

**FACTORS INFLUENCING COMPLIANCE WITH SAFETY
STANDARDS IN PUBLIC SECONDARY SCHOOLS IN
NYERI CENTRAL DISTRICT, NYERI COUNTY**

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DECLARATION

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

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This research report has been submitted for examination with our approval as university supervisors.

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DEDICATION

I wish to dedicate this report to my husband, Anthony and our children Andrew and Aaron.

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I acknowledge the almighty God who has given me the strength and will to pursue this study.

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LIST OF ABBREVIATIONS AND ACRONYMS

EFA	Education for All
GC	Guidance and Counseling
HOD	Head of Department
KCPE	Kenya Certificate of Primary Education
MDG	Millennium Development Goals
MOE	Ministry of Education
SSM	Safety Standards Manual for Schools in Kenya
UPE	Universal Primary Education
UNICEF	United Nations International Children’s Fund
UNISDR	United Nations International Strategy for Disaster Reduction

ABSTRACT

The purpose of the study was to investigate the factors influencing the compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County. The study aimed to achieve this by assessing the extent to which student population, school physical environment, students' discipline as well as students' training on safety affected the compliance with the safety standards manual for schools. Abraham Maslow's Hierarchy of Needs Theory, which advocates for safety and security as fundamental human needs, was reviewed. The study adopted a descriptive research design and targeted all the principals, heads of Guidance and Counseling departments, student leaders (captains) and First Aid or St John's clubs' students from each of the 17 public secondary schools in Nyeri Central District. The study sampled 17 principals, 17 heads of departments and 51 students from the 17 public secondary schools in Nyeri Central district, Nyeri County. Data was collected using questionnaires, interview schedules and an observation checklist. Data analysis involved both quantitative and qualitative techniques. Data was presented in frequencies and percentages in the form of tables and figures. The study found that there was congestion among the public secondary schools in the study. All the Heads of Departments (n =15) confirmed that there was congestion in their respective schools which posed a challenge to compliance with safety standards. The school physical environment was well taken care of in terms of safety standards; emergency doors that open outwards, enough lighting as well as ventilation in rooms and pathways and grass covered fields were the features present in all schools. The schools in the study had some indiscipline cases but they were few mostly regarding substance abuse. The majority (82%) of the principals in the study showed that discipline levels affected the compliance with safety standards to a small extent. There was no training of students on safety; all the principals in the study (n = 14) indicated that students were only trained on first aid administration. The study concluded that the student population as well as the lack of training of students on safety was bad predictors of the compliance of schools with the safety standards manual. The study also concluded that though there were indiscipline cases, they did not pose a threat to student safety; this was attributed to major indiscipline cases being few and far in between. The study recommended the building of more public secondary schools and expansion of the existing school facilities to ease congestion. The study also recommended training teachers on safety with a view to improving their capacity to teach their students on the same. The study also recommended that The MoE Directorate of Educational Standards and Quality Assurance Commission should establish routine inspection to ensure that safety standard guidelines are adhered to at all times.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Education is the basis upon which any development in a nation is pegged. Good and quality education is achieved when all factors contributing to its success are adhered to. One of these factors is the provision of safe learning environments. Cooper (2000) defines safety as part of organizational culture thought to affect members' attitudes in relation to performance. Without safety, the principal focus of imparting and acquiring skills and knowledge in educational institutions may lack. A safe learning environment is essential for students of all ages. Lazarus, Jimerson and Brock (2003) say that in unsafe environments, adolescents exhibit sleeping disturbances, agitation, increased conflicts and increased delinquency.

The problem of unsafe schools is not limited to any isolated part of the world. It is for this reason that policy makers from various parts of the world have formulated various declarations and agreements that seek to ensure school safety. Various governments are signatories to international conventions and protocols that have emphasized the right of every human being to quality education. Examples include UN Convention on the Rights of the Child (CRC), the Convention on Elimination of All Forms of Discrimination against Women (CEDAW) and The World Conference on Education for all. School

safety has been given a major focus by the United Nations International Strategy on Disaster Reduction (UNISDR) when the 2006-2007 World Disaster Reduction Campaign was devoted to the theme “Disaster Reduction Begins at School”.

In the United States of America and Canada, Zero- Tolerance policies which promote prevention of violence and drug abuse have been adopted in schools. The policies involve expulsion of middle and senior high school students who violate rules related to weapons, controlled substances and violence (Rowe, 2002).

In South Africa, the Safe Schools Project was launched in 2000 to create safe and disciplined learning environments. This project is a national initiative by the Education Department to promote safety at schools and involves surveillance of violence and injury at schools, develops discipline and behavior codes and provides learner training and after school safety activities (Rika, 2008). In Rwanda, the Ministry of Education developed a policy document that outlines the schools infrastructure standards expected to be met by all schools (Hirano, 2009).

Some of the institutional factors that pose threats to students include poorly constructed classrooms, dormitories, playing grounds, insufficient and broken-down toilet facilities, gender insensitive location of toilet and bathroom facilities, and inadequate and inappropriate desks and other furniture.

