

**AN ASSESSMENT OF IMPLEMENTATION OF SAFETY STANDARD
MEASURES IN PUBLIC PRIMARY SCHOOLS IN BUNGOMA COUNTY
KENYA**

BY

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**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF
EDUCATION IN EARLY CHILDHOOD IN THE DEPARTMENT OF
CURRICULUM INSTRUCTION AND EDUCATIONAL MEDIA
SCHOOL OF EDUCATION
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DECLARATION

Declaration by the candidate

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ABSTRACT

Provision of safety and security of students in learning institutions is a big challenge globally. In Kenya despite the Ministry of Education (MOE) introducing a safety standard manual in 2008, many institutions are still unsafe and insecure. The purpose of this study was to assess the implementation of the safety standard measures in public primary schools in Bungoma County. The objectives of the research were: to determine the awareness on safety measures put in place, to find out the major causes of disasters, to assess the extent of safety policy implementation and to examine the major challenges faced in the implementation of safety measures in public primary schools in Bungoma County. The study was based on Maslow's hierarchy of needs theory. The study employed concurrent mixed methods approach and survey research design. Target population comprised of teachers from 145 public primary schools in Bungoma South sub-county. Sample size comprised of 1 CSO, 23 head teachers and 23 teachers in-charge of school safety from 23 public primary schools. Stratified sampling was used to select 3 zones, simple random sampling was used to sample 23 schools, purposive sampling was used to sample 1 CSO, 23 head teachers and 23 teachers. Data was collected using questionnaires, interview schedules and observation schedules. Validity was determined using expert judgment and piloting. Reliability of the questionnaire was ascertained through test re-test which yielded a co-efficient of 0.8. Quantitative data was analyzed through descriptive statistics, percentages and frequencies and was presented in tables while qualitative data was analyzed through narrative analysis technique and presented through narration and direct quotes. The study found out that safety manuals were unavailable in most schools, there was lack of awareness of safety standards, most schools had abandoned buildings which posed a security threat, most schools experienced disasters due to drug and substance abuse, there were no emergency exits and the doorways were narrow in most schools, mushrooming of schools made it difficult for MOE to perform its functions and there was lack of supervision of the implementation of safety measures. The study concluded that implementation of safety standards in public primary schools was not satisfactory. The study recommends that MOE should mount in-service courses for teachers to create awareness on safety, MOE to support institutions financially by putting up facilities like rams and lightning arrestors to enhance safety and guidance and counselling to be emphasized to curb the major causes of disasters.

DEDICATION

I dedicate this research proposal to my husband Job and my children for the great inspiration and encouragement during the study.

ACKNOWLEDGEMENT

I would like to acknowledge the contributions of different people who in their official and private capacities assisted me to make this study a success. First am grateful to my supervisors, Professor Mukwa and Dr. Odongo for their tireless guidance and advice in writing this research thesis. I would also like to thank Professor Too for introducing me to research methods class and to my classmates for their constructive contributions during the group discussions. Further, I extend my thanks to my employer for allowing me pursue this challenging but quite fulfilling course. Not forgetting my family members for their support and encouragement to pursue this course. Last but not least, to my God for giving me good health and strength to overcome obstacles I faced in pursuing the course.

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LIST OF ABBREVIATIONS

B5	-	Below five years
CBO	-	Community Based Organization
CSO	-	Curriculum Support Officer
ECD	-	Early Childhood Development
HACCP	-	Hazard Analysis and Critical Control Points
KPLC	-	Kenya Power and Lighting Company
MOE	-	Ministry of Education
NGO	-	Non-governmental Organization
QASO	-	Quality Assurance Standards Officer
ROK	-	Republic of Kenya
SSC	-	Safe School Contracts
SAPS	-	Solid Partnership with the South African Police Services
UNDP	-	United Nations Development Project
UPE	-	Universal Primary Education
UPHOLD	-	Uganda program for Human and Holistic Development
USAID	-	United States Agency for International Development
USDA	-	United States Department of Agriculture

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

This chapter contains the background of the study, statement of the problem, objectives of the study, research questions, and significance of the study, justification of the study, assumptions, scope and limitations of the study, theoretical framework, conceptual framework and operational definition of key terms.

1.2 Background of the study

Safety is an important aspect of quality learning that has remained inadequately addressed up to date. Malinga et al (2005) defines a safe school as a school with good physical health, safe, friendly learning environment without violence and hostility, drug-free and well equipped with facilities that offer a wide range of curricular and co-curricular activities. Very many accidents and disasters in the education sector have demonstrated the common sense of disaster planning.

According to World Health Organization (2002), poor children commonly live in unsafe environments and therefore, exposed to risks that increase injuries. For example, school construction and furnishing material can lead to unintentional injuries. Poisoning may result from exposure to chemicals unsafely used or stored. Many deaths and injuries could be prevented if playgrounds and play equipment were designed with safety in mind. When safety is not a priority, playground liability is surely to be an issue. Tips and resources were put in place for parents and teachers to keep American schools safe. Others can be just as susceptible to crime and violence as other environments. According to Bureau of Justice Statistics, 17 children and

teens were killed at school and five children killed themselves in the year ending June 30, 2002.

The departments of basic education in South Africa takes school safety very seriously and as an apex priority the department has put in place various policies and measures to ensure the safety of learners, educators and relevant stakeholders in schools. Interventions have focused on addressing elements of physical infrastructure related to proper fencing alarm systems and burglar proofing, resilience-building programs for young people and the strengthening of partnerships with relevant stakeholders (George, 2001). The department has a solid partnership with the South African police services (SAPS) Aimed at linking schools with local police stations and the establishment of functional schools safety committees schools.

Schools are critical in instilling the emphasis on codes of conduct for learners. Therefore, all public schools are directly responsible for providing an environment conducive to the delivery of quality teaching and learning by among other things, promoting the rights and safety of all learners, teachers and parents. A national school safety frame work has been developed to serve a management tool for provincial and district officials responsible for provincial and district officials responsible for school safety, principals, senior management team members, teachers and learners to identify and manage risk and threats of violence in and around schools (Nyakundi, 2012).

The framework is critical in empowering all responsible officials understanding their responsibilities regarding school. In terms of regulations for safety measures at all public schools, the ministry has declared all public schools as drug free and dangerous weapon free zones. Sexual harassment and violence affect learning environment negatively. The department has released a handbook for learners on how to prevent

sexual abuse in public schools, titled “*speak out- youth report sexual abuse*”. Its purpose is to equip learners with knowledge and understanding of sexual aggravation and sexual violence its implications, ways to protect themselves from perpetrators, and where to report (Nyakundi, 2012).

The department will continue in earnest to protect the rights of all children in schools. The success of these efforts rely largely on collective efforts of parents and communities to work together with schools to ensure that all children are safe and realize their full potential in school. Recognizing that the physical environment in which learning takes place has a large impact on the outcomes of education, the ministry of education in Rwanda developed practical guidance on how to achieve the standards set in the “Rwanda Education Quality standards 2008” (Adams, Bartram, Chartier & Sims, 2009).

The document “*Child friendly school’s infrastructure standards and guidelines*” seeks to harmonize the countries understanding of what is an acceptable school infrastructure,(Hirano, 2009). The standards and guidelines provides a comprehensive framework that is to be referred by all who are involved in the planning, monitory designing, procuring, constructing and rehabilitating school infrastructure. Safety as an important aspect of quality learning has been inadequately addressed under Universal Primary education (UPE) in Uganda. A study found that 84% and 76% of pupils reported to have observed or experienced violence against girls and boys respectively. Teachers were identified as perpetrators by 17 % (Action Aid international, 2004). Abuse causes, health risks, school dropout and failure to achieve full potential among children. Since 2005 JSI/UPHOLD a USAID – funded project

that works in 34 districts in Uganda has supported the Ministry of Education and sports to introduce safe school contracts (SSCs) to more than 200 primary schools.

The Government of Kenya has committed itself to improving the standard of Education at all levels as indicated in the ministry of education – safety standards manual (Republic of Kenya, 2008). The directorate of quality Assurance and standards of the ministry of education (MOE) are supposed to inspect a school with regard to compliance with safety standards and guidelines. The safety standards manual provides standards and guidelines for use in all Kenyan schools. Chapter six of the manual incorporates key components such as: Safety on school grounds, safety in physical infrastructure, health and hygiene safety on school environment, food safety, safety against drug and substance abuse, safe teaching and learning environment social – cultural Environment of the school, safety of children with special needs/disabilities, safety Against child abuse, transportation safety, disaster risk reduction and school community relations (Omolo & Simatwa, 2010). Each of the thirteen areas of school safety covered in the manual begins with a statement followed by the necessary guidelines which when implemented should facilitate the realization of the safety standards. The children’s Act (2001) recognizes the right of the child to protection from work that is likely to be hazardous to the child’s holistic development.

The Kenyan constitution requires that the child is protected from any sort of abuse, harassment, torture and the like. Experiencing, issues of safety concerns school fires, cases of being struck by lightning is a clear indicator that learners are at risk. Whenever these incidents occur the government has come up with commissions of inquiry but it only takes a few weeks to mourn and forget all about it till the next accident (Musimba, 2010). Schools ought to be safe zones for learners. They should

never fear for their safety when they enter a classroom (Bush, 2007). Implementation of safety standards and guidelines in both primary and secondary schools has been a challenge to most schools.

The Asumbi girl's primary fire tragedy that claimed 8 lives is an indicator that there are no fire extinguishers in primary schools. The road accident that claimed 10 pupils of Marakaru primary school in Bungoma of which some was as a result of excessive bleeding shows lack of first Aid kits. This persistent recurrence of deaths of pupils led to demand for urgent solutions to avoid similar cases in future hence the investigation into the safety implementation in primary schools.

1.3 Statement of the problem

A school environment should be safe to promote learning and to facilitate the development of social skills..... The school should provide an environment that nurtures positive health in order to protect, promote and improve health for all. It's important that education stakeholders foster safe and secure school environment in order for meaningful learning to take place. The Republic of Kenya (2008), Safety standard manual for schools in Kenya

Despite the development of school safety standards manual for use by schools, many incidents that threaten learner's safety in schools have been recorded and reported in local media, and many others go unreported. Cases of learners losing lives and sustaining serious injuries while in school/include, the St. Kizito tragedy in July 13th and 14th, 1991 where boy students raped and killed 71 female counterparts, the Kyanguli tragedy which claimed 65 lives who died in a blazing dormitory locked from outside, the death of at least 22 girls from Bombolulu secondary school in

Mazeras in 1998 when their dormitory had been locked from outside caught fire at night.

In 1991, a group of belligerent students at Nyeri high school set the prefects cubic on fire in the night causing death and serious injuries. Report by Ngobilo of the East African standard newspaper (9th August 2012) indicate that Asumbi girls primary boarding fire tragedy claimed eight lives while several others sustained severe burns. One pupil died and 51 others of Musikoma primary school were admitted at Bungoma county Referral hospital with burns and cuts after lightning hit the school on Wednesday evening (East African standard Newspaper, 06 February, 2015).

School safety and disaster preparedness is an important component of disaster risk reduction which consists of actions intended to increase the coping capacity of people and make them more resilient to disasters. It's aimed at helping school administration, staff teachers and students to be prepared in case of emergencies and disasters like the ones mentioned above, to protect themselves from personal injuries and loss of life as well as to protect the school property from damage (Republic of Kenya, 2008, Safety standard manual for schools in Kenya).

Nyakundi (2012) noted shortfalls in the implementation of safety standards and guidelines in public secondary schools in Marani district, Kisii County. Ng'ang'a, (2013) highlighted on the measures to be taken into consideration to arrest incidences of insecure environments in secondary schools in Nyeri County. Bungoma South Sub-county has experienced a number of disasters for example, one pupil died and 51 others of Musikoma primary school were admitted at Bungoma county Referral hospital with burns and cuts after lightning hit the school in 2015. The road accident that claimed 10 pupils of Marakaru primary school and a recent fire tragedy in

Kimaeti, Namwela and Teremi secondary schools. This study therefore sought to find out level of implementation, challenges faced in the implementation process and suggest possible remedies particularly in Bungoma sub county, Bungoma County.

Primary schools have been left out, this study therefore, intends to bridge the gap in providing information on the implementation of safety standard measures in public primary schools by investigating how secure learners are in these schools.

1.4 Purpose of the study

The purpose of this study was to assess the implementation of safety standard measures in public primary schools in Bungoma County, Kenya.

1.5 Objectives of the study

The study was guided by the following specific objectives:-

- i) To determine the awareness on safety measures put in place in public primary schools in Bungoma County, Kenya.
- ii) To find out the major causes of disasters in public primary schools in Bungoma County, Kenya.
- iii) To assess the extent of safety policy implementation in primary schools in Bungoma County, Kenya.
- iv) To examine the major challenges faced in the implementation process of the safety measures in Bungoma County, Kenya.

1.6 Research questions

The study was guided by the following questions:

- i) What awareness strategies on safety measures have been put in place in public primary schools?
- ii) What are the major causes of disasters in public primary schools in Bungoma County, Kenya?
- iii) To what extent have safety policies been implemented in primary schools in Bungoma County, Kenya?

iv) What are the major challenges of safety measures implementation?

1.7 Significance of the study

According to Kombo and Tromp (2006), significance of the study refers to the importance of the research being undertaken. The study findings provided an important feedback to the ministry of education especially to the field officers to organize for more frequent monitoring and evaluation programs in schools. This will help to accelerate the implementation process.

Further the findings will enable the Kenya government to review budget allocation for the education sector so that some funds can be directed to the implementation process in the implementation of safety standard measures. The study exposed lack of awareness programs and awareness of the availability of safety manual for both teachers and learners. The findings therefore will help to give exposure to the school community on school safety.

The findings may enable education stakeholders and policy makers to come up with preventive strategies to curb disasters in public primary schools like launching awareness programs and mobilizing funds from donor communities to supply schools with safety equipment such as fire extinguishers, lightning arrestors, water tanks among others. To the architects and school designers, the findings provided information to help them put up safe physical facilities. The study provided very important information which if adhered to will lead to safe learning environment for both teachers and learners hence improved academic achievement. The education officers, QASOs, and the head teachers would also use the study to launch awareness programs so that teachers, learners and the entire community can be sensitized on safety standards.

According to Keck (1994), school design is meant to make teachers, learners and the community to feel safe while in school. To the Architects and school designers can use the study to design and put up safe physical facilities in school premises. This would help improve academic achievement since the learning environment is safe for both teachers and learners.

1.8 Justification of the study

Bungoma County has its headquarters in Bungoma south sub county. Farming and livestock keeping are the main economic activities centering on the sugarcane and maize industries. The parents' income is low hence they are unable to support school programmes. This sub-county being the headquarters of the county has the highest number of schools. It is therefore expected that implementation of safety standards rate is higher than those in other sub counties. Surprisingly implementation of safety standards in these schools is far from average due to lack of awareness programs among other factors. For instance, most schools in Bungoma south sub county are not aware of the MOE safety standards and the area has witnessed major catastrophes due to lack of safety. This is evident in the case of Musikoma Primary School where learners were struck by lightning.

1.9 Assumptions of the study

The study was based on the following assumptions; first, the data collection instruments that were used in the study were adequate and appropriate. Secondly, the respondents gave honest information and lastly is that the headteachers were complying with guidelines stipulated in the 2008 MOE safety standards manual for schools.

1.10 Scope and limitation of the study

1.10.1 Scope of the study

According to Banerji (2004), scope refers to the boundaries of the study in terms of content and geographical spread for deeper treatment of the subject. The study was carried out in Bungoma South sub county, Bungoma County. The study delimited itself to 145 public primary schools in the sub county because safety problems reported in public schools are higher than those in private schools as indicated by the chairman of Kenya private schools Association. The study was carried out during the second term of 2017. The research was confined to safety on school grounds, physical infrastructure, safe water supply, fencing of schools, safety against child abuse and safety against illegal food hawkers. Data collection instruments included two interview schedules, an observation schedule and a questionnaire.

The entire school community should be involved in safety issues; however the participants in this study were sampled from the selected schools. The respondents included, head teachers, teachers and one curriculum support officer since they are at the centre of teaching and learning process.

1.10.2 Limitations of the study

The study experienced the following limitations:

- i) Due to financial constraints and limited time not all public primary schools were studied.
- ii) Suspicion especially with the head teachers raised a big challenge because they feared giving correct information that is contrary to the required ministry regulations however they were assured to the confidentiality of the process.

- iii) The study targeted the head teacher and teachers leaving out pupils and parents who could have provided useful information on safety in the school

1.11 Theoretical framework

School climate theory

The framework of the study based on the school climate theory proposed by Rudasil et al (2018). In order to best assist the efforts of developing causal models that describe how school climate functions, the proponents of this theory proposed the systems view of school climate (SVSC). The framework was formed by deconstructing prior models and empirical research on school climate into themes and highlighting their implicit assumptions, school climate here is defined as the effective and cognitive perceptions regarding social interactions, relationships, values and beliefs held by students, teachers, administrators and staff within a school.

Positive school climate contributes to engagement and academic success of learners. A school's physical and structural features such as school size and school type (e.g public vs. private) also impact student achievement. The size of classrooms, doorways and pathways are key in ensuring safety of learners. The proponents further said that feeling safe in school is a primary contributor to a sense of belonging and to learning and may be of a particular importance for the learners.

School climate is commonly seen as academic community, safety and institutional environment dimensions that encompass just about every feature of the school environment which impacts cognitive behavior and psychological development. Therefore when safety measures are adhered to, learners will feel safe and this will boost their morale to work hard and achieve their goals.

1.12 Conceptual framework

A conceptual framework is an analytical tool with several variations and contexts.

