</tr>
<tr>
<td>Teamwork enhances cordial relationship</td>
<td>168</td>
<td>2.863</td>
<td>1.18</td>
</tr>
<tr>
<td>Team work greatly reduced work related illness</td>
<td>168</td>
<td>2.833</td>
<td>1.27</td>
</tr>
</tbody>
</table>

Source: Research data (2017)
The findings indicate that the respondents were indifferent whether teamwork is a good measure for health and safety practices as indicated by the mean of 3.393 and small standard deviations 1.084.

The respondents were undecided on whether employees envisaged teamwork as work paradigm as indicated by the mean of 2.905 and a small standard deviation 1.258. The strength of welfare as a result of teamwork was discussed and respondents gave views as indicated by the mean of 2.869 and a small standard deviation 1.166 the views were indifferent. On whether teamwork enhances cordial relationship, the respondents gave did not have a conclusive response as indicated by the mean of 2.863 and a small standard deviation 1.183. The respondents did not have a conclusive response on whether teamwork greatly reduced work related illness as indicated by the mean of 2.833 and a small standard deviation 1.269.

4.5.5 Attitude

To establish the effect of attitude on employee health and safety, the study employed a likert scale to rate certain aspects of attitude. The scale was divided into five as follows; 5- strongly agree, 4- agree, 3- neither agree/disagree, 2- disagree, and 1- strongly disagree. The findings are as shown below.
Table 4.6 Attitude

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees with positive attitude on health and safety rarely engage on unsafe behaviors</td>
<td>168</td>
<td>4.232</td>
<td>0.85</td>
</tr>
<tr>
<td>Work attitude has direct effect on employee safety</td>
<td>168</td>
<td>3.458</td>
<td>0.95</td>
</tr>
<tr>
<td>Employees to strive to enhance positive attitudes</td>
<td>168</td>
<td>3.048</td>
<td>1.09</td>
</tr>
<tr>
<td>Safety attitudes predict safe and unsafe behavior in case of accidents</td>
<td>168</td>
<td>2.994</td>
<td>1.1</td>
</tr>
<tr>
<td>Employees need regular monitoring of attitude</td>
<td>168</td>
<td>2.958</td>
<td>1.19</td>
</tr>
</tbody>
</table>

**Source:** Research data (2017)

The findings indicate that the respondents agreed that employees with positive attitude on health and safety rarely engage on unsafe behaviors as indicated by the mean of 4.232 and a small standard deviation 0.847. The respondents were indifferent whether work attitude has direct effect on employee safety as indicated by the mean of 3.458 and a small standard deviation 0.947. The respondents were indifferent whether employees strive to enhance positive attitudes as indicated by the mean of 3.048 and a small standard deviation 1.088 that indicates closeness of opinion among the respondents.

The respondents were indifferent whether safety attitudes predict safe and unsafe behavior in case of accidents as indicated by the mean of 2.994 and a small standard deviation 1.103 that indicates a similarity of opinion among the respondents. The respondents were indifferent whether employees need regular monitoring of attitude as indicated by the mean of 2.958 and a small standard deviation 1.186. That indicates that the respondents had almost similar opinion on regular monitoring of attitude.
4.5.6 Motivation

To establish the effect of motivation on employee health and safety, the study employed a likert scale to rate certain aspects of motivation. The scale was divided into five as follows; 5- strongly agree, 4- agree, 3- neither agree/disagree, 2- disagree, and 1- strongly disagree. The findings are as shown below.