In Kenya the Children's Act (2001) recognizes the right of the child to protection from work that is likely to be hazardous or interfere with the child or is harmful to the child's health, physical, mental, spiritual, moral or social development.

Kenyan schools have been experiencing issues of safety concerns such as school fires, drug and substance abuse and cases of school unrest which is an indication that the students are at risk. In a school setting, potential hazards are always there and when these accidents happen, Commissions of Inquiry are formed but it only takes a few weeks to mourn and forget all about it till the next accident (Musimba, 2005). Secondary schools have a responsibility to fulfill in ensuring that safety is mainstreamed in order to guarantee smooth running of teaching and learning programmes within the schools. This pushes schools safety up as an issue of prime importance for all stakeholders i.e. the government, Ministry of Education (MOE), parents, staff and care-givers in the institutions. Bush (2007) emphasizes that children should never fear for their safety when they enter a classroom and that schools should be places of safety and learning. A safe school promotes security as well as a healthy well-being of the individuals in it.

In 2008, the Kenya government in collaboration with Church World Service developed Safety Standards Manual for Schools in Kenya as a way of making schools safe zones for students. The basic principle of the safety manual is that schools are responsible for the students' safety while they're at school or on a

school trip. It follows that the Government bears responsibility for any injury that children suffer while at school. In a preface to the Safety Standards Manual, 2008, the then Education Permanent Secretary, Prof Karega Mutahi, observed that apart from personal threats, safety problems for students can emanate from inappropriate school facilities and infrastructure.

Implementation of safety standards and guidelines in public secondary schools has been a challenge to most institutions. Nyakundi (2012) sought to establish why school management is not fully implementing MaE Safety Standards and Guidelines in Public Secondary schools in Marani District, Kenya. The major findings of the study were that the MoE safety standards and guidelines had not been fully implemented majorly due to inadequate funds and inadequate supervision. The author recommended policy makers to follow up, monitor and evaluate safety situation in all educational institutions and provide funds to all schools to enhance disaster preparedness. the findings underscore the importance of adhering to safety standards and guidelines in schools thus education policy makers and other stakeholders' must come up with strategies to sustain school safety to prevent occurrence of disasters in schools however the study only concentrated on the role of school management and ignored other factors such as school infrastructure and environment.

Ntheya (2011) investigated the participation of secondary school administrators in school safety and implementation of safety policies with regard to physical infrastructure and waste disposal in some selected public

schools in Kenya. The study found out that only 20% of the schools had constituted safety sub-committees, none (0%) of the HTs and DHTs served as secretary or member of the sub-committee respectively as required by policy. All respondents ranked school safety last with curriculum, extra-curriculum and guidance and counseling respectively being given more priority. The study also established that HTs attitude on implementation of school safety was positive with an average score of 64.29%. Whereas 92% and 82.67% of the schools had fitted fire windows/doors without grills and fire extinguishers respectively, a paltry 16% had fitted fire alarms while none (0%) posts evacuation maps in its buildings nor has established a monitoring and evaluation system of school safety.

With regard to waste disposal, the majority 65.33% employed unsustainable means of waste disposal where they would abandon pit latrines once they are filled up and excavate others and another 21.33% manually emptying them with buckets exposing workers to the risk of contracting communicable diseases. Further, only 29.33% provided learners with gloves wherever they cleaned their sanitation facilities while none (0%) undertook waste segregation. The author concluded that the participation of school administrators in school safety issues was low and the overall implementation of safety policies was way below the requirements as stated in the safety manual.

Migiyo (2012) investigated the implementation of the recommended safety standards in public secondary schools in Borabu District, Kenya. The findings revealed that most public secondary schools in Borabu District, Kenya were aware of the existing MoE safety standards manual, but the majority of the schools had not implemented it fully. The study revealed that the status of school safety was wanting, and that the public secondary schools that tried to implement the MoE safety standards faced number of challenges key among them lack of funds.

Mburu (2012) sought to identify factors influencing the implementation of safety standards in public secondary schools in Limuru district, Kiambu county Kenya. The study found that all the sampled schools had set up safety committees and the committees met frequently. Some of the teachers sampled had come across the safety standards manuals in their schools but others had not. The learners confirmed their involvement by the school administration in safety programmes to some extent. The teachers confirmed that they had attended safety training programmes at 63% while 37% of the learners sampled had equally attended safety training programs.

Omolo and Simatwa (2010) carried out an assessment of safety policies in public secondary schools in Kisumu east and west districts, Kenya. The study found out that the school principals and QASOs' attitude on safety policies was positive, dormitories in 70% of the schools had emergency doors and 96.7% of the schools had first aid kits. However, there was decreasing trend in

conducting fire drills, only 26% of the schools had fire extinguishers, there was crowding in 70% of the schools and 93% of them had inadequate toilets therefore the overall implementation of safety policies fell short of the requirements. Musimba (2005) conducted a research on a comparative study of the levels of adherence and implementation of safety standards guidelines in secondary schools in Machakos District and established that most head teachers were committed to implementing the guidelines. The study found lack of finance as the main cause of failure in levels of implementation of the guidelines.