It illustrates the relationship between the depended and independent variables of the study, (Orodho, 2006). Figure 1.2 shows the conceptual framework of the study.

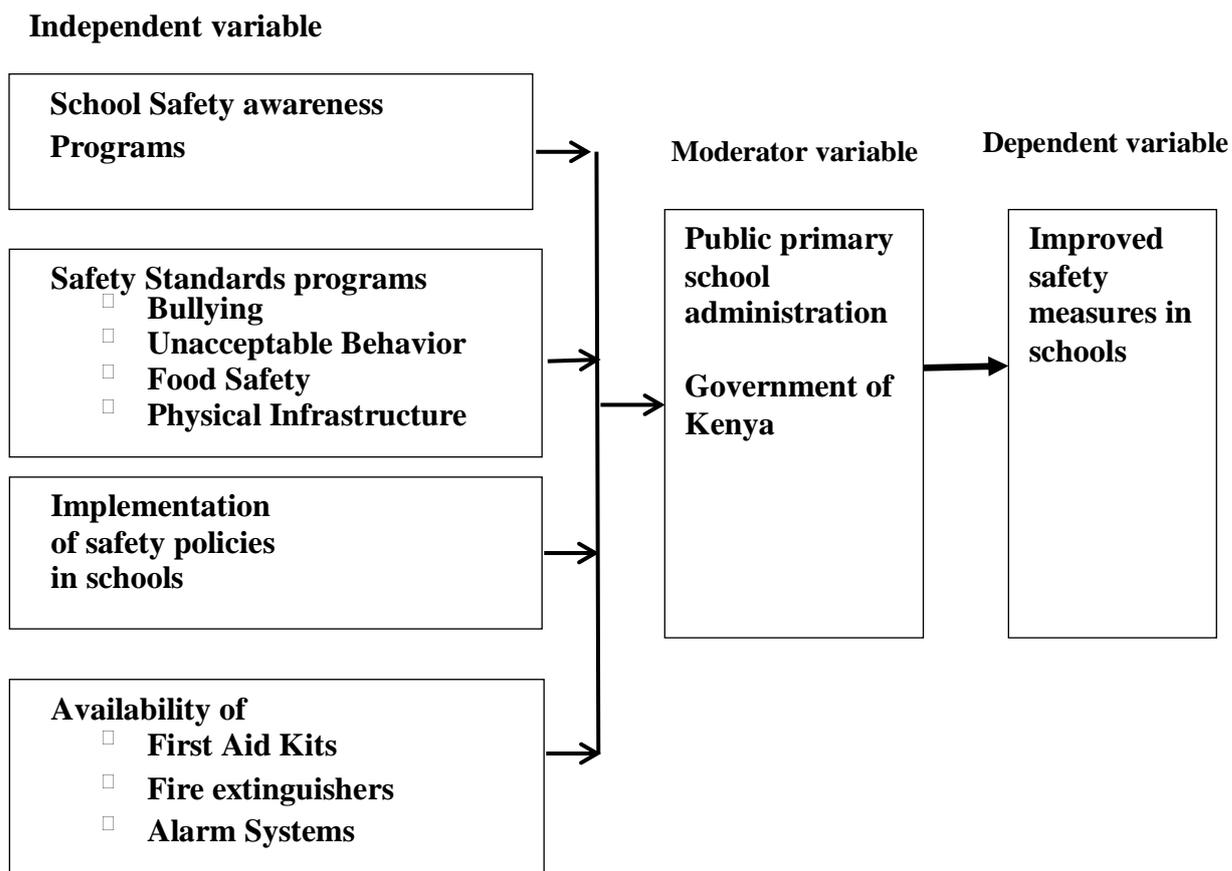


Figure 1.1: Conceptual framework – Source: Author,2019

Source: Sarah Lindstrom et al. (2015)

Ministry of Education safety standards manual, (2008) underscores the government commitment to the safety and overall welfare of our learners and especially children. Successful implementation requires partnerships with various stakeholders among them learners, local communities, NGOs, religious organizations and other community based organizations (CBOs). Physical structures should be appropriate,

adequate and properly located, devoid of any risks to users or to those around them. They should also comply with the provisions of the Education Act (cap 211), public health act (Cap 242) and the ministry of public works building regulations.

There is need for the school to provide an environment that nurtures positive health in order to protect, promote and improve health for all. The school management should create mechanisms and procedures that ensure stakeholders are conversant with measures needed to prevent occurrence of disasters and steps required to reduce the impact. Safety in schools therefore depend on the school safety awareness programs, putting in place mechanisms that can help deal with antisocial behavior like bullying and ensuring food safety and safe physical facilities. Implementing safety policies and availing first aid kits, fire extinguishers and alarm systems also contributes to safety in schools.

1.13 Operational definition of key terms

Curricular- Set of coursework and their content offered at school.

Co-curricular - accompanying educational content, mostly not academic oriented

Safety –Security or wellbeing, a feeling of comfort in school.

Disaster –An occurrence in school that may cause damage to property injury or death of Somebody.

Abuse –Treat a person with cruelty or violence especially regularly or repeatedly.

Needs –Cannot avoid, a requirement

Bullying –Hurting someone deliberately in school or destroying his property.

Harassment –Behavior intended to annoy to make one feel insecure in school.

Discrimination –Unjust treatment of different categories of people.

Policy –A course or principle of action adopted or proposed by a government.

Implementation –Process of putting a decision or plan into effect.

Safety measure- Activities and precautions taken to improve safety.

1.14 Chapter summary

The chapter gives an introductory definition of safety in school as good physical health, safe, friendly learning environment without violence and hostility, drug-free and well equipped with facilities that offer a wide range of curricular and co-curricular activities.

In the background of the study, the study illuminates world health organization (2002) school safety standards and highlights school safety standards taken in developed countries such as the United States and Canada.

Statement of the problem indicate that despite the Kenya Ministry of Education coming up with extensive safety standards and putting in policies that would ensure safety in schools, majority of school in Bungoma south sub County in Bungoma county have struggled or done little to implement this safety measures. The study was guided by 4 objectives:

To determine the awareness on safety measures put in place in public primary schools in Bungoma south sub-county, To determine the major causes of disasters in public primary schools in Bungoma South Sub-county, To examine the extent of safety policy implementation in primary schools in Bungoma south Sub County and To examine the major challenges faced in the implementation process of the safety measures in Bungoma south sub county.

Lastly the chapter reflects on Maslow hierarchy of needs theory which is the backbone of the study. From the theory, the research morphed a conceptual framework demonstrated in the last section of the chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter illustrates the concept of school safety; school safety, the safety standard manual in Kenya and also prospects on a various pieces of literature on the implementation of safety standard measures in primary schools, in the aim of developing knowledge about school safety and identifying the existing literature Gap. The chapter is themed as; concept of school safety, school safety awareness programs, physical infrastructure, implementation of safety policies in schools and factors affecting the implementation process.

2.2 Concept of School safety

This section highlights the definition of school safety, the safety standard manual for Kenyan schools, creating safe schools and action steps for students in achieving safety standards in schools.

2.2.1 School safety

School safety means an effective structure and organizational free potential and physical harm; it means the absence of violence and the presence of nurturing, caring and productive staff (Chukwu, 2008). In our daily lives, safety plays a very important role by helping to mitigate risks in only given situation. Safety in schools is an integral and indispensable component of the teaching and learning process (R.O.K, 2008).

There is need for schools to be prepared to deal with any form of insecurity. Teaching and learning is the main objective of every school however this can only be possible if the school environment is conducive and safe enough for learning (Astor, Guerra & Van Acker, 2010). Insecurity in schools can be due to factors that emanate from within the school environment or from the wider community. It is therefore imperative that all the educational stakeholders take up the responsibility to ensure that school safety threats are minimized or eliminated so as to foster all round safe living in schools.

The domain of crisis preparedness and intervention has received increased attention during the growing school crisis intervention literature (Jameson et al. 2005). Comprehensive school crisis plan should address a range of event and hazards caused by both nature and by people (Dorn, 2006). Over the past three decades researchers and educators have increasingly recognized the importance of school safety. Several studies have also found out that a conducive learning school environment improves the achievement of the learners (Johnson & Stevens 2006).

Safe relationship, a safe teaching climate and a feeling of not being threatened in activities that take place in and out of school has also been found to be important for children's learning. A safe school is a healthy school in that it is physical and psychologically safe (Prinsloo, I.J, 2005). School environments that are not safe to the learners promote truancy and delinquency which affect completion of education in schools. Education is a human right, universal and inalienable. Education is especially important in enabling people to reach their full potential and exercise other rights. These rights do not disappear or get suspended because of disasters and emergencies. When education is interrupted or limited, students drop out with negative and

permanent economic and social impacts for learners and their communities (International Finance Corporation ifc.org, 2010).

Concern about safety at school cries out for enhancing connections with families and other Neighborhood resources for youngsters, the concern is not just about the specific school that capture media. Children suffer from wide range of physical and emotional abuse experienced at school. Providing safe and happy places to learn is essential to achieving school improvement raising achievement and attendance, promoting equality and diversity, and ensuring the safety and well-being of all members of the school community (M.O.E, 2008). Schools should be safe places for everyone. The involvement and commitment of the whole school community is required to achieve a culture in which safe and respectful schools are everyone's concern and responsibility.

Teachers and other staff in a school have responsibility to ensure students are safe within the school and broader learning environments (Astor et.al, 2010). They should make certain there is every opportunity for students to alert teachers and other staff to any concerns staff to any concerns they have about safety or wellbeing. According to the United States Dept of education (1998), well-functioning schools foster learning, safety and socially appropriate behavior. They have strong academic focus and support learners in achieving high standards, foster positive relationships between school staff and students and promote meaningful parental and community involvement.

According to the reports in daily newspapers and electronic media, school arson attacks carried out by students appear to have become a trend in Kenya, leaving people to speculate about the causes although no one seems to agree. The burning

down of dormitories at Itiero boys' high school caught people's attention as it appeared to be the result of anger that students were not allowed to watch a live broadcast of a Euro 2016 football match. During that same week, there were at least 16 fire incidents in schools in western Kenya, mostly around Kisii.

Kenyans have been debating on the issue on social media and radio talk shows. Some suggest that it's a matter of indiscipline, caused by poor parenting. The experts and politicians also looked into the issue and offered their own solutions. Generally Education officials had identified several reasons behind the school unrest. In their reasons they left out the implementation of school safety standards which could be the major cause of unrest in schools. The school safety standards manual (GOK, 2008) sets out the standards and guidelines that a school should put in place to enhance child safety. Some of the key components in the manual include: safety in school environment, safety against Drug and Substance Abuse and school community relations so it leaves one with a lot of questions how Drugs get into the school compounds and how the community colludes with the learners to the extent of selling them petrol to burn the schools (Miller, Gibson, Ventura & Schreck, 2005).

2.2.2 The safety standards manual

The safety standards manual is a document that the school should use to maintain a safe, secure and caring environment that fosters teaching and learning. The manual therefore sets out the standard and guidance that a school should put in place to enhance child safety (ROK 2008) the manual in corporate thirteen key elements. Learning institutions have experienced various kinds of disasters for many years. Whenever the education process is disrupted, the quality of no task is as important as creating safe learning environment for our notaries' children. Following the past

events where children died or were injured due to building collapsed and fire accidents in schools there was need to set up programs that would help to ensure safety of learners and staff in schools. there is need to have school building level emergency preparedness schedule time in the busy school day to practice drills to respond efficiently and effectively to occurrence that might be encountered (Government of India 2006)

The school safety program essentially targets in promoting a culture of a disaster safety in school. The government of India has put in place the school safety program whose goal is to promote a culture of disaster preparedness in the school community. Its objective is to sensitize children and the school community on issues of disaster preparedness and safety measures and to motivate key stakeholders through direct participation in activities that would foster towards a disaster resilient community.

The primary strategies under the program are:

- i) Place the school safety on the education agenda. This will need school administrators to facilitate and coordinates to improve school safety as well as sensitizing the community.
- ii) Create a school advisor committee at the district level which will involve key stakeholders in the education, medical, administration as well as a representative from the students.
- iii) Develop a district wide school safety plan which will deal with specific types of crisis and ensuring safety of students and staff.
- iv) Each school should prepare a school building level emergency preparedness and response building van should be submitted to the district officer on annual basis.
- v) Develop a school safety literature database on school safety issues. Prepare a school safety public information brochure to explain important issues and specific roles

individuals and groups need to perform during both peace and critical conditions (GOI-UNDP, 2006).

The safety of the learners is central to the provision of quality education in any country (MOE, 2008). The Ministry of Education (2008) further emphasizes that safety is essential for learners at all levels of education. For learners at the basic education level in view of their relatively tender ages, children of this early age are very vulnerable to threats such as bullying by their older colleagues, intimidation verbal and physical abuse and all manner of harassments. Inappropriate school facilities and infrastructure are also threats to insecurity for children.

2.2.3 Creating safe schools

Characteristics of a safe school include focus on academic achievement, involving families in meaningful ways developing links to the community, emphasizing positive relationships among learners and staff and discussing safety issues openly helps children feel safe expressing their feelings among others.

Parents can help create safe schools by discussing with their children and show their support for the roles as well as help their children understand the reasons for them. Parents also need to involve children in setting rules for appropriate behavior at home, talk to the children how to control their anger that will not involve verbally or physically hurting others. It's important to note any disturbing behavior in the children like frequent angry outbursts, excessive fighting and bullying of other children, cruelty to animals, fire setting, frequent behavior problems at school and in the neighborhood, lack of friends and alcohol or drug use can be signs of serious problems.

Parents need to keep lines of communication open with their children. They should encourage their children to let them know where and with whom he/she will be. Get to know their friends and be involved in the child's school life by supporting and reviewing homework, talking with his teachers and attending school functions such as parent conferences, class programs, open houses and PTA meetings work with the child's school to make it more responsive to all students and to all families. Share their ideas about how the school can encourage family involvement. Encourage the schools to offer before – and after - school programs.

2.2.4 Action steps for students

There is much students can do to help create safe schools. Students need to talk to their teachers, parents and counselor to find out how they can get involved and do their part to make their school safe. They can listen to their friends if they share troubling feelings or thought then encourage them to get help from a trusted adult such as a school psychologist, counselor, and social worker, leader from the faith community or other professional or even share with their parents. The students can create, join or support student organizations that combat violence, such as “Students against Destructive Decisions” and “Young Heroes Program” Organize an assembly and invite the school psychologist, school social worker and counselor – in addition to student panels to share ideas about how to deal with violence, intimidation and bullying.

2.3 School safety awareness programs

The first and foremost desire of every person is to ensure the safety of children from primary to advanced levels. It is essential to provide adequate infrastructure and educational facilities for them in order to create a positive learning environment. The concept of a safe school and overall well-being of school children is gaining its

significance under the overarching commitment towards quality education for all hence being alert about possible hazards is an important aspect in a school (Kipngeno, 2009). Safety awareness is very important in increasing the coping capacity of learners and makes them more resilient to disasters.

It is aimed at helping school administrators, teachers and learners to be alert in case of disasters and emergencies like lightning and terrorism. Learners should be able to protect themselves and personal injury and loss of life as well as to protect the school property from damage (Republic of Kenya, 2008).

The safety standards manual for schools in Kenya recommended that every school should set up safety committee's which will oversee school safety. (R.O.K, 2008). The best disaster prevention will always come from the staff if they are trained to look for trouble spots, irregularities and to report them. They will always be the first to notice anything unusual, problematic or suspicious because they are familiar with the environment. Staff should be given responsibilities for specific areas (Kipngeno, 2009).

There is need for the formation of a school sub-committee to deal with school safety. According to the MOE safety standards manual, the specific functions of the committee shall be to create safety awareness by keeping learners, parents and other stakeholders informed about school safety policies and implementation activities among other functions. The teacher in charge of school safety shall sensitize learners, staff, parents and the community members regularly on issues relating to child safety (Gomes, Kithil & Ahmed, 2006).

A department should be formed to prevent accidents and make school environments safe, its main concern should be safety and emergency preparedness. The role of the

team is advisory to management and in the area of planning. It includes responsibility for establishing a policy on specific matters relating to disaster prevention recommending how this policy can be implemented. Specific tasks of the prevention team include monitoring, appraising accident prevention in the organization by means of safety inspections school (Gomes et.al, 2006). Identifying areas that contribute to safety problems in the. Recommending action to be taken and assisting in their implementation, arranging fire drills and demonstrating of safety equipment such as fire extinguishers, recruiting new staff to disaster control and, in general maintaining staff awareness on safety measures (Gomes et.al, 2006).

According to the Ministry of Education and National institutes of education in Sri Lanka, there is need to make a school disaster safety plan. This can be done by awareness creation among school members. The topics of awareness meeting could be: What are hazards and disasters, how the school could be affected, how teachers and students can protect themselves and behave correctly during emergencies, how preparedness can minimize losses and damages. Public awareness is understood to be core element of successful disaster reduction. It is considered essential to motivate vulnerable population to become more active in their everyday lives and contributes to build a culture of safety in the community and society. Schools play a pivotal role in reaching the community. An effective educational program is conducted not only through the schools but also reaches deep into the community through them, their parents and teachers (Jayaratne & Gomes, September, 2012). Typically, awareness activities focus on providing information and knowledge to influence individual attitudes.

The most important and effective way to deliver messages is through personal communication through discussions, projects, sports and cultural events. Other ways

are through brochures leaflets and school magazines. Rono et al (2009) conducted a study in Turkana district and the findings were that all the head teachers and teachers who were interviewed had not attended the training in fire drills and fighting skills. Most the teachers had no safety knowledge on how to deal with disasters. He did not indicate the availability of fire extinguishers in these schools and whether the head-teachers and teachers were aware of safety standards.