Table 4.7 Motivation

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivating employees is a therapy to safety and health issues in an organization</td>
<td>168</td>
<td>3.274</td>
<td>1.05</td>
</tr>
<tr>
<td>Through motivation employees are aware of health and safety regulations</td>
<td>168</td>
<td>3.238</td>
<td>0.92</td>
</tr>
<tr>
<td>Motivation and health and safety of employees go hand in hand</td>
<td>168</td>
<td>3.226</td>
<td>1.21</td>
</tr>
<tr>
<td>Healthy employees are more likely to be motivated and engage in the job therefore take less time</td>
<td>168</td>
<td>3.018</td>
<td>1.15</td>
</tr>
<tr>
<td>Motivated workers have less incidences of health and safety</td>
<td>168</td>
<td>2.958</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Source: Research data (2017)

The findings indicate that the respondents were indifferent whether motivating employees is a therapy to safety and health issues in an organization as indicated by the mean of 3.274 and a small standard deviation 1.054. The respondents were indifferent whether through motivation employees are aware of health and safety regulations as indicated by the mean of 3.238 and a small standard deviation 0.917.
The respondents were indifferent whether Motivation and health and safety of employees go hand in hand as indicated by the mean of 3.226 and a small standard deviation of 1.207. The respondents didn’t have a response on whether Healthy employees are more likely to be motivated and engage in the job therefore take less time as indicated by the mean of 3.018 and a small standard deviation 1.145 that indicates closeness of the respondent opinions. The respondents neither agreed nor disagreed on whether workers have fewer incidences of health and safety as indicated by the mean of 2.958 and a small standard deviation 1.175.

4.5.7 Factor Analysis

Factor analysis was undertaken to identify the variables that affected employee health and safety the most. This was undertaken establishing the average mean on the responses on each variable.

<table>
<thead>
<tr>
<th>Factor Analysis</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>3.33</td>
<td>1.04</td>
</tr>
<tr>
<td>Leadership Style</td>
<td>3.30</td>
<td>1.12</td>
</tr>
<tr>
<td>Motivation</td>
<td>3.14</td>
<td>1.10</td>
</tr>
<tr>
<td>Teamwork</td>
<td>3.03</td>
<td>1.17</td>
</tr>
<tr>
<td>Training</td>
<td>2.99</td>
<td>1.13</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>2.88</td>
<td>1.22</td>
</tr>
</tbody>
</table>

Source: Research data (2017)
The findings indicate that employee attitude was the most significant factor that affects employee health and safety to a moderate extent as indicated by the average mean of 3.33. This was followed by leadership style at the mean of 3.3 while the third factor was motivation at the mean of 3.14. The fourth factor was teamwork at the mean of 3.03. The fifth being training at the mean of 2.99 and the sixth was working conditions at the mean of 2.88. This indicates that the variables were of relevance to employee health and safety in the order of the objective with the highest mean to the one least mean.

4.6 Discussion of the findings

The researcher also sought to find out the effect of working conditions, training, leadership style, teamwork, attitude, and motivation on the health and safety of employees. The findings indicate that there was diversity in gender roles and existence of good leadership style which is a recipe of health and safety environment safety in an organization. This is in agreement with the findings of Gaceri (2015) which found out that leadership influences the implementation of health and safety measures. The study findings also reveal that training of staff reduced risks and influenced the execution of of healthy and safety rules. These findings are in agreement with the findings of Gaceri (2015). She concluded that training influenced the execution health and safety measures. Participation of employees was shown by the study to influence the execution of health and safety measures in supermarkets to a great extent. Armstrong (2004) also state that trainings on safety highlight rules and gives information of probable hazards and ways to avoid them. Additional trainings should be conducted to and special courses done to cover all aspects of health, safety or area in which safety problems have arose.
Their findings indicate that most of the companies employed health and safety practice just as regulatory requirement and to cope with the competitive environment with little knowledge on the impact of employee perceptive on the effectiveness of health and safety practices. These findings are in agreement with the The Kenya Employment Act (2007) which highlights some of the working conditions which a firm must practice. Health and safety and welfare of workers are put into consideration and regulations put in place on the working conditions of employees. Proper cleanliness, to properly dispose wastes and effluents, proper ventilation and temperature, proper management of dust to prevent inhalation and accumulation in any work room, avoiding overcrowding, lighting, drinking water areas as well as proper accommodation of latrines and urinals are well figured in the Act (Employment Act, 2007).
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives a summary of the findings of the study, conclusions and recommendations. It also outlines the limitations of the study and suggestions for further research. The findings are summarized in line with the objective of the research which was to determine the factors that affect health and safety of employees at the Teachers Service Commission in Kenya. The summary is given based on the aspects covered in the questionnaire which were; respondents’ profile, and the factors that affect employee health and safety namely; working conditions, training, leadership style, teamwork, attitude, and motivation.