Wanyama (2011) sought to ascertain the level of compliance with health and safety standards for the emergency response in secondary schools in Sabatia District, Vihiga County, Kenya. The findings of this research show that the majority of secondary schools in Sabatia District had complied with health and safety standards for the emergency response in the provision of infrastructure and in hygiene. All the schools in the study had over 60% compliance in provision of perimeter fence, doors to the buildings opening outwards, stairs on both ends of storey buildings, emergency exits on laboratories, halls and dormitories, removal of window grills and long walls of classrooms running from east to west. There was however less than 20% compliance by schools on the fitting of lightning arrestors on buildings. On hygiene, there was over 80% compliance by schools in providing uniform to their non-teaching staff and medical examination of food handlers. There was less than 30% compliance

by all schools in provision of first aid kits, sanatorium and hiring of qualified health personnel. Most schools had not complied in the area of emergency response against fire. The conclusion drawn from this research is that most schools had not fully complied with the health and safety standards for the emergency response. The researcher recommended training of all head teachers in school health and safety. He also recommended for provision of resources to facilitate fixing of lightning arrestors on the buildings.

1.2 Statement of the problem

Nyeri County is located in the central highlands in the former Central province. Nyeri Central district has 17 public secondary schools as of December 2012 (PDE, Nyeri, 2012). Some secondary schools in the county have encountered safety tragedies such as the Nyeri High School where in 1999 four prefects were burnt by fellow students (Musimba, 2005). In 2010, Endarasha Boys Secondary Schools dormitory burnt down killing two students (Otieno, 2010). In Giakanja Boys Secondary School, property valued at thousands of shillings was burnt down in a dormitory fire (Ngunjiri, 2012). Such safety crisis in schools Nyeri and other parts of the country prompted the government to come up with a policy on school safety which culminated in the 2008 Safety Standards Manual for Schools in Kenya.

The Ministry of Education (MoE) prepared a safety standards manual in collaboration with Church World Service and other key stakeholders. The guidelines, code-named School Safety Standards Manual for schools, were

issued and aimed at ensuring that the safety of students in schools is established and sustained. According to Mr. Mutula Kilonzo, a former Minister for Education, any school that ignores the aspects of learner safety may inflict considerable damage to the physical social and mental health of students.

When these fire accidents happen, members of school communities are affected emotionally and this disrupts the learning process in the schools (Musaa, 2009). There is need for all public secondary institutions within Nyeri Central district to comply with safety standards in order to avoid future problems that would have otherwise been prevented. Safe schools go a long way in minimizing the disruption of education activities within schools. This study sought to determine the factors that influence the compliance with safety standards with a view to establish the extent of compliance in these institutions.

1.3 Purpose of the study

The purpose of the study was to investigate the factors influencing the compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County.

1.4 Objectives of the study

The study focused on the following objectives:

- i. To establish the extent to which the school student population influences the compliance with safety standards in public secondary schools in Nyeri Central district.
- ii. To establish the extent to which the school physical environment influences the compliance with safety standards in public secondary schools in Nyeri Central district.
- iii. To establish the extent to which student discipline levels influence the compliance with safety standards in public secondary schools in Nyeri Central district.
- iv. To establish the extent to which student training on safety influences the compliance with safety standards in public secondary schools in Nyeri Central district.

1.5 Research questions

To achieve the above objectives, the following research questions were formulated:

- i. To what extent does the school student population influence the compliance with safety standards in public secondary schools in Nyeri Central district?
- ii. To what extent does the school physical environment influence the compliance with safety standards in public secondary schools in Nyeri Central district?
- iii. To what extent do the students' discipline levels influence the compliance with safety standards in public secondary schools in Nyeri Central district?
- iv. To what extent does student training on safety influence the compliance with safety standards in public secondary schools in Nyeri Central district?

1.6 Significance of the study

The study findings may be useful to the Ministry of Education's Directorate of Educational Standards and Quality Assurance Commission in determining the strategies to be employed in implementing safety programs in schools. The

study findings may benefit the school principals in identifying intervention measures they need to take in their individual schools to enhance safety as well as crisis preparedness. Students may benefit bearing the fact that in safe environments, meaningful teaching and learning processes take place.

1.7 Limitations of the study

Getting the co-operation of the target population especially the school captains and first aid students could raise challenges because they might have feared giving answers that are contrary to the school operations; however, they were assured of the confidentiality of the process.

The research data collection was carried out during the long rains season and some of the roads were impassable. Motor-bike services were employed to reach the target population in inaccessible areas.

1.8 Delimitations of the study

Delimitations are the boundaries of the area of study (Orodho, 2005). The study was carried out in all the 17 public secondary schools in Nyeri County (D.E.O, Nyeri, 2013). The respondents in this study were secondary school principals, guidance and counseling heads of departments, student leaders (school captains) and first aid or St John's club students.