Migiro (2012) indicated in his findings conducted in Nyamira county that (100%) principals acknowledged being aware of the MEO safety standards and out the teachers interviewed (57%) were aware of the safety manual while (43%) were not aware. He further noted that (64%) had a copy of the manual in their schools while (36%) had none. Out of the 7 principles that had the safety manuals in their schools 4 principles had made it available to other members of the staff while the others (42%) had kept the manuals in their offices. Although aware of safety standards they had not been fully implemented, Migiro did not show whether they were aware of the provisions in the manual.

Nyakundi (2012) in his study on implementation of safety standards in Marani, Kisii county reported that majority of the respondents (75%) indicated that they had a circular on health and safety standards in their schools while 18% pointed out that they had no such circular in their schools. He did not indicate whether they were aware of the contents in the circulars.

According to Muigai (2011) knowledge on safety manuals in schools was limited. Ng'ang'a (2013) in his study in Nyeri County puts the safety manual awareness at 78%. Therefore in my study I intent to find out the awareness rate / percentage in Bungoma south sub county , what programs have been put in place to ensure safety in

schools, whether the programs are being implemented and if not what could be the hindrances.

2.4 Major causes of disaster in public primary schools

Learning institutions have experienced various kinds of disasters for many years and the quality of no task is as important as creating safe learning environment for our notaries' children (Shah Khan, 2008). Following the past events where children died or were injured due to building collapsed and fire accidents in schools there was need to set up programs that would help to ensure safety of learners and staff in schools.

The safety of the learners is central to the provision of quality education in any country (MOE, 2008). The ministry of education (2008) further emphasizes that safety is essential for learners at all levels of education for learners at the basic education level. In view of their relatively tender ages, primary school children are very vulnerable to threat such as bullying by their older colleagues, intimidation verbal and physical abuse and all manner of harassments inappropriate school facilities and infrastructure are also threats to insecurity for children

2.4.1 Bullying

According to the department of education and ECD department (2008), every child should be able to learn in a school environment free from bullying of any kind and in which they feel safe and supported. It is the responsibility of every member of the school community to ensure that there is no place for bullying and create a culture where bullying is not tolerated. No child deserves to suffer the pain and indignity that bullying can cause. Any situation where a member of the school community feels unsafe at school due to bullying or any form of unacceptable behavior such as harassment discrimination or a threat or an act of violence should not be tolerated (Johnson & Johnston 2015).

Bullying is deliberately upsetting or hurting another person or damages their property on more than one occasion. It may occur because of perceived difference such as culture, ethnicity, gender, sexual orientation ability or disability, religion, body size and physical appearances, age or economic status (Ronan, Alisic, & Towers, 2015; Johnson & Johnston 2015). Bullying may be motivated by jealousy, distrust, fear, understanding or lack of knowledge. It can continue over time, is often hidden from adults and will probably continue if no action is taken.

There are different types of bullying examples are direct physical bullying which includes hitting kicking, tripping pinching, pushing or damaging property. Direct verbal bullying includes name calling insults, teasing, intimidation, racist, remarks or verbal abuse. Indirect bullying which is carried out behind the bullied person's back it is designed to harm someone's social reputation or cause humiliation e.g. lying and spreading rumors, playing nasty jokes to embarrass and humiliate among others (State of Victoria 2010).

2.4.2 Unacceptable behavior

Unacceptable behavior in the school environment refers to a wide range of behavior that are not acceptable or appropriate this includes harassment, discrimination and a threat or act of violence. Harassment is behavior intended to annoy disturb threaten or upset another person. Harassment and bullying may involve similar behaviors as both usually involve a learner or group of learners who have or are perceived to have, more power deliberately upsetting someone on more than one occasion (Horner, Sugai, Todd & Lewis-Palmer, 2005).

Sexual harassment is unlawful behavior under the commonwealth sex discrimination act 1984. It occurs when a person engages in any unwelcome or unreciprocated

conduct of a sexual nature (written or verbal) in circumstance which could reasonably be expected to cause offence, humiliation or intimidation. Sexual violence and abuse in some schools is very high which has led to withdrawal from school, unwanted pregnancies and even death (Chege,F.N& Sifuna,D.N,2006)

2.4.3 Food safety

Millions of meals are served to learners in schools across the country every year, which means that the potential for food safety incidents such as a food borne silliness outbreak, may occur from time to time. When those incidents happen, there can be serious consequences. Children and staff who get sick may have to be out of school. Severe cases can result in death. (Yiannas, 2009).

To promote food safety school need a food safety program. The food safety program must be based on hazards analysis and critical control points (HACCP) Principles. The Healthy, Hunger free kids act (HHFKA) of 2016 clarified that the food safety program requirements based on HACCP principles must be applied to any location where food is stored, prepared or served as part of school nutrition programs not just the cafeteria. Food safe schools are built on comprehensive procedures, policies and plans that address the sources of food safety. They also address the learner's behavior to encourage the use of food safety procedure policies and plans. (USDA, 2014).

Food safe schools have two main ingredients – first, they are built on comprehensive procedures, policies and plans that address the science of food safety. Second, they address people's behavior to encourage the use of food safety procedures policies and plans. It's important to know which practices are important to keep food safe, for example, temperature control of food but also why these practices are critical for

instance, food held out of temperature can grow microbes than can make learners sick (USDA, 2014).

Developing plans policies and procedures will be an important part of building food – safe schools. They will establish expectations and standards and create a food safety blueprint for the entire school community. Leading a culture of food safety means more than managing food safety practices. It calls for use of established and innovative approaches to communicate and partner with various groups to weave those food safety practices into day-to-day school activities.

2.4.4 Physical infrastructure

School buildings house in the most precious resource, the nation’s future. Children and staff members occupying the school building at a significant time of an occurrence of the event are exposed to a considerable amount of risk (MOE, 2008). Many places schools serve as a multiple purposes in a community. During the day time, the schools house in the children, the schools also serve as gathering places for community events, important public meetings and storage places/public shelters in emergencies. A comprehensive assessment of the safety of the building including functional and preparedness observations need to be addressed annually. Simple structural and non-structural measures can be taken up to address various existing hazards (MOE, 2008). An inspection around by the building inspector and the fire officer from the fire department is recommended to take necessary steps to adhere life safety therefore:

- i) Schools need to prepare for damaging events. In such an event, school administrators and teachers will have to be self-sufficient, relying on their own resources to protect population and the immediate surrounding communities until outside assistance is available.

ii) School children and their families need more information and education on safety and preparedness measures. Each school develops its own resource material and school children and parents and educates the mass

iii) Assemble emergency kits and conduct fund raising activities to raise money to purchase preparedness supplies and equipment retrofitting of school buildings.

These facilities include structures such as classrooms offices, toilets dormitories, libraries laboratories, kitchen, water tanks, and playground equipment among others. Such physical facilities should be appropriate, adequate and properly located, devoid of any risks to users or to any around them. They should also comply with the provisions of the education act (Cap 211) public Health Ac (Cap 242) and ministry of public works building regulations /standards M.O.E (2008). Additionally the Ministry of education, (2008) recommends that:

i) The size of the classrooms should be as specified by the ministry of education building specification 7 x 5.85m or 7.5m x 6.0m for 30 learners in a one seated desks or 40 learners in a two seated desks in line with the provisions of the (Ministry of Education institution, 2001).

ii) The door ways of both classrooms and dormitories should be adequate for emergency purposes, open outwards and should not be locked from outside at any time when learners are inside.

iii) For storied buildings, they stairways should be wide enough and located at both ends of the building and should be clear of any obstructions at all times. The construction of stairways should give provision for learners with special need and the handrails in the stairs should be strong and firmly fixed (MOE, 2001).

iv) The corridors should be both well ventilated and lit. The width should be wide enough for the learners to walk along without bumping into each other.

- v) Classrooms and dormitory windows must be without grills and should be easy to open. Should open outwards.
- vi) The classrooms and dormitories should be well lit and ventilated.
- vii) Each dormitory should have a door at each end and an additional emergency exit at the middle. It should be clearly labeled “emergency exit.”

2.5 The Extent of Implementation of Safety Policies in Primary Schools

Despite the provision of the safety standards manual (2008) to schools by the ministry of Education, Maritim et al in their findings indicates that schools lack safety preparedness. Detailing fire and other emergency procedures most schools were still found to be unprepared for the eventuality of a fire (Maritim et al 2015).

Omolo and Simatwa (2010) found out that in public secondary schools in Kisumu East and West district’s 14 schools (70%) had emergency doors against 6 that did not 10 boarding schools (50%) had successfully fitted windows that open outward and without grills. Seventeen schools (85%) had double dormitory doors that open outwards. Eight schools (26.6%) had fire extinguishers against 22 that did not have. Only 10 schools (33.33%) had the required number of learners per class against 20 that did not have. However, their study majored on boarding secondary schools. They do not tell us if day schools had also adhered to the safety standards, they did not talk about the nature of furniture used in classes. The researchers assumed all public schools have boarding facilities therefore this study intends to bridge the gap by looking at day schools and especially primary schools.

A study carried out on physical infrastructure safeness in public boarding schools in Kenya found out that most schools had not implemented all the school safety requirements. (71%) indicated that doors did not open outward while (34.8%) reported that their dormitory and class room windows still had grills. (Maritim et al

2015). Waithera (2013) in her study establishment that in most schools classrooms that had been designed to accommodate 35-40 learners were now accommodation double the number. The classes were located too close to the toilets and school fence hence interfered with the health and concentration of the learners. Some schools lacked enough light to allow safe access and exit, some loose electrical wires and sockets were dangling dangerously in some schools most dormitories were far from the administration block and were not appropriately locked.

2.6 Major challenge affecting the implementation process of safety measures in primary schools

To ensure safety and health of our children in schools, there is need for all schools to adhere to safety standards and guidelines (Republic of Kenya, 2008). Most schools have put in place strategies to ensure the implementation of the safety standards in their schools; however these schools have experienced a lot of challenges in the implementation process.

Previous studies done on implementation of safety standard and guidelines in secondary schools: Simiyu, Katiambo and Lutomia (2015) carried out an investigation into the state of disaster and safety preparedness in schools in Kenya. The study established that 92.4% of the surveyed schools did not possess Kenya power and lighting company (KPLC) Certificate of complete as required by law. All schools in western and coast provinces did not own KPLC certificates. This was noted to be dangerous to the learners. Fire extinguishers in most of the schools that were surveyed had not been serviced since the time they were bought. Only 43% of the schools surveyed had their fire extinguishers serviced while 57% had not serviced them since they were installed.

Kirui, Mbugua, and Sang (2011) in their research on their challenges facing head teachers in security management in public secondary schools in Kisii County in Kenya found out that 52% of the head teachers blame the general insecurity in their schools on the society. Over-emphasis on material gains rather than morality and ethical standard which has impacted negatively on the youth leaders and parents should serve as role models for the youth.

This means that the behavior of the youth is usually a reflection of the society. School head teachers indicated that parents sided with pupils who behaved badly in schools (highly placed parents or guardians may intimidate principals and teachers). Omolo and Simatwa (2010) investigated the implementation of safety policies in public schools in Kisumu East and west districts Kenya. The study found out that 23 schools (76.67 %) of the total number of schools surveyed had provided houses for their teachers. It was noted that 2 head teachers did not take up residence in 2 schools despite the provision of housing. Head teachers are key school stakeholders therefore their presence in school is paramount. He is to liaise with other teachers on matters relating to school safety, sensitize learners, staff, parents and community members regularly on issues relating to child safety, Keep accurate and up-to-date records of incidents relating to school safety and ensure that school safety measures agreed upon are implemented (ROK, 2008).

2.7 Knowledge Gaps

Rono et al (2009) conducted a study in Turkana district and the findings were that all the head teachers and teachers who were interviewed had not attended the training in fire drills and fighting skills. Most the teachers had no safety knowledge on how to deal with disasters. However the author did not indicate the availability of fire extinguishers in these schools and whether the head-teachers and teachers were aware

of safety standards. This research leaves a gap in understanding safety measure on fire and therefore defective implementation of safety measures in general. As much there is assorted research on school safety measure such as (Gomes, Kithil & Ahmed, 2006; ROK 2008; Kipngeno, 2009; Johnson & Johnston 2015), none has reflected the full MOE safety standards, especially in food and water safety, classroom safety and students behavior that lead to unsafe school environment. There is need for schools to deal with school safety according to the MOE safety standards manual to realize comprehensive healthy and safe learning environment. These research is guided by the MOE safety standards and measure on food, class room, water supply safety and student safe behavior are expansively discussed.

2.8 Summary of the literature review

This chapter has presented literature on the school safety programs; safety standards programs, implementation of safety policies in schools and factors affecting the implementation process. The aspects highlighted in this chapter are significant to the study in that they directly determine the safety situation in our schools. The research gap, therefore, is the implementation of safety standards in schools as per the safety standard manual produced in 2008. This study aims to fill this gap by reporting what strategies primary schools have put in place to ensure safety.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter focused on the research design and methodology that the researcher used to carry out the study. It presented the research design, study area, study population, sample size and sampling procedure validity and reliability of the research instrument, procedure for data collection and data analysis and ethical issues.

3.2 Research design

A research design outlines the scheme used by a study in answering its research questions and/or hypotheses. It stipulates the procedures and techniques for data collection and analysis with the aim of combining responses for the fulfillment of the study's objectives. It is a blueprint for data collection, compilation, and analysis (Kothari, 2006).

This study employed a descriptive research design. The study used descriptive research design (Creswell, 2014) to gather information about the implementation of safety measure in public primary school in the study area. Creswell further explained that research design describes the current nature of a situation at the time of the study and accordingly explore causes inherent for existence of the problem under study.

Additionally, according to Mugenda and Mugenda (2010) descriptive research is commonly used when examining social phenomena that exist in communities. Mugenda and Mugenda (2003) noted that the explanatory nature of the descriptive research design makes it easier and simpler to conduct and find a foundation upon which correlational and experimental studies emerge. In that case, Descriptive research was adopted to examine the awareness strategies on safety measures by the

school management committee, teachers and pupils in public primary schools in Bungoma County.

3.3 Area of study

This study was conducted in Bungoma South Sub-county in Bungoma County, Kenya. The sub-county lies west of Bungoma East Sub-county with Bumula Sub-County in the south and Teso in the North. The sub-county has an area of 2068 Km². According to the population census of 2009, the number of women is 209,885 against 198,713 men. The sub-county has good land and soil with a gentle sloping terrain making it one of the most arable lands in Kenya.

The academic performance of the region can be rated as average. It has deteriorated because of a high percentage of people living below the poverty line. This performance can also be a result of insecurity in schools. To implement safety policies in schools, there is need to pull resources together. When parents are not able to pay levies in school, the implementation process becomes hard. A student died of lightning and 51 others were admitted at Bungoma county Referral hospital with burns and cuts after lightning hit Musikoma Primary school on 6th February 2015 (East African standard Newspaper, 06 February, 2015). This was because the school could not afford to install lightning arrestors.

3.4 Target population

The target population for this study consisted of 145 public primary schools, 145 head teachers, 2,175 teachers and one the curriculum support officer in Bungoma South sub-county in Bungoma County, Kenya. Table 3.1 shows the summary of the target population.

Table 3.1: Summary of the target population

Entity	Number
Schools	145
Head teachers	145
Teachers	2175
Curriculum support officer	1
Total	2321

Source: Field data (2019)

According to the statistics from Bungoma South sub-county Director of Education office, there is 1 curriculum support officer in the region, 145 public primary schools which are headed by a single head teacher and have an average of 15 teachers. In that case, the study targets 145 head teachers, 2175 teachers and 1 curriculum support officer making a total target population of 2,321 individuals.

3.5 Sample and sampling procedure

For this study stratified sampling was used to group the total population of 145 schools into 3 feasible study units as shown in Table 3.2. Stratification enhances data validity and verification (Cooper, 2006). Essentially, a smaller error margin is made possible through classifying a population into a more homogenous group. In addition, reducing the target population into convenient groupings has an overall advantage of reducing the cost per observation as a sizeable representation of the entire target population is selected to participate in the research. Table 3.2 shows the selected schools in the study.

Table 3.2: Sampled schools in Bungoma south Sub county zones

Township municipality zone	Sang'alo zone	Mwibale zone
13	10	6

Source: Field data (2019)

From table 3.2, the target population (145 schools) was divided into 3 homogeneous strata based on the 3 zones that make up the sub-county. These are Sang'alo, Mwibale and township Municipality zones.

According to Mugenda and Mugenda, (2003) for descriptive studies at least 10 – 20% of the total population is enough. In conformance with the Mugenda, the study chose 20% representative which gave a sample of 29 schools. These 29 schools were proportionally selected from the 3 strata (zones) in Bungoma South Sub County where the town ship municipality zone which has the highest number of schools (67) had the highest representation of 13, Sang'alo zone (51) had a representation of 10 and Mwibale zone with lowest number (27) had a representation of 6.

The individual representative schools were randomly selected from the strata. This because random sampling avoid biasness as it permits the researcher to apply inferential statistics to the data and provides equal opportunity of selection for each element of the population.

Additionally, in simple random sampling, the samples yield research data that can be generalized to a larger population. It is a procedure in which all the individuals in the defined population have an equal and independent chance of being selected as a member of the sample (Mugenda, 2003).

Purposive sampling method was used to choose individual respondents from the schools. In that note, the study opted to choose the school head teachers who are in charge of school administration and one teacher appointed by the head teacher either

in charge of boarding or general school safety measures. Summary of the no of respondents is as shown in table 3.3.