5.2 Summary of Findings

The objective of this study was to determine the factors that affect health and safety of employees at the Teachers Service Commission in Kenya. Data was collected using questionnaires. The study targeted a study population of 200 respondents but 168 filled questionnaires were obtained, representing a response rate of 84 percent.

From the findings on respondents’ profile, a majority of the respondents were male contributing 57.7% of the respondents and their female counter parts comprising of 42.3% of the respondents. Also, majority of the people working at the TSC have served for a period between 6 and 10 years. This is captured by the study. 40.5% of the respondents have served for 6-10 years, followed by those that have served 1-5 years at 27.4%. Those that have served at the TSC below 1 year are 19% and those that have served above 10 years are the least at 13.1% of the respondents. On highest level of education, 50% have
university education. 42.9% of the respondents have college education and 7.1% of the respondents have secondary education as their highest level of education.

A majority of the respondents, 63.1%, had never fallen sick at the work place. 33.3% of the respondents however had ever fallen sick at the work place while 3.6% of the respondents did not give any response to this question. From the study findings, a majority of the respondents at 59.4% did not relate their sickness at the work place to their work, while 40.6% attributed their sickness to their work. 39.8% of the respondents that fell sick at the work place were taken to the hospital closely followed by 38.9% who were given first aid by the employer. 21.3% of the respondents however saw no action taken by the employer.

The researcher also sought to find out the effect of working conditions, training, leadership style, teamwork, attitude, and motivation on the health and safety of employees. On the effect of working conditions on the health and safety of employees the finding indicate that the respondents were indifferent whether the working environment was conducive for all workers or whether hazardous machines and equipment were clearly marked. The respondents were indifferent whether employees are provided with protective clothing at workplace or whether regular servicing of office machines and equipment was undertaken. The respondents were indifferent whether there was adequate space for movement and adequate lighting or whether there was a defined system of reporting defective machines.
The study findings on effect of training on the health and safety of employees the findings indicate that the respondents were indifferent whether training of staff was necessary to reduce risks or whether regular training and audit was carried out at the commission. The respondents were indifferent whether large number of staffs is aware of safety and health signs or whether health and safety signs are placed visibly at the commission. The respondents were indifferent whether employees were supplied with health and safety manuals on 1st appointment or whether the commission hires professionals to train on health and safety or whether workplace accidents reduced as a result of training.

On the effect of leadership style on employee health and safety; the finding indicate that the respondents agreed that diversity in gender roles may positively influence health and safety in an organization and were indifferent whether good leadership style is a recipe of health and safety environment . The respondents were indifferent on whether combination of leadership positively impact on safety and health or whether leadership should involve employees in safety and health policies making or whether leadership style directly influences safety and health of employees.

On the effect of teamwork on employee health and safety the study employed the findings indicate that the respondents were neither for the statement; teamwork is a good measure for health and safety practices nor employees envisaged teamwork as work paradigm whether welfare was strong as a result of teamwork or whether teamwork enhances cordial relationship or whether team work greatly reduced work related illness the respondents didn’t give a satisfactory response.
The study revealed that the respondents agreed that employees with positive attitude on health and safety rarely engage on unsafe behaviors and were indifferent whether work attitude has direct effect on employee safety. The respondents were indifferent whether employees strive to enhance positive attitudes or whether safety attitudes predict safe and unsafe behavior in case of accidents or whether employees need regular monitoring of attitude.

On the effect of motivation on employee health and safety, the study employed the findings that indicate that the respondents were indifferent whether motivating employees is a therapy to safety and health issues in an organization or whether through motivation employees are aware of health and safety regulations. The respondents were indifferent whether motivation and health and safety of employees go hand in hand or whether healthy employees are more likely to be motivated and engage in the job therefore take less time or whether workers have fewer incidences of health and safety.