1.9 Basic assumptions

The researcher assumed that:

- i. The principals and other stakeholders were interested in the compliance with safety standards and would truthful responses.
- ii. That every school had its own unique environment that influences the compliance with safety standards.
- iii. That the school principals were complying with the guidelines stipulated in the MoE's Safety Standards Manual for Schools in Kenya 2008.

1.10 Definition of significant terms

Some terms are used in this study that may have different meaning in different context. These terms are defined according to their meaning in this study.

Compliance refers to the schools conforming to the safety guidelines provided.

Discipline level refers to the extent to which students are able to obey rules and control behavior within their school setting.

Influencing refers to how factors affect the compliance with safety standards in schools.

Physical environment refers to the natural and built infrastructure in a school.

Safety training refers to the acquisition of skills, knowledge and competencies as a result of the teaching of vocational skills and knowledge in regard to safety.

School safety refers to freedom from danger, injury, risk or loss within a school.

Standards refer to the school safety guidelines provided for all secondary schools in Kenya..

Student population refers to the registered total number of students in a secondary school.

1.11 Organization of the study

This study was divided into five chapters. Chapter one sought to introduce the problem under investigation by giving a brief background, stating the problem, identifying its objectives and guiding questions, giving limitation and delimitation of the study, outlining the basic assumption of the study and describing the organization of the study. The second chapter provides the literature review introduction, student population and safety, school physical environment and safety, student discipline levels and school safety and student training on safety. The summaries of literature review, theoretical and conceptual framework of the study were also presented in this chapter. The third chapter dealt with research methodology which comprises of research design, target population, procedure, research instrument, instrument validity

and reliability, data collection and analysis. The fourth chapter consists of data analysis in relation to the stated objectives and guiding questions and discussion of the finding. Lastly, the fifth chapter consists of summary of the study findings, giving conclusions, recommendations and suggestions for further reading.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covers the literature review of the study under the following sub-sections student population and school safety, physical environment school safety, student discipline and school safety and student training and safety.

2.2 Safety standards manual for schools in Kenya

The Safety Standards Manual for Schools in Kenya was published by the Ministry of Education in 2008. According to the then Minister of Education, Professor Sam Ogeri, the Ministry in collaboration with Church World Service and other key stakeholders, saw it fit to initiate the School Safe Zones (SSZ) Programme through which 60 schools were supported through the pilot phase of the initiative. Experiences gained from the pilot phase have enabled us to develop this Safety Standards Manual for application nationwide. It was in view of the success of the pilot phase of the programme that the Ministry of Education with the support of CWS engaged a team of consultants to compile a Safety Standards Manual for use in all Kenyan schools. The consultants were guided and mandated to cast the concept of school safety widely to embrace diverse issues as they impinge upon the safety of learners, personnel, parents and the catchment communities around the schools.

The Minister explained that the need for a policy guideline was necessitated against the backdrop of the 2007 – 2008 post-election violence where early in 2008 the country experienced unprecedented insecurity, leading to internal displacement of over 300,000 people, many of them school children. In addition, many schools in the affected areas had their infrastructure destroyed thus disrupting learning in schools, when children returned to their home areas. The safety standards manual was developed in response to the under the Children's Act 2001 which dictates that it is a crime to subject any child to any form of child abuse.

The safety standards manual defines school safety are the measures undertaken by the learners, staff, parents and other stakeholders to either minimize or eliminate risky conditions or threats that may cause accidents, bodily injury as well as emotional and psychological distress. To that effect, disaster in the safety standards manual refers to a serious disruption of the functioning of a community or society, causing widespread human, material, or environmental losses which exceed the ability of the affected population to cope. The safety standards manual lists the threats to safety as accidents, school violence and harassment, lack of adequate health care and nutrition, lack of sensitivity to sexual maturation challenges for both boys and girls, armed conflicts and insecurity, hostile school environment.

The main objective of the safety standards manual is to create and maintain a safe, secure and caring environment that facilitates and enhances quality

teaching and learning processes in all schools in the country. More specifically, school safety seeks to provide opportunities for the learner to exploit and maximize potential for learning, growth and development, provide opportunity for the learner to participate in enhancing school safety and promote, maintain and contribute to the understanding of child and staff safety. School safety also provides a benchmark for monitoring and appraising the safety status of schools, empowers members of the school community to handle disasters and thus minimize risks. Schools safety enables students and teachers provide first line emergency services to learners and staff who become victims of injury or are taken ill, counsel, guide and advise learners and staff on issues relating to school safety, empower the school to liaise with parents, members of the community and other partners in order to increase awareness about issues related to school safety as well as forge alliances and networks that enhance school and student safety.