Table 3.3: Total number of respondents in the research

Respondents	No
Head teachers	23
Teachers	23
Sub county curriculum officer	1
Total	47

Source: Field data (2019)

Table 3.3 shows the total number of respondents in the research. However, out of the 29 representative schools, only 23 head teachers responded positively to the researcher's request to conduct the study in their school premises. 6 schools declined permission to the study. This reduced representative percentage to 16%, therefore, the study had a final sample size of 23 head teachers, 23 teachers and 1 curriculum support officer, making a total of 47 respondents.

3.6 Data collection instruments

The research mainly used primary data which was collected using both qualitative and quantitative methods of data collection. Quantitative data was collected through semi-structure questionnaire that was administered to the 23 public school teachers and observation guides. Qualitative data was obtained from the two interview schedules administered to 23 head teachers and 1 sub county curriculum support officer

3.6.1 Questionnaire

The questionnaire was administered to the 23 teachers in-charge of school safety. The questionnaire permitted greater depth of responses and allowed the respondents to express themselves freely. Both close and open ended questions were used by the

researcher to capture both qualitative and quantitative data from teacher. Questions were presented in contingency form because they probe for more information and are easy to complete hence respondents are unlikely to be put off. These questions need to be answered only when the respondent provides a particular response to a question prior to them. This helps to avoid asking questions that are not applicable. The researcher could easily detect a trend by just glancing at the response. Questionnaires are confidential; they cover a wide geographical area, saves on time and have no bias.

3.6.2 Interview schedules

According to Kasomo (2006), an interview is an oral questioning technique in which information is obtained in detailed and well explained narration. It is a face to face interaction between individuals leading to self-report. This research used two interview schedules. One schedule was used on 23 head teachers and another one on the curriculum support officer. Interviews are good because they can be used to obtain details which are not possible with questionnaires. This can be made possible by use of probing questions. The interview schedule used on the head teachers provided critical information on the safety situation at the school level while that of the CSO provided information on the implementation of safety standard measures in the entire sub-county.

3.6.3 Observation schedule

One way of obtaining information about the progress or outcome of an educational programme is to observe directly selected aspects of its development and implementation as they occur. An Observation schedule gives the researcher an opportunity to collect data first hand, thereby preventing contamination of information gathered, (Frankfort et al 1996) According to Kombo and Tromp, (2006), the researcher observed equipment and materials related to safety standards in

schools. The researcher prepared a list of items to be observed in the sampled schools. The researcher was able to see the situation in the schools the way it was and recorded the information. The observation also assisted the researcher to ascertain whether the required facilities were adequate or not. Observation schedules were used as a control measure to check on the accuracy of information obtained through interviews and questionnaires. The researcher observed the school perimeter, sign post, playgrounds; classroom's condition, doorways, emergency exits, windows, furniture; lighting arrestors, toilets, composite pits, school kitchen, water tanks, library, fire extinguishers, the school gates and related them to the MOE safety standard measures.

3.7 Pilot study

It is necessary that the research instruments are piloted as a way of finalizing them (Hair, Celsi, Money, Samouel & Page, 2011). This is vital as it enables the reliability of the instruments to be determined. Prior to visiting schools for data collection, a pilot study was done in two schools in the neighboring Bumula sub-county. The two schools were randomly selected from Kabula zone and Mateka zone in the sub-county. The Pilot study involved a sample size of 5 respondents; 2 head teachers and two teachers each from the selected schools and the Bumula sub county curriculum support officer. The two head teachers and the curriculum support officer were interviewed while questionnaires were administered to the two teachers. The purpose of this pilot study was to find out weaknesses, if any, that might be in the research instruments and check on the clarity of the items in the data collection instruments.

The Piloting enabled the researcher to get comments from respondents on specific items which required moderation and refinement. The feedback informed the refinement of the interviews and questionnaires questions to make them more

specific, clear and objective to the research. Additionally, the pilot study also confirmed the testability of the research topic.

3.8 Reliability and validity of research instruments

Testing of reliability and validity was done on the data collection instruments to ensure that they have the ability to show relationship or differences in variables of the study being carried out.

3.8.1 Validity

Validity is the extent to which a research instrument measures what it ought to measure. It deals with the accuracy and meaningful of inferences based on the time list, Babbie & Mouton, (2001). According to Mwangi & Oluoch Kosure (2004), validity refers to the extent to which an instrument can accurately be interpreted and generalized. The instrument should yield the same results on repeated trials.

The content and validity of the instruments was tested to measure what the instruments intends to measure. To ascertain validity of the instruments the researcher consulted experts in the department of Curriculum instruction and education media (CIEM) Moi University and thesis supervisors from the department were requested to examine the research tools for content validity.

3.8.2 Reliability of the instruments

According to Oso and Onen, (2008) reliability is the measure of the degree to which a research instrument yields consistent results after repeated trials. It is the level of internal consistency or stability of measuring device overtime. The researcher employed the pretest method of estimating reliability. This was done by piloting to a small sample of schools in the neighboring Bumula sub-county; randomly selected comparisons were made and, validity and reliability tested.

The researcher employed test-retest method to establish the reliability of the instruments. This involved administering the same instrument twice to the same group of respondents (Gregory, 1992). The instrument was administered to same respondents from the two schools in the pilot study within an interval of two weeks after the pilot study. According to Goforth (2015) when test and retest responses are correlated and test-retest reliability coefficient is greater than or equal to the standard threshold Cronbach alpha (0.70) used in behavioural research, then the research instrument is said to yield reliable data. The pilot study test-retest composited a reliability co-efficient of 0.8 for all the constructs, which is greater than the Cronbach alpha (0.70) and therefore the research instruments were reliable.

3.9 Data collection procedures

The researcher sought permission and an introductory letter from Moi University which was used to obtain a permit from the National Council for Science and Technology before going to the selected schools for collection of data. The interview schedule and questionnaire were administered in person to be sure they reach the respondents. The questionnaire was first administered to the teachers, then the interview schedule to the head teachers and the Bungoma South CSO. Observation schedules were employed for observation activities in the implementation of the safety standards in the selected schools. In a nutshell, the researcher observed the school perimeter, sign post, playgrounds; classroom's condition, doorways, windows, furniture; lighting arrestors, toilets, composite pits, school kitchen, water tanks, library, fire extinguishers and the school gates.

3.10 Ethical consideration

The researcher ensured consent from the respondents before soliciting information from them as stated by Saunders, Levis and Hill (2003). This was done by the

researcher explaining the purpose of the study (Mugenda & Mugenda, 2010). In this study therefore, the researcher shared the findings after completion of the research to the relevant users. Anonymity was upheld and withdrawal given in case a respondent felt like withdrawing either partially or completely.

3.11 Data analysis procedures

The study used both quantitative and qualitative methods of data analysis. Qualitative analysis was employed to analyze data from the interviews and secondary sources while Quantitative analysis methods were used to analyze the study questionnaires. In qualitative analysis, the study majored on content analysis in analyzing the patterns, trends and information from the respondent's response in the interviews. Narrative analysis technique was used. The research also used descriptive statistics such as frequency, mean and percentages using the Statistical Package of Social Sciences (SPSS) in quantitative analysis. Frequency and percentage was used to analyze the population's demographic information, awareness on safety standards, major causes of disaster. Mean and percentages were used in analysis of safety policy implementation and challenges faced in the safety measures implementation process.

3.12 Chapter summary

This chapter highlighted the research design and methodology. The chapter also discussed the study area, target population, sample and sampling procedure, methods used to collect and analyses data, instruments of data collection and ethical consideration. Descriptive survey was the study design, and the study area was Bungoma south which has the highest number of primary public schools in Bungoma county and apparently experiencing problems in school safety measures as indicated in chapter one.

Stratified sampling technique grouped the study area into zones and the representative schools were proportionally and randomly picked from the zones. Interviews, questionnaire and observation schedules were the research instruments that collected both qualitative and quantitative data. Data validity was established through the Moi university supervisors and reliability obtained through test-retest reliability test which composited a reliability coefficient of 0.8. Data results and presentation was exclusively based on the research findings which are presented in the next chapter (Chapter 4).

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

The study had a sample size of 47 respondents of which 24 were interviewed (23 head teachers and 1 CSO) while 23 (teachers) were administered questionnaires. All the respondents appropriately responded to the interviews and questionnaires making a 100% response rate. The chapter analyzes and presents results of data collected from these 24 interviews, 23 questionnaires and an observational schedule. This section analyses and presents results on the basis of the research objectives and research questions; therefore, it's aligned under the following sub titles:

- i. The demographic characteristics
- ii. Awareness on safety standards
- iii. Major causes of disasters in public primary schools
- iv. Safety policy implementation
- v. Challenges faced in the implementation process of safety measures in public primary schools.

4.2 Demographic information

4.2.1 Gender

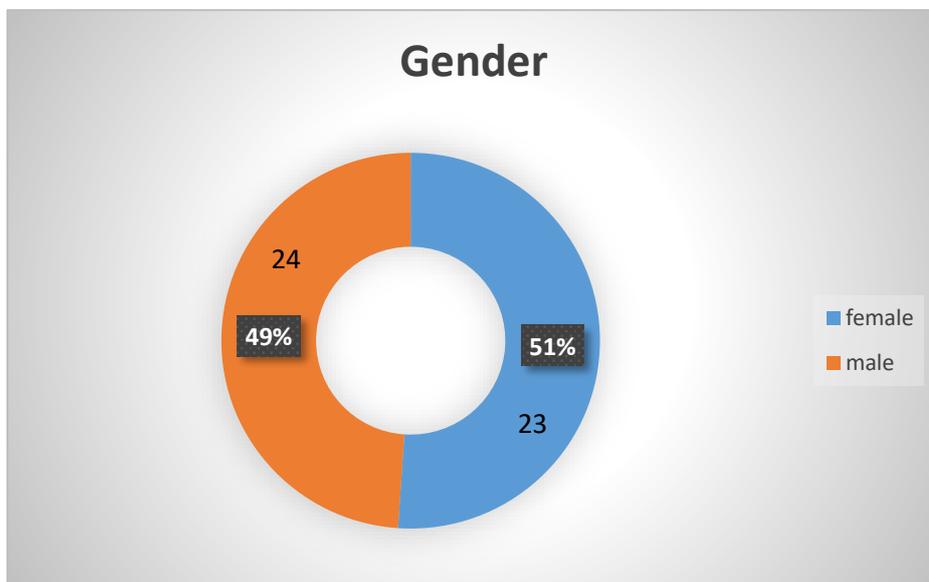


Figure 4.1 Gender of the respondents

Figure 4.1 shows that majority of the respondent were of female gender (51%) and minority were male (49%). The figures demonstrate that there was no significant difference posed by gender in the research.

4.2.2 Highest qualifications of Head teachers/teachers

The study recorded the highest academic qualification of the sampled head teachers and teachers as shown in table 4.1.

Table 4.1: Highest education level of the respondents

Highest educational level	Frequency	%
Secondary	0	0
P1 certificate	17	37
Diploma certificate	11	24
Degree	14	30
Master level	4	9
Total	46	100

Source: Field data (2019)

According to the findings, out of the 46 respondents 17(37%) were P1 holders, 11(24%) Diploma holders, 14(30%) first degree holders and 4(9%) had Master level in Education. There were nil respondents with a secondary school certificate as the highest education qualification. This findings therefore revealed that the personnel were qualified enough to comprehend and be part of safety standards implementation.

4.2.3 Teaching experience of teachers

The study sought to show how long the respondents (teachers) had been in the teaching profession. Figure 4.2 shows the results of the findings:

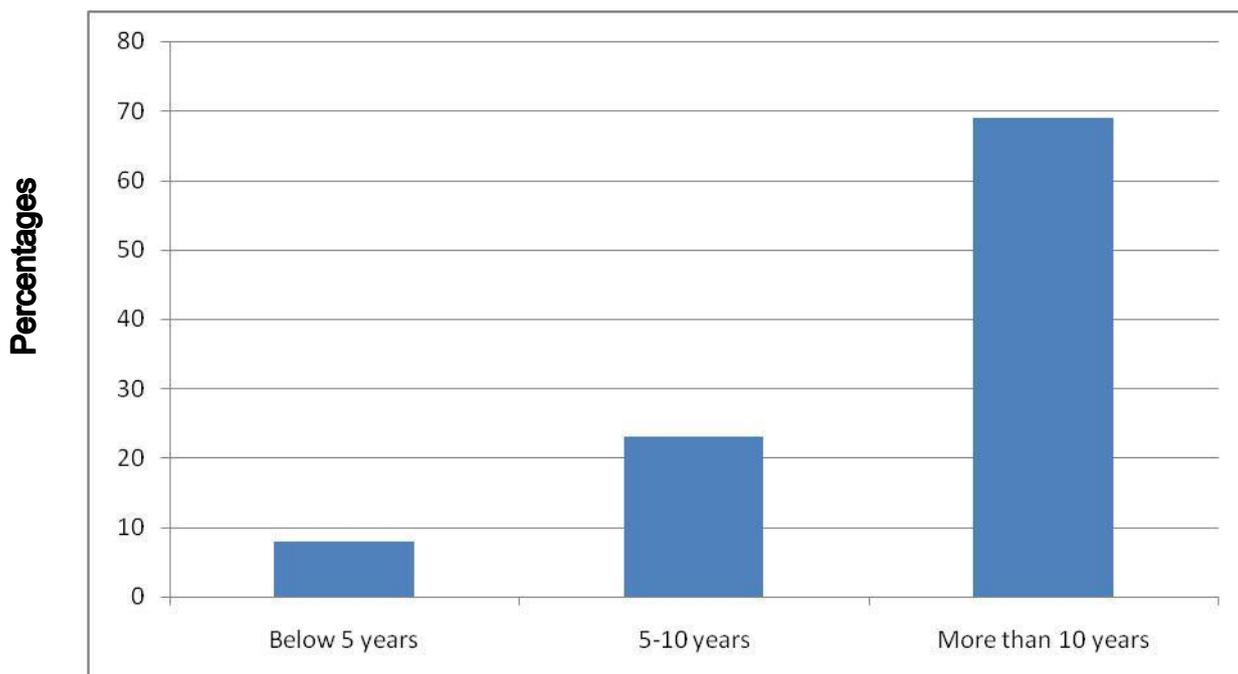


Figure 4.2: Teaching experience of teachers

Figure 4.2 shows the respondents who had been in the profession for a period of below 5 years were 2, (9%). Those who have been in the profession between 5 – 10 were 5(21%) and those who had served for more than 10 years were the majority 16 (70%). This also implied that they were in position to give detailed and meaningful information on the safety situations in their stations.

4.2.4 Type of school

The study sought to find out what type of schools the researcher visited. Findings were as recorded in table 4.2

Table 4.2: Type of school

Type	Frequency	%
Boys	1	4%
Girls	0	0%
Mixed boys and girls	22	96%

Source: Field data (2019)

From table 4.2 there was one single sex school (boys) and 22 schools were mixed both girls and boys.

4.2.5: Status of school

The researcher sought to find out whether the schools under study were boarding or day schools. The researcher found out that all the 23 schools were day schools.

4.2.6 Period as a head teacher

The study sought to establish how long the respondents have been serving as head teachers in the various schools. The findings were as recorded in Figure 4.3.

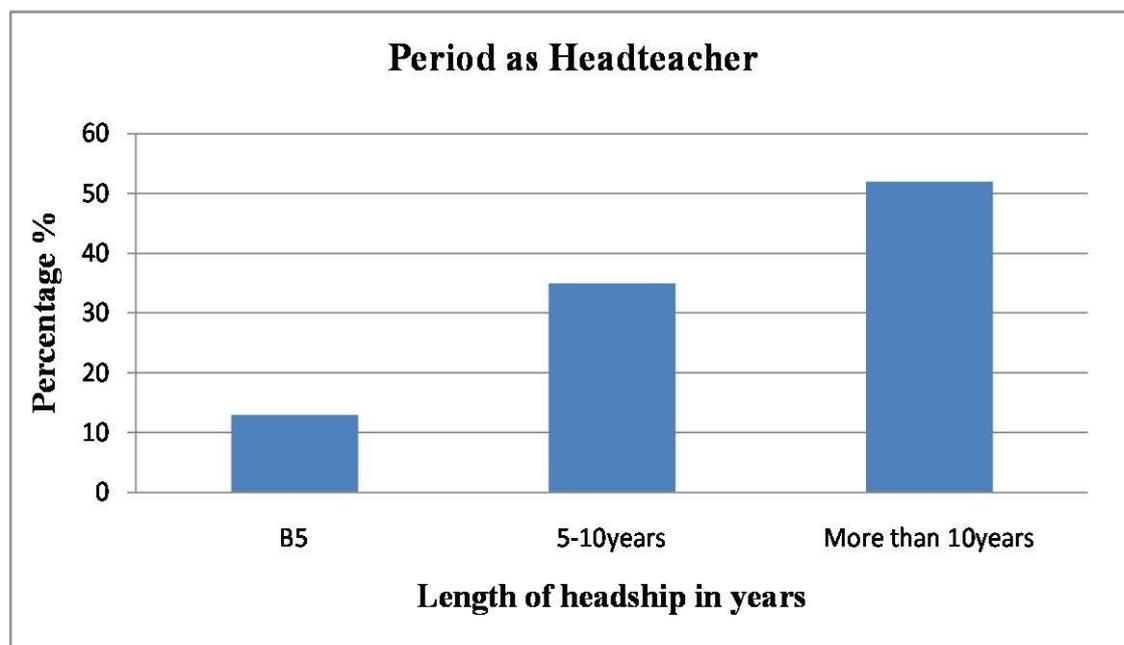


Figure 4.3: Period as a head teacher

The findings in Figure 4.3 show that 3 head teachers (13%) had served as heads for less than 5 years. Headteachers who had served between 5 and 10 years were 8 (35%) and those who had served for more than 10 years were 12 (52%). Most headteachers had served as headteachers in the current station for more than 3 years and had risen from deputy headteachers to their current positions as headteachers. Thus implied that a good number of head teachers had enough experience to implement safety standards in their schools and be able to give a clear picture of the safety situation in their schools as the major policy implementers.