The findings on factor analysis indicate that employee attitude was the most significant factor that affects employee health and safety to a moderate extent, followed by leadership style while the third factor was motivation. The fourth factor was teamwork with the fifth factor being training and the sixth was working conditions. This indicates that the variables were of relevance to employee health and safety in the order of the objective with the highest mean to the one least mean.
5.3 Conclusion

The following conclusions were made based on the summary of the findings. From the findings on most elements indicating availability of proper working conditions, training, leadership style, teamwork, attitude, and motivation, respondents did not agree or disagree showing limited understating and appreciation of the concepts of health and safety. The study therefore demonstrates that there is limited understanding of the importance of proper working condition, training on health and safety, an inclusive leadership style, teamwork, positive attitude towards health and safety and motivated employees in reducing ill health and accidents at the work place.

Despite the ambiguity from the research findings the study using the findings of the factor analysis concludes that the most relevant factor that affects employee health and safety is employee attitude followed by leadership, motivation, teamwork, being training and last being working conditions in that order. This indicates that the variables were of relevance to employee health and safety in the order of the objective with the highest mean to the one least mean.

5.4 Recommendations

The following recommendations were made based on the summary and conclusions of the study: The study recommends that in order to ensure employee health and safety, employers should improve working conditions, train the employees on health and safety, adopt inclusive leadership styles, and ensure motivated employees with positive attitudes. The study also recommends the formulation of policies that ensure employers provide safe work environments for employees.
The study recommends that organization should undertake to build the capacity of workers to understand the importance of health and safety. Health and safety and welfare of workers should be put into consideration and regulations put in place on the working conditions of employees. Proper cleanliness, to properly dispose wastes and effluents, proper ventilation and temperature, proper management of dust to prevent inhalation and accumulation in any work room, avoiding overcrowding, lighting, drinking water areas as well as proper accommodation.

Compulsory working safety standards should be provided. They include fencing and covering of dangerous machinery parts in operation, provide suitable striking gears, casing of new machinery, self-acting machines, hoists and lifts, lifting chains and lifting tackles, revolving machinery, pressure plant, floors and means of access, excessive weights, protection of eyes, explosive or inflammable gas, precautions in case of fire and many others. Organizations should ensure that the training provided is effective especially in regard to the principles of first aid, use of tools and machines and fire prevention. Training should be able to provide change in the thoughts and actions of individuals and to ensure effectiveness of employees by conveying of technical knowledge, manipulating skills, problem solving ability and positive attitudes.

Leadership Style in organizations should be effective in influencing and supporting others to follow them and to do willingly the things that need to be done. The actions requested by a leader should be reasonable, relevant and ethical. They should represent appropriate action that will advance depths towards its goals of higher productivity, improved quality or service and conservation of resources with reduced accidents in the work place. Leadership should be effective in with obtaining group involvement with a
two-way communication which is open and which maintain a good rapport within the group such that people are permitted to function essentially on their own.

Organizations should strive to enhance the effectiveness of teamwork by eliminating power and authority conflicts, interpersonal and unusable relationships. To enhance health and safety, teamwork should empower employees by facilitating full potential realization despite the more critical perspectives being taken lately. Members of the team will gain essential gains from autonomy, job satisfaction, identification with work and greater skills development thereby promoting the health and safety of team members. Organizations should ensure that attitudes help employees to adjust to work environment which reduces cases of accidents and injuries, helps them to defend their self-image, and provides people with basis for expressing their values on health matters.

5.5 Limitations of the Study

The study’s limitations included the reluctance of respondents to offer information for fear that the information would be used against them. The researcher handled the problem by carrying an introductory letter from the university and assuring the respondents of treating any obtained information confidentially and purely for academic purposes.