According to the safety standards manual, safe school should have the following indicators: high retention rate of enrolled learners, strong focus on teaching and learning, reflected by better academic performance and all round character development amongst its learners. Visible strategies in promoting the rights of children as provided in the Convention on the Rights of the Child and in Children's Act. Other indicators include high levels of interaction between school administrators, teachers, learners, sponsors parents/guardians and the community, among others. Active participation of community in

school programmes. Visible presence of key stakeholders such as relevant Government officials, private sector representatives, religious leaders, and representatives of NGOs in providing material, psychological and spiritual needs of the learners and staff. Adequate and well maintained facilities such as toilets and sanitation facilities. Clearly demarcated school grounds with proper fencing and secure gates/boundaries. An environment free from drug and substance abuse, trafficking and illegal hawking and low incidences of indiscipline are good indicators of school safety.

The school safety manual dictates that the direct responsibility of overseeing school safety should fall within a specific School Safety Committee which comprises of Chair, School Management Committee or Board of Management chairperson, principal, deputy principal, teacher in charge of school safety, guidance and counseling teacher, teacher union representative (in the school , an Ex-officio from AEO's Office, a representative of the Crisis Response Team (CRT) and two other members of the School Management Committee/Board of Management. The manual details that the functions of the committee is to identify the safety needs of the school; mobilize resources required by the school; monitor and evaluate the various aspects of school safety; form sustainable networks with all stakeholders; seek the support of parents and stakeholders and ensure their participation in activities relating to school safety and constantly review issues of student safety in and around the school.

This manual has provided the necessary information guidelines and instruments needed in design, implementation and evaluation of a school safety programme. However, all those concerned must use the manual bearing in mind local circumstances. For this reason, school managements and their stakeholders must constantly examine and re-examine the local circumstances and decide on what they need to do to ensure safety of children in and out of schools. The purpose of the study was to investigate the factors influencing the compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County.

2.3 Student population and safety

In recent years, Kenya has experienced continued growth in student population in secondary schools as a result of the introduction of Free Secondary Tuition Program which the government introduced in 2008 with a target of raising student enrolment to 1.4 million by the end of that year (MOE, 2008). This is in accordance with the Kenyan law and the Millennium Development Goals (MDGs) of 2000 that seek to achieve the Universal Primary Education (UPE) by 2015. Table 2.1 shows the number of secondary schools in the Kenya and enrolment.

**Table 2.1 Number of existing public secondary schools and enrolment
2003 – 2010**

Year	No. of schools	Enrolment (million)
2003	3,622	0.87
2006	3635	1.03
2008	6566	1.32
2010	7308	1.70

Source MOE A Policy Framework for Education (2012)

Table 2.1 shows that the existing secondary schools have not proved adequate to accommodate the rising student population transiting from primary schools. According to the MOE Policy Framework for Education (2012) in 2003, there were 3622 public secondary schools, which increased to 7308 in 2010 against a population of about 1.70 million students.

While free secondary education has increased participation and access, it has at the same time created considerable problems. It has exacerbated the problem of teaching and learning facilities. As a result of the high influx of new students, classrooms are congested. Many schools are understaffed as a result of the free secondary education programme. This does not augur well for the quality of education being delivered or the security of students. Muthuiya (2013) carried out a study to establish the emerging issues and challenges facing implementation of free secondary education policy on access and retention in Tigania East District, Kenya. Among others, the study

found that the major challenges included over enrolment of students leading to strained physical facilities, inadequate facilities, lack of enough funds from the government. Chabari (2010) carried out a similar study to investigate the challenges facing the effective implementation of FSE in Kangundo District, Kenya in relation to adequacy of learning resources and funding to schools. The study established that more students were able to attend schools as a result of free secondary education though this stressed the available resources in the schools. The major shortcoming of these two studies is that Muthuiya (2013) and Chabari (2010) did not look at the security situations schools nor the compliance to safety standards of the secondary schools in their respective studies.

Frederiksen (2011) says that Kenya education is fundamentally flawed because there aren't enough spaces in secondary schools. As a result, the physical infrastructure has been over-stretched to the point of compromising safety standards in these schools. One of the factors constraining growth in secondary school enrolment is lack of adequate secondary schools to match the increasing student population. KENPRO (2010) says that Kenya education quality has not kept pace with quantity and the dramatic rise in student population has further stressed the schools physical facilities. The report adds that most schools do not have adequate classroom to accommodate the large number of pupils enrolled under the FSTE program.

2.4 School physical environment and safety

A school physical environment plays an important role in the compliance with safety measures. Gathoni (2013) established that some buildings in schools were unsafe for teachers and students in terms of structural designs and space. Mayer (2007) says that a school should convey a feeling of welcome to the students. He adds that in unwelcoming physical environments, young people respond in the same ways as if they were feeling unsafe. They will close themselves off from the school and attempt to stay in a protective bubble, isolated from the efforts of the teachers and staff to educate them.