4.2.7 Academic qualifications and period of service of the CSO

The study collected data on the academic qualifications, period of service of the curriculum support officer (CSO). The findings were that the CSO was a diploma holder, had served as a CSO for a period of 15 years but 10 years in the current zone. He had risen from a classroom teacher to senior teacher, Deputy Head teacher, Head teacher and finally the Area Education Officer which is currently referred to as curriculum Support Officer. The finding implicate that the CSO has a good understanding of about safety measures in the schools under the sub county jurisdiction and he was in a better position to give detailed and meaningful information on the safety situations in school.

4.3 Safety awareness

The study sought to determine whether the respondents were aware of the safety programs.

The researcher therefore sought to find out safety awareness programme that different schools had put in place. A well planned program begins with an evaluation of the school conditions and practices related to the schools safety and accidental prevention program, Creswell Jr. et al, (1993).

4.3.1 Awareness on safety standards

The study sought to determine whether the respondents were aware of the 2008 safety standards manual or not. Figure 4.4 presents the findings on the responses from the head teachers on the availability of the MOE safety standard manual.

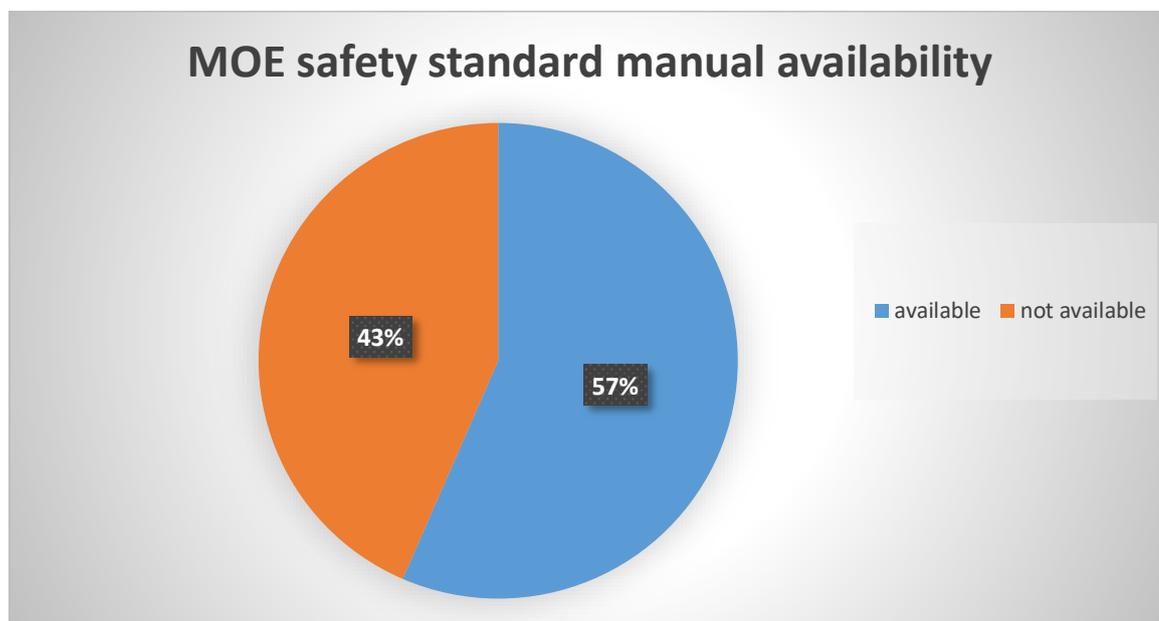


Figure 4.4 Head teacher's response on the availability of safety standard manuals

Figure 4.4 indicate that a larger number of respondents (57%) head teachers indicated the availability of the safety standard manuals in their schools while 10 (43%) did not have the manuals. This implies that more than a half of the head teachers who participated in the study were knowledgeable enough regarding the safety standards. The study further sought to establish if the teachers who were the curriculum implementers were in picture of what the MOE safety standards is all about. Table 4.2 presents the findings of the responses from the teachers on their awareness of the MOE safety standards.

Table 4.3: Teacher's responses on their awareness of the MOE safety standards

Awareness	Frequency	Percentage
Aware	10	43%
Not aware	13	57%
Total	23	100%

Source: Field data (2019)

The findings in table 4.3 show that the majority (57%) of teachers were not familiar with the 2008 MOE safety standards manual for schools in Kenya. 43% of the teachers indicated that they were aware of the existence safety standards manual.

The study sought to find out from the teachers who participated if the copies of the safety manuals were available in their schools. Their responses were as indicated in table 4.4.

Table 4.4 Availability of safety manuals in schools

Safety manuals	Frequency	Percentage
Available	9	39
Not available	14	61
Total	23	100

Source: Field data (2019)

The findings in table 4.4 show that, out of the 23 respondents 9(39%) participants indicated that they had the copy of the manual in their schools while 14(61%) had no

idea if the copy was available or not. The 9 teachers further indicated that the copies are kept in the Head teacher's office.

The participants also noted that they have just heard about the safety standard manual but they have no idea what is contained in the manual. The participants from their responses were not aware of the contents in the manual.

The study further sought to find out from the head teachers on the safety awareness in their schools. Out of the 23 respondents 10 admitted to be in possession of the safety manuals while 13 explained plans were underway to deliver the manuals in their stations.

From the findings, it is evident that majority of the schools under study have no safety manuals, therefore implementation of safety standards in such schools has not taken off. This implies that generally, implementation of safety standards in public primary schools is low.

The head teachers further said that the manuals available in their schools are accessible to all the staff members however most of them declined to say where the manual is kept. They also said the learners are frequently sensitized on safety precautions while in school on parade. So far no school has ever carried out a drill session in readiness of any disaster. This is according to the findings from the head teachers.

Findings from the 23 teachers revealed that 10 out of 23 respondents seemed to be in picture of the safety guidelines. This represented only 38% of the total population studied. It is clear that awareness on the MOE safety standard guidelines is very low since more than half of the respondents were not in picture of what it is all about. The study also noted with concern that out of the 38% who were in picture of the availability of the manual. More than 20% were not conversant with the provisions

in the manual. This means the few copies that are available are not accessible to the members of staff.

The study sought to find out if the schools had safety committees. Their responses were as indicated in table 4.5.

Table 4.5. Presence of safety committees in schools

Safety committees	Frequency	Percentage
Present	3	13
Not present	20	87
Total	23	100

Source: Field data (2019)

The information from table 4.5 shows that only 3 respondents (39%) indicated that there was a safety committee that consisted of teachers and pupils while 20 (87%) had no safety committees in their schools. This confirms the findings by Nderitu (2009) that most schools had not established schools safety committees.

School attendance registers

Registers are important documents that help to keep record of presence and absence of learners daily.

The 23 respondents indicated that registers are marked twice on daily basis by the class teachers' i.e. morning and afternoon.

The researcher sought to find out from head teachers how often the Curriculum Support Officer (CSO) and Quality Assurance and Standards officers (QASO) inspect the safety status in their schools. The findings were as shown in Table 4.6

Table 4.6: The CSO and QASOs inspection schedule

The CSO and QASOs inspection schedule	Frequency	Percentage %
Once per term	3	13.04%
Twice a term	7	30.43%
Once in a year	4	17.39%
Never	9	39.13%
Total	23	100%

Source: Field data (2019)

The study found out that schools which were inspected once in a term on safety were 3 (13.04%). Those inspected twice a term on safety were 7 (30.43%) once in a year were 4 (17.39%) while those that were never inspected on safety were 9 (39.13).

The respondents further said that school inspections majored most on curriculum implementation rather than safety measures. According to Omolo et al (2010), school safety policies require that premises and student be inspected at least once a year. Failure to inspect schools on safety may impact negatively on the safety, security and even performance of learners. Schools ought to be safe zones for learners, they should never fear for their safety when they enter a classroom. This is according to Bush (2007).

The study sought to establish the safety status awareness in the entire zone. The respondent from Curriculum support officer (CSO) who is in charge the zone described the situation as wanting and as one of the major challenges in the schools in the zone.

4.4 Major causes of disasters

The researcher sought to find out the major causes of disasters in public primary schools in Bungoma south sub-county. The researcher focused on the occurrence, type and causes of disasters in the sub-county.

4.4.1 Occurrence of disaster

The study sought to find out the frequency which disasters occurred in schools. The findings were as summarized in fig.4.5

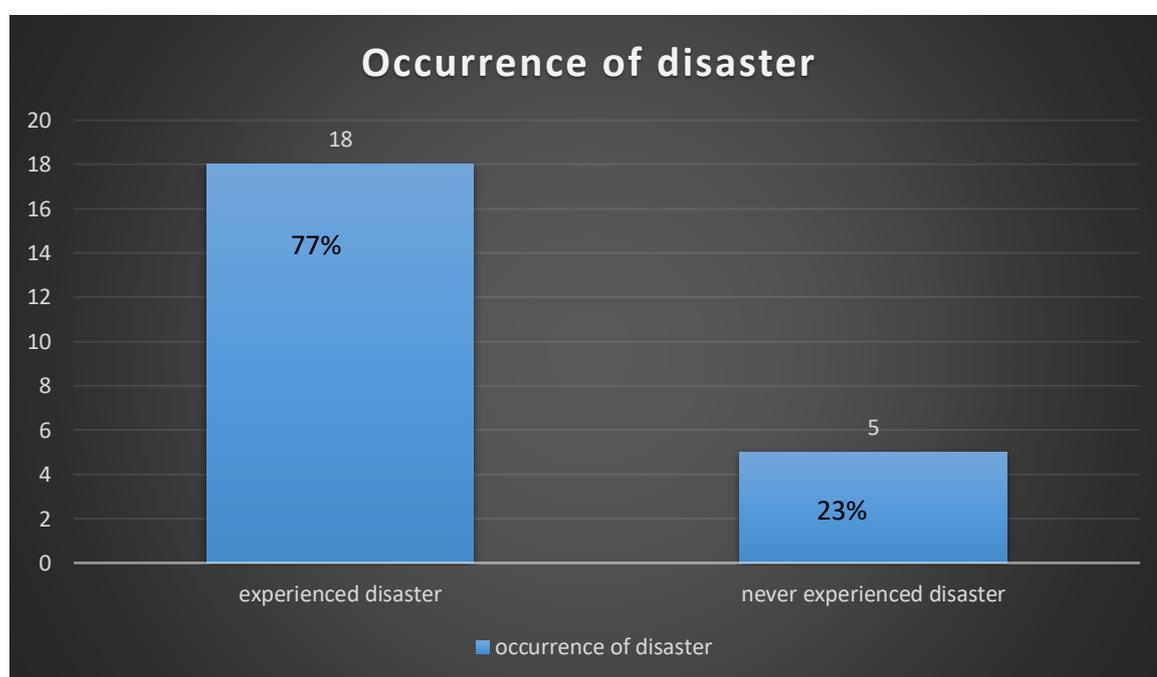


Figure 4.5: Occurrence of disaster

The findings as summarized in Figure 4.5 shows that majority of the respondents 77% indicated that they had experienced either one or more disasters in their schools while 23% had never experienced a disaster in their schools. This showed that more than half of the schools in the sub-county were prone to disasters hence the curriculum support officer together with the sub-county education office should take safety

measures to either minimize or eliminate threats to the named disasters. This will help to boost the Safety of learners in schools both physically and psychologically.

4.4.2 Type of disasters

The study sought to find out from the 23 teachers what type of disaster the schools under study had experience and the findings were summarized in Table 4.7.

Table 4.7: Type of disaster in Bungoma South Sub-County schools

Type of disaster	Yes		No	
	Frequency	%	Frequency	%
Robbery	6	26.1	17	73.9
Road accidents	3	13	20	87
Rape	3	13	20	87
Fire	2	8.6	21	91.4
Lightning	2	8.6	21	91.4
Electrical hazards	3	13	20	87

Source: Field data (2019)

From the result in table 4.7, it's evident that 73.9% of the respondents indicated that their schools had never experienced robbery while 26.1% had experienced. This was interpreted to mean that robberies were experienced in schools in Bungoma Sub-county. Robbery was a type of a disaster in some schools in this county. Interpretively this could be as a result of poor fences, lack of gates and security officers at the gates of these schools. 13% of the respondents revealed that they had experienced road accidents while 87 said they had never experienced road accidents.

This implied that road accidents is another type of disaster to learners. This could be as a result of all the schools under study being day schools. As noted in literature review cases of road accidents have been reported at Marakaru primary school and Mungeti primary school in 2014. Furthermore 91.4% of the respondents indicated that their schools had not experienced lightning while 8.6% had experienced. This was inferred to mean that lightning too was a disaster in some schools. Given that Western Kenya region is prone to occasional thunder (lightning) there was need for lightning arrestors.

On rape 87 % of the respondents indicated that their schools had never experienced rape while 13 % had experienced. This meant that rape was also one of the disasters that needs the attention of the educational stakeholders Ruto, (2009) argues that learning institutions in Kenya are notorious avenues of sexual assault. In addition 91.4% of the respondents indicated that their schools had not experienced fire while 8.6 % had experienced. This showed that fire was another type of disaster in some of the schools under study. This was interpreted to mean that there was inadequate fire fighting equipment in most schools. This is in agreement with Kirui et al (2001) and Omolo et al (2010) who found out that fire is a type of disaster in public secondary schools.

This means that the situation is similar in public primary schools hence fire preparedness in these schools is either very low or totally not there. School fire drills prepares students and staff what step to take in case of fire outbreak, this is according to Colmolotti (1991), they also allow students and teachers to plan escape in advance and to address learners' safety issues. Finally on electrical hazards a large percentage of respondents 87% indicated that they had never experienced electrical hazards in their schools while 13% had experienced. This could be as a result of more than 50%

of the schools under study having not been supplied with electricity. This means that sensitization on electrical hazards was low in the schools that had electricity. The technicians dealing with installation of electricity also need to do a credible job to avoid such hazards.

4.4.3 Possible causes of disasters

The researcher sought to find out from the 23 teachers what could be the possible causes of disasters in public primary schools in Bungoma south sub-county. The findings were summarized in Table 4.8.

Table 4.8: Causes of disasters in public primary schools

Causes of disasters	Yes		No	
	F	%	F	%
Sitting carelessly on desk e.g. legs blocking aisles	16	69.2	7	30.8
Sharp instruments	14	61.5	8	38.5
Drug and substance abuse	11	46.2	12	53.8
Poor constructed infrastructure	6	26.9	17	73.1
Poor electrification	5	23.8	18	76.2
Poorly placed furniture	4	23.1	19	76.9
Insufficient lighting	2	11.5	21	88.5
Slippery surfaces	2	7.7	21	92.3
Poor ventilation	-	-	-	-

Source: Field data (2019)

The data from Table 4.8 revealed that 46.2% of the respondents indicated that drug abuse among the pupils was a cause of disasters in schools while 53.8% said it was not. This is in agreement with Njagi, (2010) whose argument was that drugs could have contributed to the fire incident in Endarasha Boys Secondary School because the

school is found in a middle of a slum. A similar study by Sivingi (2003) pointed out than when students are under the influence of drugs, they can beat up their teachers, kill colleagues or even rape them.

Pudo (1998) noted with concern that education management in Kenyans schools has been hampered due to students indulging in drug and substance abuse not forgetting the incidence of arson in Nairobi girls high school in which the girl behind the painful ordeal was said to have been under drug influence. A high percentage of respondents 61.5% pointed out that sharp instruments was another major cause of disasters in schools while 38.5% said it was not. Also 69.2% of the respondents revealed that sitting carelessly on desks with legs blocking the aisles was a major cause of disasters in schools while 30.8% said it was not. Small children find it fun to block the pathways but this ends up causing injuries to their colleagues.

Poorly constructed infrastructure was pointed out as another cause of disasters by 6 of the respondents (26.9%) while the remaining 17 (73.1%) said it was not. According to Omolo et al (2010) students spend a considerable length of time in dormitories and classrooms so these buildings should be put up according to policy specifications in order to avoid situations that would compromise the safety of the occupants.

Furthermore 5 respondents (23.8%) cited poor electrification as a cause of disasters in schools while 18 (76.2%) said it was not. This was seen as one of the causes of fires in the schools under study. In addition 23.1% of the respondents pointed out that poorly placed furniture like tables and desks was also a cause of disasters in schools while 76.9% said it was not. Children are very playful hence poor arrangement of furniture can be a cause to injuries as they run up and down. Insufficient lighting was another possible cause of disasters in schools as pointed out by 11.5% of the respondents although 88.5% said it was not. Finally slippery floors were noted as a

cause of disasters by 7.7% of the respondents while those who said it was not were at 92.3%.

4.4.4 Other disasters

The respondents were asked to name any other hazards not mentioned. They indicated that strong winds blew off the roofs of classes therefore posing a threat to the learners. This could be as a result of deforestation in the sub-county in search for timber and fuel. On the other hand the respondents pointed out tattooing among the pupils as a health hazard that needs attention. This could be peer pressure influence hence sensitization was needed. Poor litter disposal was also identified as a hazard in schools leading to outbreaks of diseases like cholera, typhoid among others.