The study was also limited by the time limit given for the research and the limited scope. This limitation was overcome by starting the research early in the period set aside. This ensured the maximum amount of time possible was spent in the research and last minute rush was avoided.
5.6 Suggestions for Further Research

The limitations of this study provide areas for further research, which include a similar study whose objective would be to reaffirm these findings. Further research could also be done to determine other factors that affect employee health and safety. Other than those covered in this study, a similar study could be conducted in a different sector to compare variation in responses.
REFERENCES

Alan S. & Gary J. (2011). Perception, attribution, and judgment of other organizational
behaviour: Understanding and Managing Life at Work Vol. 7


London UK

USA.


University Press.


APPENDIX I: QUESTIONNAIRE

Please answer the questions by using a tick [✓] where appropriate or by writing on the space provided.

SECTION A: GENERAL INFORMATION

1. Gender (a) Male [ ] (b) Female [ ]

2. Length of Service

Below 1 year [ ] 1-5 years [ ]

6-10 years [ ] above 15 years [ ]

3. Highest Level of Education

Primary [ ] Secondary [ ]

College [ ] University [ ]

SECTION B: FACTORS AFFECTING EMPLOYEE HEALTH AND SAFETY

i) Have you ever fallen ill at your work place?

Yes [ ] No [ ]

ii) If yes do you relate the illness to the work you do

Yes [ ] No [ ]

iii) What measures were taken by the employer?

First aid given [ ] Taken to hospital [ ] No action taken [ ]
Please tick as appropriate using the following ratings

5- Strongly agree. 4 – Agree 3 –Neither Agree/Disagree 2 – Disagree 1 – Strongly Disagree

<table>
<thead>
<tr>
<th>WORKING CONDITIONS</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employees are provided with protective clothing at the workplace</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. There is regular servicing of office machines and equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Working environment is conducive for all the workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. There is adequate lighting at the work areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. There is adequate space for free movement at the work place</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. There is a defined system of reporting defective machines/equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. All hazardous machines and equipment are clearly marked</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAINING</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work place accidents have greatly reduced as a result of training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. A large number of staff are aware of health and safety signs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. All employees are supplied with health and safety manuals on 1st appointment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Regular training audit is carried out at the Commission

5. Training of staff and protective equipment is necessary to reduce the risk of exposure and occupational hazards

6. Health and safety signs at the commission are placed at places that are easily visible and accessible

7. The commission hires professional health and safety experts to carry out health and safety training of staff

<table>
<thead>
<tr>
<th>LEADERSHIP STYLE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leadership style has a direct influence on the health and safety of employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. A combination of leadership styles may positively impact on health and safety of employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Diversity in gender roles in leadership may positively influence health and safety of officers in an organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. A good leadership style is a recipe for a healthy and safe work environment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Leadership style should be one which involve employees whenever health and safety policies are being drafted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. A leadership style must be agreed on by all if health and safety practices is to be adhered to effectively</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEAMWORK</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1. Teamwork has greatly reduced work related illnesses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Employees have envisaged teamwork as a preferred work paradigm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Teamwork has enhanced cordial relations in the workplace</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Welfare activities have been strong as a result of teamwork</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Teamwork has greatly reduced staff conflicts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Teamwork is a good measure of an organizations adherence to health and safety practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ATTITUDE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work attitude has direct effect on employee safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Employers need to regularly monitor employee attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Employers should strive to enhance positive attitudes as much as possible.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Safety attitudes predict the safe ad unsafe behavior which leads to accidents.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Employees with a positive attitude on health and safety less frequently engage themselves in unsafe behaviors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**MOTIVATION**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Well motivated workers have less incidences of health and safety</td>
</tr>
<tr>
<td>2</td>
<td>Motivating employees may serve as a therapy in dealing with health and safety issues in an organization</td>
</tr>
<tr>
<td>3</td>
<td>Through motivation employees are aware of health and safety rules/regulations</td>
</tr>
<tr>
<td>4</td>
<td>Employees who are healthy and well are more likely to be motivated and engage in the job and therefore take less time off work.</td>
</tr>
<tr>
<td>5</td>
<td>Motivation and health and safety of employees go hand in hand</td>
</tr>
</tbody>
</table>

*Thank you for your participation*

*God bless you*