Creating a welcoming school goes hand-in-hand with safety. This resonates with the findings that buildings have significant effect on behavior of inhabitants whereby the better the built environment is, the more positive the impact on the students (Earthman, 1998). Picus (2013) says that an effective school facility at a minimum should provide a physical environment that is comfortable, safe, accessible, well illuminated, well ventilated, and aesthetically pleasing. He adds that the school environment is much more than a passive container of the educational process it is an integral component of the conditions of learning. The layout and design of a facility contributes to the place experience of students. Depending on the quality of its design and management, the facility can contribute to a sense of ownership, safety, privacy as well as sociality, spaciousness or crowdedness.

2.5 Student discipline and school safety

Mayer (2007) says that school discipline is a key to school safety. He states that the simplest rules are the building blocks of school discipline. Enforcement of the school rules should be taken seriously by all staff. When a school enforces discipline among the students, it sends a strong message of safety to the student body. Many of these rules will be specific to the school and the community that it serves, but some rules are universal among all schools. With this in mind, he proposes that creating a safe school is a fundamental concept that all schools should take into account in an effort to successfully educate the students.

Marshall (2004) suggests implementation of character education or the promotion of fundamental moral, use of violence-prevention and conflict-resolution-curricula, peer mediation, prevention of acts of bullying and provision of a safe environment for staff and students as a number of interventions that can be employed to improve the overall student discipline and school safety.

UNICEF- Kenya developed a program for MOE in 2009 based on participation and peace to militate against the violence in schools. The national program involved development of school councils was started in collaboration with the Ministry and the National Association of Head Teachers. The report says that the adoption rate of school councils that stood at 34 per cent in 2011 has resulted in reduction of unrest and violence in schools. (UNICEF,

2011). This agrees with Muindi (2012) findings that participation of learners in management of secondary schools have reduced cases of unrest.

According to Garegae (2007) lack of discipline interferes with the teaching and learning process, manifests itself in various ways including bullying, vandalism, alcohol and substance abuse, truancy, inability or unwillingness to do homework. He further says that if children are not properly taught moral issues, they graduate into criminal gangs instead of educated citizens who could develop the socio-economic sector of the country. The American National Association of Psychologists (2006) emphasizes the need for school to teach students the alternatives to violence such as peaceful conflict resolution and positive interpersonal relationship skills.

2.6 Student training on safety

Gathoni (2013) establishes that teachers lack training in fire fighting techniques and that most schools, consequently lacked fire fighting preparedness in some sampled Kenyan schools. They lack information on safe administration of first aid, despite being entrusted with administering the same to their colleagues and students.

According to SSM (2008) when safety training is provided for students, indicators for safety such as active participation of school programs, sense of ownership and low incidences of indiscipline are noted. Training such as fire drills, fire marshals, first aid and evacuation procedures in case of a crisis

break-out go a long way in prevention of or lessening the effects of a disaster. Walko-Frankovic (2012) says that staff also needs training on topics that include disruptive students and potentially violent situations.

2.7 Summary of the literature review

The literature review has established that school safety is a sensitive issue all over the world. Issues affecting school safety differ all over the world. In Kenya, safety issues include fire disasters, student's strikes and vandalism of school property. The literature has also showed that student population, physical environment, student discipline and student training on safety have a role to play in promotion of school safety.

In the course of reviewing literature the researcher has identified several gaps in existing studies. Studies by Musimba (2005) and Otieno (2010) only looked at fire disasters and ignored other safety issues such as vandalism. Gathoni (2013) study concentrated on the training of teachers in implementing safety standards but ignored students' discipline and awareness in ensuring school safety. The study wishes to fill these gaps by investigating the institutional factors influencing the compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County.

2.8 Theoretical framework

This study is based on Abraham Maslow's Hierarchy of Needs Theory (1943). The proponent, Abraham Maslow presented a hierarchy of needs model using

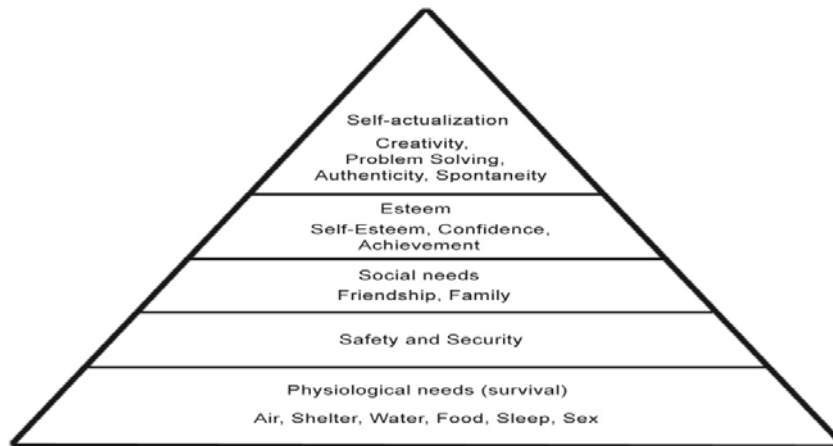
the terms physiological, safety, social, esteem and self-actualization to describe the pattern that human motivations generally move through. Physiological and safety needs are considered lower level while social, esteem and self-actualization are said to be the high level needs. He believed that human beings possess a set of motivation systems that are not related to rewards or unconscious desires.