The respondents also pointed out other causes of disaster such as pot holes and rough floors. Such can cause dislocations of the joints and also attract jiggers. Rough play was also identified as another cause of disasters in public primary schools.

4.5 Safety policy implementation

The researcher sought to examine the extent of safety policy implementation in primary schools in Bungoma County.

4.5.1 Safety standards programs

The respondents majorly the head teachers mentioned some of the programs they have put in place to ensure safety of learners in case of a disaster. Some schools had no water supply meaning the learners had to carry their own water from home. Some schools through class parents meetings and academic days had sensitized the parents on ensuring clean and safe drinking water for the pupils. From the office of education the respondent indicates that programs are underway to ensure safety in schools in the zone. Some of the safety programmes include removal of grills from the windows,

ensuring doors open outwards, putting fire extinguishers in strategic areas in the compound and installing lightning arrestors.

4.5.2 Safety on school grounds

The following observations were made concerning the safety of school grounds. It was evident that in some schools, visitors entered without providing their personal details at the gate as the MOE safety manual dictates. This implies that the pupils were exposed to physical danger and may be involved in illegal intentions and characters that would easily enter the school unnoticed.

This is an agreement with Omollo et al (2010) who argues that while fences are not 100% temper proof, they define the extent of the school plant and act as a deterrent to intruders, strong and sturdy fence is symbolic of safe and secure school.

4.5.3 Safety on physical infrastructure

The researcher wanted to find out if the classrooms were spacious enough for the learner's free movement in class. The responses from the teachers were as shown in fig 4.6.

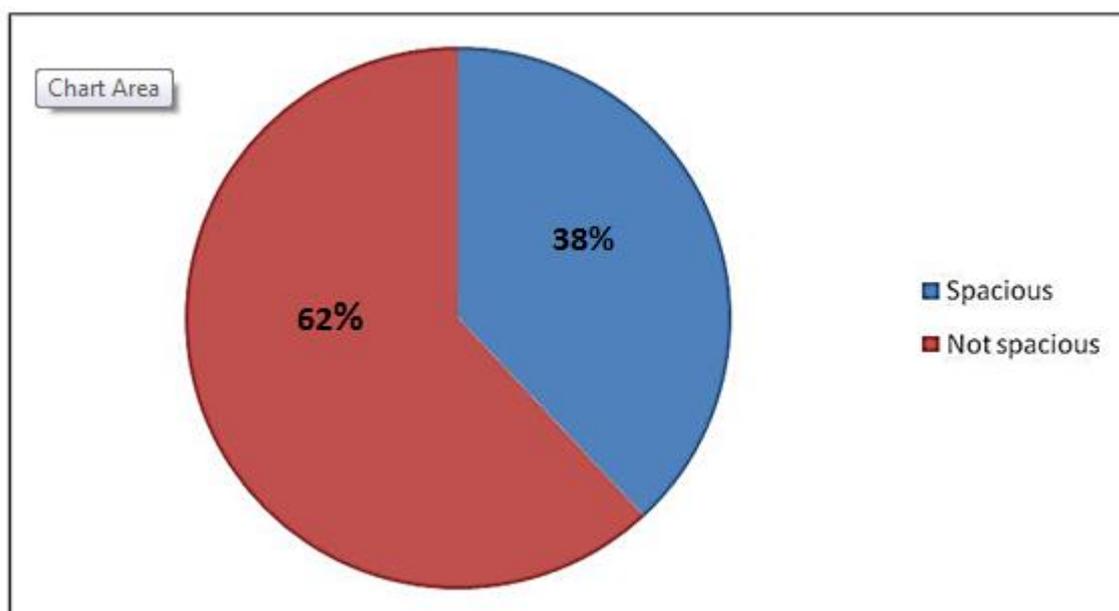


Figure 4.6: Size of class rooms

Out of the 23 schools under study, only 9 (38%) were spacious while 14 (62%) were overcrowded due to free primary education. The researcher making observation on the same issue of size of classrooms observed that out of the 23 (100%) schools visited only 3 (10%) were spacious enough for the learners while 20 (90%) were congested. The researcher also wanted to find out whether the door ways were adequate and if they open outward. The findings were summarized in Fig 4.7

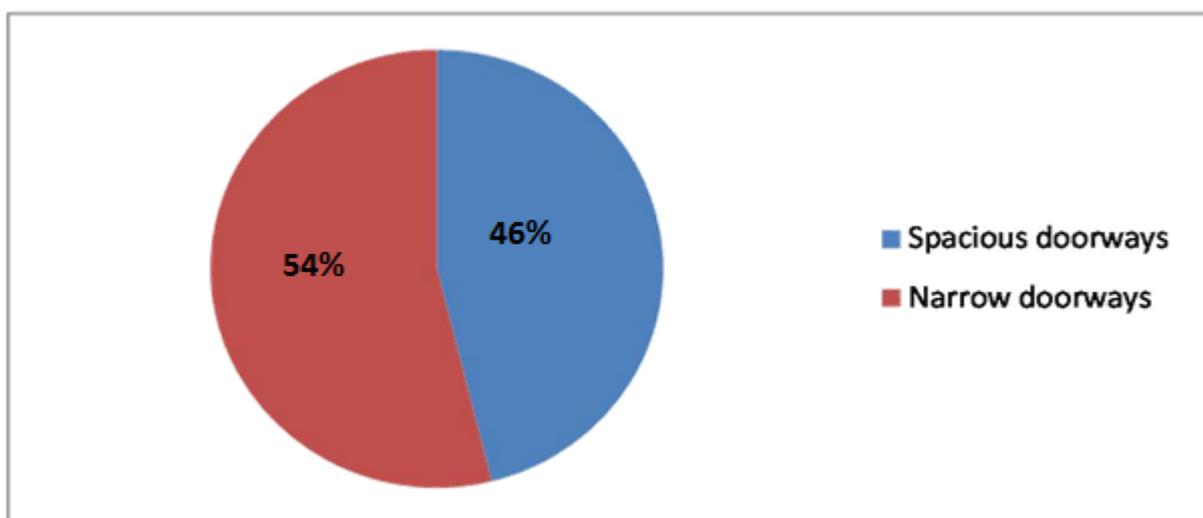


Figure 4.7: Size of classroom doors

The teachers who responded showed that 11 (46%) were adequate therefore wide enough for easy escape in case of disaster while 12 (54%) had narrow doorways, hence not safe for escape for the pupils in case of a disaster. Further findings on doorways showed that only 13 (58%) had their doorways opening outward. This showed that 10 (42%) open inward which is contrary to the MOE safety standards regulations.

The researcher observed that from all the schools visited, so far nothing has been done on the doorways. The doorways could only accommodate two to four children at a go which according to the researcher was dangerous in case of a disaster. The researcher

also observed with concern that none of the schools visited had emergency exits that could be used in case of a disaster.

4.5.4 Nature of windows

Concerning the physical infrastructure, the researcher wanted to know if the classroom windows had grills or not. The findings are presented in Fig. 4.8.

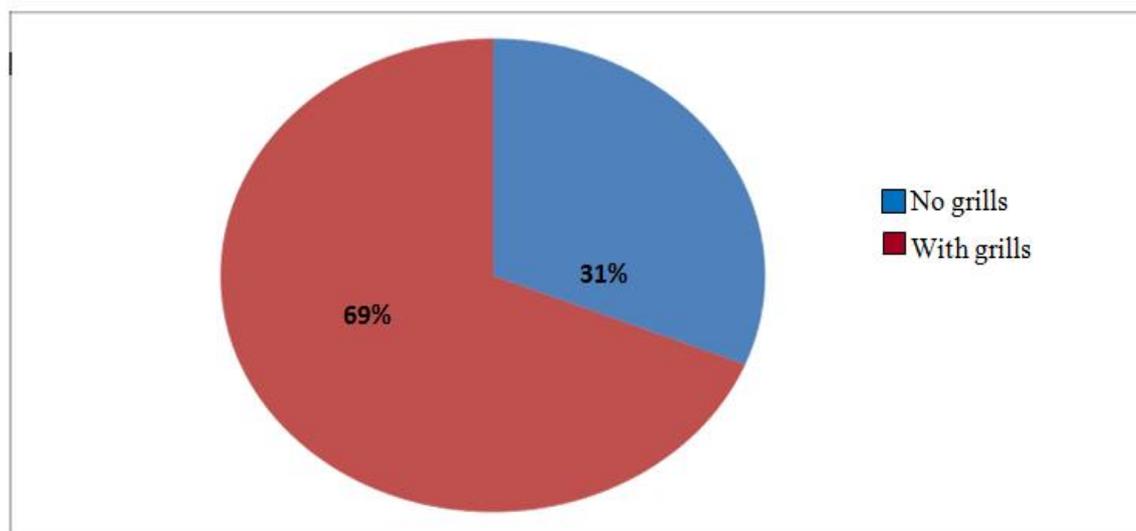


Figure 4.8: Nature of windows

The findings presented in Figure 4.8 show that 23 respondents who participated in the study 8 (31%) indicated that their classroom windows had no grills while 15 (69%) teachers indicated that the classroom windows still had grills.

However, using the observation schedules, the researcher found out that all the schools under study had grills on the windows. From the observation, it was the feeling of the researcher that little effort had been put in towards the implementation of safety standards in schools. The windows were not easy to open outward. Safety on the furniture used was up-to date according to the response of the teachers; however from the observation done by the researcher, some desks were too high for the learners.

The situation could be termed as fair. Most desks were shared per three pupils 18 (77%) while in 5 (23%) schools a desk was shared by two pupils. To determine if the schools were in position to handle fire out breaks, the researcher inquired if each block had been served with fire extinguishers. All the schools under study had no fire extinguishers installed. This implied that in case of a fire break out in these schools, learners would be in danger of either losing their lives or their property.

The researcher further inquired to determine the pupils' safety on the lighting system in the schools. The findings revealed that out the 23 (100%) respondents 17 (73%) had installed electricity in their schools while 6 (27%) were still in the process of installing power in their schools. The respondents further indicated that the sockets were within the reach of the learners, however in most schools through the observation schedule, power had been installed in classes seven and eight. To a larger extent the upper classes from class four to eight had electricity in their classes as compared to the lower classes therefore, the lighting system was insufficient.

The study sought to show responses on whether there were abandoned buildings in the school or not and whether such buildings were safe. 3 (15%) out of 23 respondents indicated the presence of abandoned buildings and also confirmed that the buildings were safe. The researcher using the observation schedule found out that the number of toilets in the schools under study compared to the population of the school were inadequate. The safety manual states that the first 30 learners; 4 closets (holes). The next 270 learners, one extra closet for every 30 learners. Every additional learner over 270 learners: 1 closet per 50 learners.

It was also observed that most schools had kitchens. 18 (76%) had kitchens while 5(24%) had no kitchens. Out of the 23, 10 (45%) were permanent while 13 (55%) were earthen. The researcher also observed that most schools had libraries which were

well organized. This was 20 (83%) and the rest 3 (17%) had their books arranged in boxes in the head teachers office.

4.5.5 Health and safety education

One of the most important strategies of managing disasters in schools is creating awareness on safety to the pupils through health and safety education lessons, UNDP (2008). The researcher sought to find out if learners ever receive lessons on health and safety education. All the 47(100%) respondents acknowledged that the learners are taught health and safety education as a full unit in Science. The study further sought to find out if the health and safety education was included in normal school curriculum or through special programme. The findings were as shown in Fig 4.9.

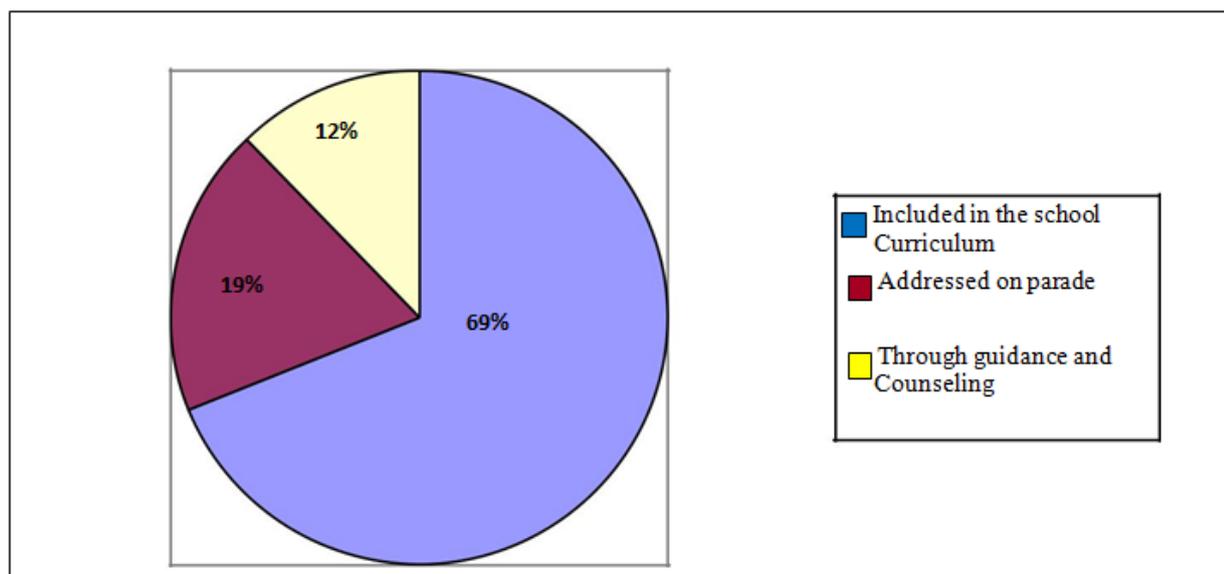


Figure 4.9: Health and safety education

As much all respondents indicated that health and safety education is vital, the Figure 4.9 shows that 32(69%) indicated that safety education was included in the school curriculum in subjects such as social studies and science 8(19%) indicated that the safety education was addressed on parade while 7(12%) had their education through

guiding and counseling sessions which were organized mostly on Thursdays or Wednesdays at games time in most schools.

4.5.6 Safe water supply

The researcher sought to know if the schools under study had a safe water supply. From the 46 respondents only 17 (38%) schools had safe water supply. The study further sought to know the main source of water for the learners as shown in table 4.9.

Table 4.9: Main sources of water in public primary schools in Bungoma south.

Source	Frequency	Percentage (%)
Piped	7	15
Rain	6	12
Stream/river	9	19
Boreholes	24	54
Total	46	100

Teachers and head teacher (respondents) = 46

From table 4.9 only 15% of the teachers under study identified piped water as the main source of water in their schools although not 100% reliable because at the time of study the researcher using the observation schedule identified some taps which were dry. 12% of the teachers identified rain harvested water as the main source of water in their schools. Those who identified stream (river) as the main source were 19%. The majority of the teacher and head teachers (54%) identified the borehole as their main source of water in the school.

According to the Table 4.9, it can be concluded that most schools have no reliable safe source of water for their learners. The majority who depended on boreholes carried this water from their homes. This can be dangerous to the learners because it is not clear if the boreholes are treated or not. In addition, the containers used to transport the water from home to school may bring about contamination. Using the observation schedule the researcher observed that and the findings were as reflected in Fig.4.10.

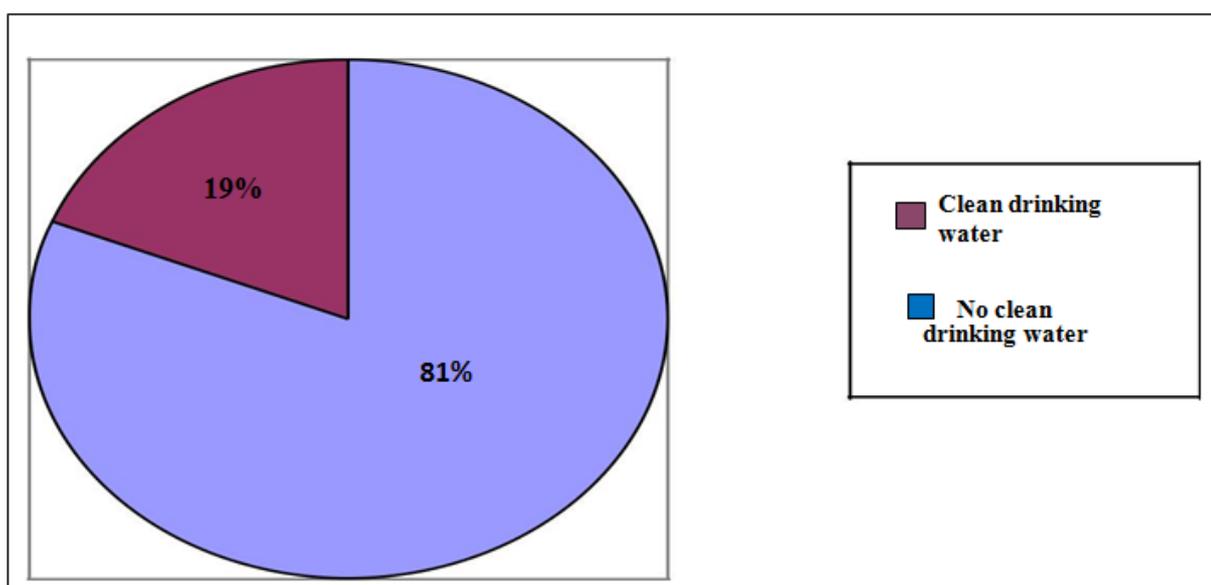


Figure 4.10: Availability of clean drinking water in public schools

From Fig.4.10 only 19% of the schools under study had clean drinking water on their compounds while 81% had no safe drinking water.