According to Maslow, individuals are motivated by the unsatisfied needs in each level. The human psychological needs are arranged with the understanding that people are incapable of paying higher attention to higher level needs when lower level needs remain unmet. Once the needs are met, they cease to be motivators and the individual moves up to the next level. The lower level needs include food, shelter, clothing, shelter and safety. With their physical needs relatively satisfied, the individual's safety needs take precedence and dominate behavior. Absence of safety may be due to war, natural or man-made disaster.

The safety needs are protection from elements, security, order, limits and stability financial security, health and well-being of an individual. The theory supposes that humans prefer a safe, organized and predictable world. They avoid physical harm and chaos and in cases of threats, safety needs predominate. Maslow supposed that all humans struggle to reach the highest levels of their abilities and that everyone is capable and has the desire to

esteem needs and self- actualization levels. The elements of this theory are shown in Figure 2.1

Figure 2.1 Abraham Maslow's Hierarchy of Needs Theory



Source Marshalls (2004)

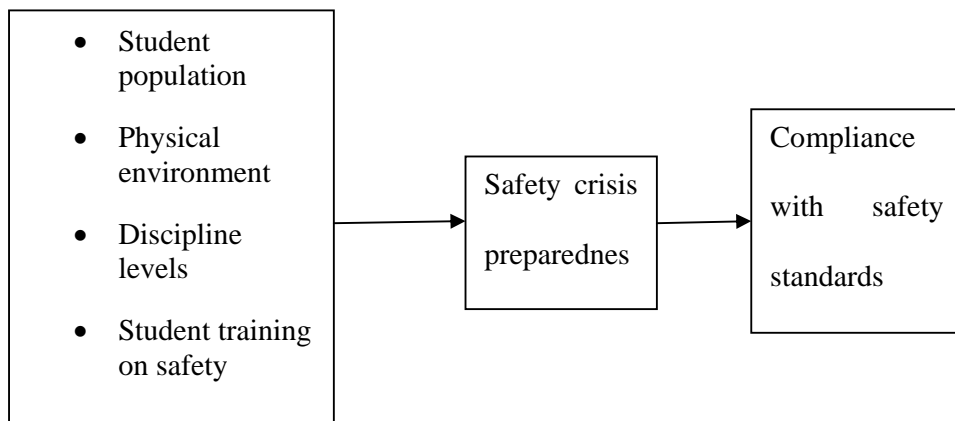
The theory has been critiqued for its little proof to bear its hierarchical aspect. For instance in some cultures, communal needs are placed before any needs. There is also little proof that people are motivated to gratify only one level at a time (Babayusi, 2011). This theory is relevant to this study because it prioritizes safety as a basic human need. In regard to this study, for a school to achieve its education mission it is important to make students feel safe and secure. Depriving students of a safe and secure learning environment is simply denying them their fundamental human right.

2.9 Conceptual framework

A conceptual framework was proposed for the study to show the study's variables and how they interact. Figure 2.2 shows the independent variables, their indicators and how they contribute to the dependent variable, school safety.

Figure 2.2 Conceptual Framework

Institutional factors



This study sought to investigate the factors influencing the compliance with safety standards in public secondary schools in Nyeri Central, Nyeri County. The independent variables in the study are student population, physical environment, student discipline levels and student training on safety factors which reviewed literature has established have a role in ensuring school safety which is the dependent variable in the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives a detailed outline of how the study was carried out. It describes the research design, target population, sampling technique and sample size, research instruments, validity and reliability of the research instruments, data collection techniques, data processing and analysis procedures.

3.2 Research design

The study adopted a descriptive research design which involves collecting data in order to answer questions on current status of subjects of the study. It can be used to collect information about people's attitudes, opinions or habits (Kombo and Tromp 2006). The data assisted in determining the current state of public secondary schools in relation to safety in Nyeri Central district. Kothari (1985) design recommends descriptive design as it allows the researcher to describe, record, analyze and report conditions that exist or existed. The researcher related school safety with student population, schools' physical environment, student discipline and student safety training.

3.3 Target population

The population consisted of all principals, heads of guidance and counseling departments, 2 student leaders(captains) and 1 first aid or St John's clubs' students from each public secondary school in Nyeri Central. There were seventeen public secondary schools within Nyeri Central district, (DEO Nyeri, 2012) as shown in Table 3.1. The study entailed boys, girls, mixed, day and boarding schools within Nyeri Central district

3.4 Sampling technique and sample size

Orodho (2005) suggests that in a population of 30 or less subjects, census technique can be employed in data collection. Census research technique involves a complete enumeration of all the items in a population. Unlike a sample survey, in which only a subset of the elements is selected for inclusion and enumeration, a census generally does not suffer from sampling error. The researcher employed the census technique to select 85 participants as shown in Table 3.1.