4.5.7 School feeding programme

The researcher sought to find out from the teachers if a school feeding programme existed in their schools. The findings are presented in Figure 4.11.

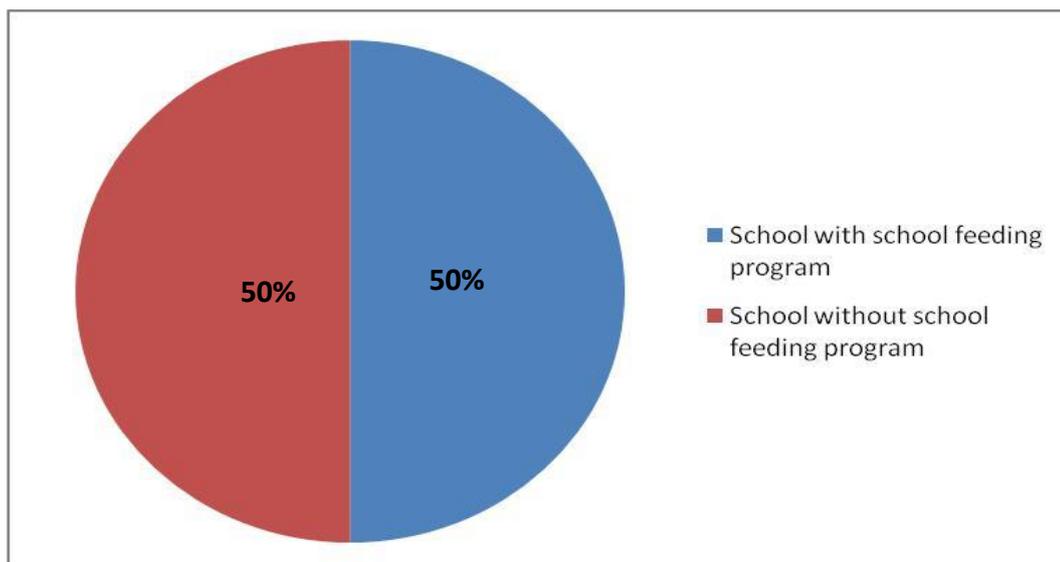


Figure 4.11: School feeding program

The findings presented in Figure 4.11 revealed that 23 (50%) of the 46 respondents (teachers and head teachers) affirmed that they conducted a feeding programme in their schools while the remaining 23(50%) indicated that they had no feeding programme in their schools. Food is a basic requirement for human being; this is according to Okumbe (1998). The results revealed that half the public school in Bungoma south do not have a feeding program and therefore, most of the student have to depend on outside source of food supply such as hawking or eat from home. The finding reflects the sub county's assorted cases of food safety for instance, food poisoning and student learning without food.

4.5.8 Food hawking

The researcher made an inquiry on whether food hawking was allowed in the schools or not. The results are in shown in Figure 4.12.

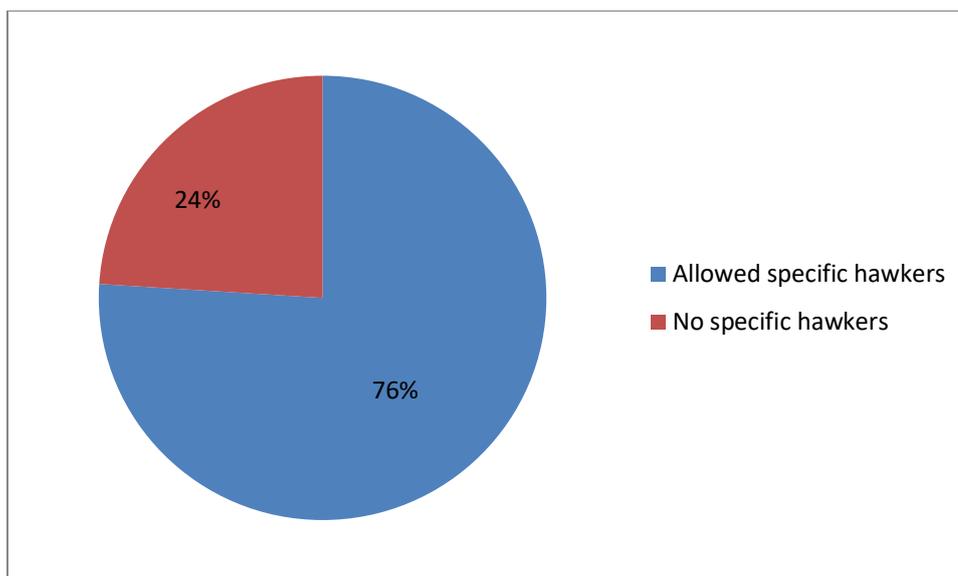


Figure 4. 12: Food hawking

The findings presented in Figure 4.12 revealed that 9 (35%) of the schools head teachers denied hawking in their schools while 14 (65%) accepted hawking in their schools. The respondents further said they had specific hawkers and their details were in the headteacher's office.

4.5.9 Safety against child Abuse

The study wanted to find out how safe the pupils are while at school therefore the researcher sought to know the status of safety against child abuse in schools. The respondents were asked if there were any cases of child abuse reported in their schools and the findings were as summarized in table 4.10.

Table 4.10: Reported cases of child abuse

Response	Frequency	%
Yes	39	85
No	7	13
Total	46	100

Source: Field data (2019)

From table 4.10, 39 of the respondents (85%) indicated some form of child abuse cases that had been reported in their schools while 7 (15%) of the respondents had no knowledge of any reported case on child abuse in their school.

The researcher further asked what kind of abuses had been reported and the findings were as shown in Fig.4.13.

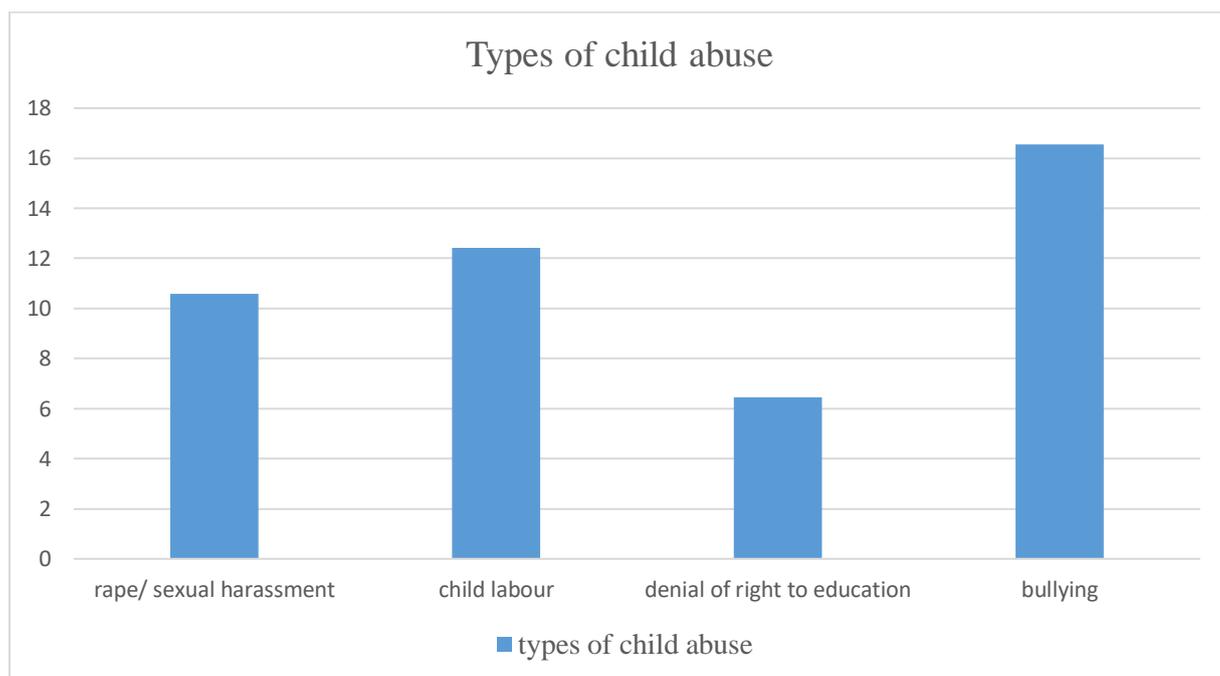


Figure 4.13: Type of child abuse

From Fig. 4.13, 23% of the respondents (teachers and head teachers) identified rape/sexual harassment, 27% identified child labor whereby pupils came to school late and in some cases absenteeism was very high due to children being involved in heavy workload. The respondents also identified denial to right to education which was 14% and 36% identified bullying as a major form of abuse.

4.5.10 Safety against unacceptable behavior

Due to the different forms of child abuse identified by the respondents, the researcher further asked to know how these cases were handled. When asked if they had guidance and counseling programme in their schools, all the 23 respondents (100%)

admitted to have the program. The teachers were also asked how often they guided and counseled the pupils and their responses were as shown in Table 4.11

Table 4.11: Guiding and counseling frequency by teachers

Response	Frequency No. of schools	%
Very frequency (weekly)	2	9
Frequently (monthly)	12	52
Rare (once a term)	9	39
Never	-	-

Source: Field data (2019)

The findings from table 4.11 revealed that guiding and counseling was done weekly in 2 schools (9%), monthly in 12 schools (52%) and once a term in 9 schools (39%).

The respondents further reported that they held both individual and group guiding and counseling.

When asked to respond on what kind of abuses they had counseled, their response was as shown in Figure 4.14.

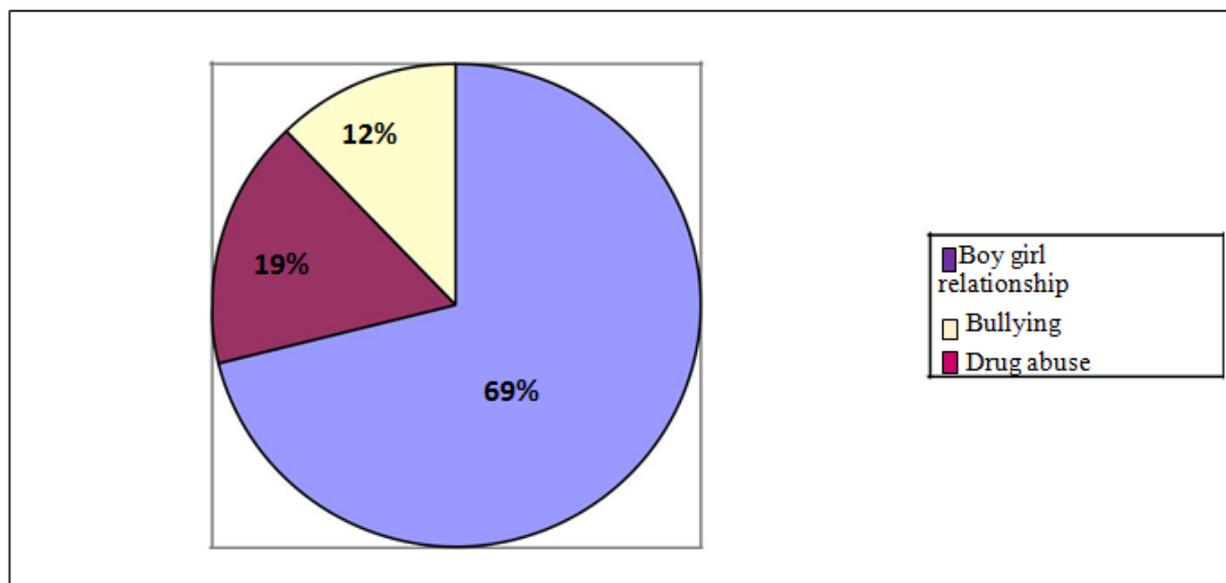


Figure 4.14: Types of abuses counseled

The information in Figure 4.14 shows that out of the 46 respondents 9 (19%) had handled cases of drug and substance abuse, 32 (69%) had handled boy-girl relationships and 5 (12%) had handled bullying.

Findings about if the schools under study organize any training on disaster management skills indicated that none had ever organized such trainings. All the schools under study had never undergone any drill session for disasters such as fire, lightning, floods and storms. The schools under study had no evacuation maps in case of disasters.

When asked about safety programmes put in place to ensure safety of learners in case of a disaster, the head teachers named programs such as safe drinking water through the life straws program, fencing the schools compounds, escape routes, sensitization sessions to all pupils and lightning arrestors as shown in table 4.12.

Table 4.12: Safety programmes put in place

Programme	Frequency	%
Safe drinking water through life straw Program	6	26
Fencing the school	20	87
Escape routes	2	9
Safety sensitization programmes	2	9
Lightning arrestors	5	22

Source: Field data (2019)

Table 4.12 shows that most primary public schools in Bungoma South have a well fenced compound with 87%. There is 26% availability of safe drinking water through life straw program. Lightning arrestors are well fixed averaging to 22%. Escape routes and safety sensitization programmes each have 9% coverage.

From the above information, it is evidenced that most public primary schools in Bungoma South have defective safety measures and most of them have not complied with the ministry of education safety measure manual. This could be the reason why most schools have experienced dormitory/class fires as few schools, 5 (22%) out of the 23 have lightning arrestors, 2 (9%) have safety sensitivity programmes and 2 schools (9%) have escape routes in case of fire and any other catastrophe or any other safety hazard. The information also shows that there is inadequate safe drinking water which has resulted to the rampant water borne diseases witnessed in the primary public schools in Bungoma South.

The researcher sought to know if the physical facilities comply with the MOE safety guidelines all the head teachers who responded indicated that the facilities were safe and that there were no abandoned buildings in their schools.

The researcher further went ahead to find out from the head teachers what could be done to improve the safety status in their schools. Their response was as shown in table 4.13.

Table 4.13: Strategies to improve safety status

What to do to improve safety status in schools	Count	%
Installation of steel shutters	5	22
All entries to have ramps	18	78
Lockable gates at the main entrance with a security officer	22	96
Installation of lightning arrestors	10	43
Installation of fire extinguishers	5	26
Sensitization on safety to staff and pupils	21	91

Source: Field data (2019)

The data from table 4.13 shows that 96% of the respondents supported the idea of all schools having lockable gates with a security officer, 91% of the respondents felt that there is need for sensitization on safety to staff and pupils, 78% felt that all entries should have ramps to cater for the disabled, 43% indicated the need to install lightening arrestors, 26% felt installation of fire extinguishers would be of great help and 22% suggested the installation of steel shutters.

From the above table, most of the respondents agreed with the idea of the different ways to be implemented to curb insecurity and other safety issues.

96% supported the idea of all schools having lockable gates with a security officer. This could help prevent thieves and outsiders who have malicious intentions within the schools vicinity. 91% supported the need for sensitization on safety to staffs and pupils. This idea could help equip both staffs and pupils with relevant skills to apply in case of unsafe issues. 78% had an idea of installation of ramps to cater for the disabled. This was the best measure as it could help the disabled to respond quickly in case of insecurity. Installation of fire extinguishers could reduce cases of fires which destroy school property.

The researcher sought to find out from the curriculum support officer the general safety status of the schools in the zone. The response was that the safety status is still wanting since most of the schools still had challenges of latrines sinking and collapsing. The respondent termed the safety status as average as in some schools, tuition blocks were condemned. From the response of teachers, this response was the same as that of the head teachers.

Sanitation was also wanting since classrooms had no shutters and desks were not enough.

4.6 Challenges faced in the implementation process

The study sought to know if there were challenges faced during the implementation process. The head teachers reported that financial instability was a major challenge. Furthermore there was lack of supervision on the safety implementation process. The respondents also pointed out the inadequacy of infrastructure theft of lightening arrestors and negative attitude of parents. The curriculum support officer cited mushrooming of new schools that makes it hard for the ministry to perform some functions as required.

The teachers under study were also asked if they encountered any challenges in the implementation process. Their responses were summarized and presented in table 4.14.

Table 4.14: Challenges faced in implementing the safety standards

Challenge	Rank	Count	%
Financial constraints	1	23	88
Lack of safety awareness	2	18	69
Lack of accessibility to the safety manual	3	12	46
Poor administration	4	5	19
Unco-operative pupils	5	-	-

Source: Field data (2019)

From Table 4.14, it can be seen that a high percentage of teachers 88% identified financial constraints as the first obstacle to the implementation of safety standards in schools. Lack of safety awareness 69% was identified as another big challenge. Lack of accessibility to the safety manual was also identified as an obstacle with 46%. Poor administration was also identified as an obstacle with 19%.

From the table, it was evidenced that there was poor implementation of safety standards in schools. This was as a result of financial constraints as most public primary schools in Bungoma South region have inadequate capacity to raise enough capital to fund safety implementation. Lack of safety awareness was a challenge since most schools did not receive the training on safety management. Lack of accessibility to the safety manual was another challenge as the Ministry of Education delayed regularly in distributing the manuals in schools. Poor administration in most schools was identified as a challenge since most staff members were either ignorant or had no prior knowledge of handling safety.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions and recommendations of the major findings of the study based on the research objectives. The study sought to find out how effective safety standards and guidelines have been implemented and to what extent in public primary schools in Bungoma sub-county. The researcher used questionnaire, interview schedule and an observation schedule to get information from head teachers, teachers and CSO.

5.2 Summary of the research findings

The summary of the analyzed data was presented basing on research objectives and research questions.

5.2.1 Awareness strategies

The first objective of the study was to examine the awareness strategies on safety measures put in place in public primary schools in Bungoma sub-county. The study established that the level of awareness on the safety measures and guidelines in the schools under study was low. The Ministry of Education had issued safety standards manuals for schools in Kenya which a small percentage of the respondents agreed to have received. Majority of the schools under study did not have copies of the manuals which means that such schools were not conversant with the school safety standards and guidelines. On monitoring of the whereabouts of the learners, the study revealed that the school attendance register were marked twice on daily basis by the class teachers.

5.2.2 Causes of the disasters

The second research objective of the study was to determine the major causes of disasters in public schools in Bungoma south sub-county. The findings revealed that a few schools experienced disasters due to nature of floors, insufficient lighting poorly placed furniture poor electrification and poorly constructed infrastructure. However, most schools experienced disasters due to drug and substance abuse; young as they are in primary schools have indulged in cigarette and bhang smoking as well taking alcohol. The head teachers noted with concern the mushrooming of drinking points in the county.

Most parents to the learners brew the local charm hence taking alcohol to the pupils has become a normal way of life. This confirms what Siringi (2003) noted that if students are under the influence of drugs, they can beat up their teachers, kill colleagues or even rape them. Additionally Pudo (1998) noted with concern that education management in Kenyan schools has been hampered due to students indulging in drug and substance abuse not forgetting the incident of arson in Nairobi Girls High School in which the girl behind the painful ordeal was said to have been under drug influence.

Sharp instruments were another major cause of disasters in the schools under study. Teachers recorded quite a large number of cases reported and dealt with involving learners hurting one another by use of sharp objects like razor blades, needles, nails and pair of compasses as well as pair of dividers. Sitting carelessly on desks with legs blocking aisles in schools, pupils take it as fun but as a result has led to so many injuries as reported by head teachers. To deal with these disasters therefore meant that

schools must fully implement safety standards and guidelines as stipulated in the safety standards manual (Government of Kenya, 2008).

5.2.3 Extent of safety policy implementation

The study sought to examine the level at which schools had implemented the MOE safety standards. The safety on school grounds was average since most of the schools had fully implemented the measures in question while the rest were either in the process or had not implemented the measures at all. On physical infrastructure most schools had not fully implemented the MOE safety standards measures. This is because the study revealed that 38% of the classrooms were spacious while 62% were crowded. Furthermore 46% of schools reported that they had adequate doorways while 54% were narrow.

More information on doorways revealed that 58% of the doorways opened outward while 42% opened inward. Most windows still had grills contrary to the MOE standard measures. As pertains the MOE safety standard on safe health and hygiene for the learners the study revealed that most schools were still implementing the safety measure in question since safe water supply was at 10% and 50% had put in place a school feeding program to curb food contamination and poisoning. Most schools 75% had specific hawkers allowed to sell foodstuffs within the school.

The study further revealed that some of the schools had implemented the MOE safety measures on safety against drug and substance abuse while majority were still in the process of implementing the safety measure in question. From the study in regard to implementation of MOE's safety measure on prevention of fire outbreak in schools, more than 90% of the schools were yet to implement the safety measures since none of the schools had fire extinguishers put in place. Concerning the creation of safety committees, none of the schools had formed the committee. The research confirms the

study carried out on physical infrastructure safeness in public boarding schools in Kenya found out that most schools had not implemented all the school safety requirements (71%) indicated that doors did not open outward while (34.8%) reported that their dormitory and class room windows still had grills. (Maritim et al 2015). Additionally, the findings concur with Waithera (2013) in her study establishment that in most schools classrooms that had been designed to accommodate 35-40 learners were now accommodation double the number.

5.2.4 Major challenges faced in the implementation proces

The schools sampled for study faced challenges implementing MOE safety standards. The most challenging issue identified was financial constraints. Safety standards implementation require finances to be implemented. Therefore, it is important that the government comes in to boost the implementation process in conjunction with the Free Primary Funding program. According to Otieno et al (2010), most schools are poor and cannot afford fire extinguishers. Other challenges faced included lack of safety awareness, lack of accessibility to the safety manual and poor administration.

5.3 Conclusion

The core objective of the study was to establish the implementation of safety standards and guidelines in public primary schools in Bungoma South Sub-county. From the findings, most schools had partially implemented the safety measures and majority of the schools were not aware of the existence of MOE safety standards. The few schools that have tried to put safety measures in place have faced financial constraints which has frustrated their efforts. Remarkable efforts have been done on school compounds by fencing and ensuring the presence of a gate and a security guard at the gate, guidance and counseling programmes were active and safety on health and hygiene was above average.

Some of the public primary schools had failed totally to complement some of the core safety standards therefore exposed the learners to danger. Most respondents indicated that all doorways in the school open outwards and are not bolted from outside, windows in the schools still had grills, schools had no safety committees, the physical infrastructure were rarely repaired, maintained and serviced. Finally some schools experienced strong winds, lightning and thunder crisis which have blown off the roofs and left quite a number of pupils with serious injuries.

The study also concludes that there were no attempt to train personnel to handle disasters, there was also failure on putting in place facilities for learners with special needs. Continuous monitoring and evaluation of safety measures in school is poor by the education office through the mandated body QASO. This implies that although the government had a very good and valuable idea of launching a safety policy in school, the implementing and monitoring organs have not put enough efforts to ensure that these policy measures on safety are adhered and followed to the latter by schools. In summary therefore there is an urgent need to hasten the implementation of safety standards in order to salvage lives of the young nation as well as property destruction.

5.4 Recommendations of the study

The study made the following recommendation regarding implementation of Ministry of Education safety guidelines in public primary schools.

- i) The MOE to mount in-service course for teachers to create awareness on safety.
- ii) The (QASO) Quality Assurance Standards Office and the Curriculum Support Officer (CSO) should ensure that safety standards assessments are conducted in schools on a regular basis to ensure safety of the learners as well as making follow up on any recommendation made is adhered to.

- iii) MOE to support institutions financially by putting up facilities like rams and lightning arrestors to enhance safety.
- iv) The school management should come up with a disaster mitigation committee and safety sub-committees to help oversee school safety and take necessary steps to prevent disaster. The committee will help to include safety measures implementation in schools development plan to ensure safety measures are budgeted for and implemented.
- v) School Administrators should work hand in hand with other departments like the fire brigade to have them regularly inspect the physical infrastructure and make recommendation as well as carry out fire drills in schools to help learners to be informed what to do incase of a fire breakout or any other disaster.
- vi) Guidance and counselling to be emphasized to curb the major causes of disasters.

5.5 Suggestions for further research

The researcher made the following suggestions for further studies.

- i) This study was conducted in only one sub-county therefore the findings cannot be generalized to other sub-counties in the county and nation as a whole. Further research should be done to other sub counties and counties to have a larger picture of the situation in the whole.
- ii) A similar study should be conducted in private schools which were not included in this study to determine their level of implementation.
- iii) A research on the role of the learners and the community on school safety can be good to bring harmony in the implementation process.

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APPENDICES

APPENDIX 1: INTRODUCTION LETTER

Moi University
Department of CIEM
P.O Box 3900 – 30100
ELDORET

Dear Sir/Madam,

RE: REQUEST FOR A RESEARCH IN YOUR SCHOOL

I am student of Moi University, taking a master of Philosophy in EPE in the school of education. I am conducting a research on the implementation of safety standard measures in public primary schools in Bungoma South sub-county, Bungoma County, Kenya. This is a partial requirement for the award of the degree. I request you to allow me conduct the study in your school as it is among the sampled school for the study.

Thanking you in advance for your positive consideration.

Yours faithfully,

Kwata Misanya Caroline
EDU/PG/EDH/1004/15

APPENDIX 11: QUESTIONNAIRE FOR THE TEACHERS

ASSURANCE STATEMENT: Note that this study is for research and learning purposes only, information collected will be confidential. Therefore, you should not indicate your name or that of your school or contact information on the questionnaire.

SECTION A: BACKGROUND INFORMATION

Please respond by ticking or by providing information as required.

1. Your gender

Male	
Female	

2. What is your professional qualification?

Untrained	
Certificate (PI)	
Diploma	
Degree	
Masters	
Other (specify) _____	

3. How long have you been teaching?

Less than 5 years	
5 – 10 years	
Over 10 years	

4. What is the type of your school?

Boys	
------	--

Girls

Mixed

5. What is the status of your school?

Boarding

Day

Boarding and day

SECTION B

I. General safety standard

details. Awareness programs on safety standards

6. Are you aware of the Ministry of Education's safety standards?

Yes

No

7. Does your school have a copy of the safety standards manual?

Yes

No

8. If yes, where is the copy kept?

9. Are you conversant with the provisions in the safety manual?

Yes

No

10. Does your school have a safety committee?

Yes

No

11. If yes, who are the members of the committee (teachers, pupils, parents)

12. Are registers marked on daily basis?

Yes No

13. If yes who marks them? _____

14. If no explain _____

15. Have you ever experienced any disaster in your school?

Yes No

16. Which of these disasters have you experienced in your school?

Please respond by putting a tick for disasters experienced and a cross

for disasters not experienced.

Robbery

Road accidents

Rape

Fire

Lightning

Electrical hazards

Others

Specify _____

17. What are the possible causes of disasters in your school?

Please respond using Y for Yes and N for No.

Sitting carelessly on desks e.g legs blocking aisles

Sharp instruments

Drug and substance abuse

Poorly constructed infrastructure

Poor electrification

Poorly placed furniture

Insufficient lighting

Slippery surfaces

Poor ventilation

II. Safety on physical infrastructure

18. Are your classrooms spacious?

Yes No

Explain your answer

16

.Are the doorways adequate for emergency purposes?

Yes No

Do they open outwards?

Yes No

17

.Do the classroom windows have grills?

Yes No

Are they easy to open?

Yes No

18

.Is each block serviced with fire extinguishers?

Yes No

19

.Is the furniture in the classes appropriate for the learners?

Yes No

20

.How many learners share one desk?

2 3 Other

.21. Are electrical sockets within the reach of learners?

Yes No

22. Are there abandoned buildings in the school compound?

Yes No

Are they unsafe? Yes No

Explain _____

III. Safety in health and safety education

23. Are children taught health and safety education in your school?

Yes No

If yes in what ways?

a) Through special programmes. Yes No

b) Included in the school curriculum. Yes No

c) Any other (specify). _____

IV. Food safety

24. Does the school have a safe water supply?

Yes No

25. What is the source of water in your school?

Tap water Yes No

Harvested from rain Yes No

Collected from the river/stream Yes No

Others (specify)

26. Does a school feeding program exist in your school?

Yes No

27. Is food hawking allowed in your school?

Yes No

28. If yes do you have specific people who run the business?

Yes No

29. Do you allow learners to carry foodstuffs to school?

Yes No

V. Safety against child Abuse

30. Have you handled any cases of child Abuse in school?

Yes No

31. If yes, what kind of Abuse?

VI. Safety against unacceptable behaviour

32. Do you have guidance and counselling sessions in your school?

Yes No

33. If yes, how often

Weekly Monthly Termly

34. Does the school have individual behaviour counselling sessions?

Yes No

35. If yes, what kind of behaviour (specify)

VII. Safety

36. Does the school organize any training on disaster management skills?

Yes No

37. Have you undergone any drill session for disasters such as fire, lightning, floods and storm?

Yes No

38. Does the school have evacuation maps in case of disaster?

Yes No

VIII. Challenges of implementing safety standards

39. What obstacles does the school encounter in the process of implementing MOE safety standards?

(Rank the obstacles in order from the most challenging to the least.)

- i. Poor administration
- ii. Financial constraints
- iii. Lack of safety awareness
- iv. Lack of accessibility to the safety manual
- v. Uncooperative pupils

vi. Any other (specify)

APPENDIX III: INTERVIEW SCHEDULE FOR THE CSO

My name is _____.

I would like to interview you as concerns the implementation of safety standard in Bungoma south sub-county. Freely and honesty respond to the questions asked. Your responses will be used only for the purpose of this study and will be strictly confidential.

1. What is your highest academic qualification?

2. How long have you served as a CSO?

3. How long have you served as a CSO in your current station?

4. What other responsibilities and positions did you hold before you became a CSO?

5. In your own words, how can you describe safety status awareness in your zone?

6. What safety standard programs have been put in place to improve safety in schools in your zone?

7. What is the safety status of schools in your zone?

8. What are barriers to the implementation of MOE safety guidelines in the schools in your zone?

APPENDIX IV: INTERVIEW SCHEDULE FOR HEADTEACHERS

1. What is your highest academic qualification?

2. How long have you served as a headteacher?

3. How long have you served as a headteacher in this school?

4. What other positions did you hold before you became a headteacher?

Safety standards awareness programs

5. Does the school have the MOE safety standard manual?

6. Is it accessible to all other members of the staff?

7. Are the learners sensitized on safety precautions while in school?

8. Has the school ever carried out a drill session in case of any disaster?

9. What examples of safety programs have the school put in place to ensure safety of learners in case of a disaster?

10. Do the physical facilities comply with the MOE safety guidelines?

11. Are there abandoned buildings in your school?

12. What can be done to improve the safety status of physical infrastructure in your school?

13. Which safety courses/workshops have you ever attended?

14. How often do the CSOs/QASOs assess safety in your school?

15. What challenges do you encounter while implementing safety standards in your school?

APPENDIX V: OBSERVATION SCHEDULE

The researcher will be involved in the following observation activities in the implementation of

safety standards in schools.

School code:

No. of pupils:

Date of observation:

Y Where item is present.

N Where items are not present.

YES/NO	ITEM	DESCRIPTION OF STATUS
	Perimeter	
	Sign posts	
	Playgrounds	
	Classrooms	
	Doorways	
	Emergency exits	
	Windows	
	Furniture	
	Lighting	
	Pathways	
	Toilets	
	Composite pits	
	Kitchen	
	Water tanks	
	Libraries	
	Fire extinguishers	
	Gate	

**APPENDIX VI: RESEARCH AUTHORIZATION LETTER FROM
GRADUATE SCHOOL**



MOI UNIVERSITY

Office of the Dean School of Education

Tel: (053) 43001-8
(053) 43555
Fax: (053) 43555

P.O. Box 3900
Eldoret, Kenya

REF: MU/SoEd/PGS/54

DATE: 16th February, 2017

The Executive Secretary

National Council for Science and Technology
P.O. Box 30623-00100

NAIROBI

Dear Sir/Madam,

**RE: RESEARCH PERMIT IN RESPECT OF KWATA MISANYA
CAROLINE - (EDU/PG/EDH/1004/15)**

The above named is a 2nd year Master of Education (M.Ed) student at Moi University, School of Education, Department of Curriculum, Instruction and Educational Media.

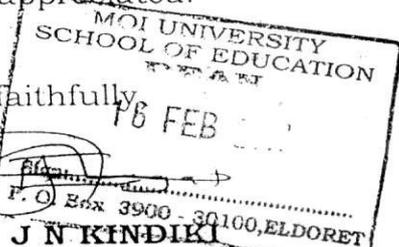
It is a requirement of her M.Ed Studies that she conducts research and produces a thesis. Her research is entitled:

“Implementation of Safety Standard Measures in Public Primary Schools in Bungoma South Sub-County, Bungoma County.”

Any assistance given to enable her conduct research successfully will be highly appreciated.

Yours faithfully,

PROF. J N KINDIKI
DEAN, SCHOOL OF EDUCATION



APPENDIX VII: RESEARCH AUTHORIZATION



**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,
2241349, 3310571, 2219420
Fax: +254-20-318245, 318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
when replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/17/58024/15915**

Date: **10th March, 2017**

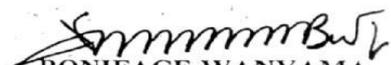
Kwata Misanya Caroline
Moi University
P.O. Box 3900 - 30100
ELDORET.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“Implimentation of safety standard measures in public primary schools in Bungoma South Sub-County,”* I am pleased to inform you that you have been authorized to undertake research in **Bungoma County** for the period ending **9th March, 2018.**

You are advised to report to **the County Commissioner and the County Director of Education, Bungoma County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.


BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Bungoma County.

The County Director of Education
Bungoma County.

*Kindly facilitate
the researcher carry on
the exercise.
Thank you
Support and motivation*



APPENDIX VIII: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
MS. KWATA MISANYA CAROLINE
of MOI UNIVERSITY, 1419-50200
BUNGOMA, has been permitted to
conduct research in Bungoma County
on the topic: IMPLIMENTATION OF
SAFETY STANDARD MEASURES IN
PUBLIC PRIMARY SCHOOLS IN BUNGOMA
SOUTH SUB-COUNTY
for the period ending:
9th March, 2018

Permit No : NACOSTI/P/17/58024/15915
Date Of Issue : 10th March, 2017
Fee Recieved :Ksh 1000



Applicant's Signature

Director General
National Commission for Science, Technology & Innovation

**APPENDIX X: LETTER FROM THE COUNTY DIRECTOR OF
EDUCATION**



REPUBLIC OF KENYA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY
State Department of Education – Bungoma County

When Replying please quote
e-mail: bungomacde@gmail.com

Ref No: BCE/DE/19 VOL I/261

County Director of Education
P.O. Box 1620-50200
BUNGOMA
Dates: 4th April, 2017

**THE SUB – COUNTY DIRECTOR OF EDUCATION
BUNGOMA SOUTH SUB - COUNTY**

RE: AUTHORITY TO CARRY OUT RESEARCH – KWATA MISANYA CAROLYNE
REF: NACOSTI/P/17/58024/15915

The bearer of this letter Kwata Misanya Carlyne is a student of Moi University. She has been authorized to carry out research on *“Implementation of safety standard measures in public primary schools in Bungoma South Sub - County”*, for a period ending 9th March, 2018.

Kindly accord her the necessary assistance.

**CHRISTINE OWINO
FOR: COUNTY DIRECTOR OF EDUCATION
BUNGOMA COUNTY**

APPENDIX XI: MAP OF BUNGOMA COUNTY IN KENYA