Table 3.1 Sampling frame

Population	Total Population
Principals	17
Head of Department (Guidance and counseling)	17
Student Leaders	34
First aid students	17
Total	85

3.5 Research instruments

In this research, the researcher used questionnaires interview guide and an observation checklist. The researcher developed research instruments, a survey questionnaire, a structured interview guide and an observation checklist to measure the variables.

A **questionnaire** is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents (Mugenda and Mugenda, 2010) The researcher has opted for the questionnaire because the responses are gathered in a standardized way so questionnaires are more objective compared to other tools of data collection. It is also relatively quick to collect information using a questionnaire. Additionally, potential information can be collected from a large portion of a group.

An **observation checklist** is a list of things that an observer is going to look at when observing a particular phenomenon or item(s). An observation checklist was used to collect data on the physical aspects of schools' safety programs such as fire extinguishers and laboratory safety rules. Observation checklists were preferred for this role because the researcher is able to see what has been done therefore the data gathered is highly reliable (Orodho, 2005).

Interviews are useful for gathering in-depth information about the viewpoint and opinions of a limited number of respondents. The interview schedule is an

interview with pre-coded questions to produce quick, cheap and easy quantitative data which is high in reliability (Mugenda and Mugenda, 2010). The researcher prefers interviews because they are useful to obtain detailed information about personal feelings, [perceptions and opinions] and they have a high chance to achieve a high response rate and because ambiguities can be clarified and incomplete answers followed up. Structured interview schedule was used on principals, guidance and counseling (guidance and counseling) HODs and one semi- structured interview schedule to gather data from the student leaders.

3.6 Validity of research instruments

Validity is defined as the degree to which a test measures what it purports to measure (Borg and Gall, 1983). Content validity was used in this study; content validity is the degree to which the instrument measures what the test is designed to measure. This is important in the establishment of accuracy and truthfulness of the research. In order to ascertain face validity, the instruments were designed and handed to the supervisors in the School of Education, University Of Nairobi for analysis and the provision of feedback. Instrument validity was further be established by undertaking pilot study

3.7 Reliability of the instrument

Orodho (2004) states that reliability of a measurement concerns the degree to which a particular measuring procedure gives similar results over a number of

repeated trials. To test the reliability of the instruments the study used the test-retest technique. Test-retest reliability is measured by administering a test twice at two different points in time.

The questionnaires were administered to the respondents in the pilot schools similar to those in the sample. According to Orodho (2004) the number in the pre-test should be 10 percent of the entire sample. Therefore the study carried out a pilot study on 2 principals, 2 guidance and counseling HODs, 4 student leaders and 2 first aid students in public secondary schools in Tetu, a neighboring District. The study tested the internal consistency of the instruments by computing Cronbach's alpha to determine the reliability of the instrument. A Cronbach's alpha of 0.83 was obtained in the questionnaires which qualified the instruments as reliable since the coefficient was above the recommended 0.8 and above according to Cronbach (1957).

3.8 Data collection

The researcher sought a clearance letter from the Department of Education, University of Nairobi; this letter enabled the researcher get a research permit from the National Council for Science and Technology. The researcher then got permission from the District Education Officer Nyeri. The researcher then drew a visit schedule and visited the schools personally in order to get consent from the principals to administer the instruments. This enabled the researcher to familiarize with the respondents and establish rapport. The researcher then administered the questionnaires to the participants. The researcher assured the

respondents of strict confidentiality in dealing with the responses. The researcher collected the questionnaires later depending on both parties understanding on the timeframe.

3.9 Data Analysis

After collecting the data the researcher organized it according to its type as used in the study. The researcher organized the data to ensure that the raw data is edited to free them from inconsistencies and incompleteness. This involved the scrutiny of the completed instruments in order to detect and reduce as much as possible, errors, incompleteness, misclassification and gaps in the information obtained from the respondents. Descriptive methods such as frequency distribution, percentages, mean, were used to analyze quantitative data. Qualitative data generated from questions were organized into themes, categories and patterns pertinent to the study. The results from the data analysis were presented using tables of frequencies and percentages.

CHAPTER FOUR

DATA INTERPRETATION AND INTERPRETATION

4.1 Introduction

This chapter presents findings from the analysis of the data collected. The discussion of the findings is also presented in this section. The findings presented include the response rate, the bio data of the head teachers and heads of guidance and counseling departments as well as findings related to the four study objectives. The findings aimed to establish to what extent the school student population influenced the compliance with safety standards, the extent to which school physical environment influenced the compliance with safety standards, the extent to which students' discipline levels influenced the compliance with safety standards and the extent to which student training influenced the compliance with safety standards.

4.2 Response rate

The study sampled 85 respondents from whom data was collected using self-administered questionnaires. 82 respondents returned their questionnaires however, 5 questionnaires were rejected for incompleteness leaving 77 questionnaires which were fit for analysis. This represents a 90% response rate.

4.3 Demographic information of participants

The study collected the bio data of the principals and heads of guidance and counseling departments who participated in the study. The bio data included gender, age, level of education and job experience. This information was important to enable the study to establish who is responsible for implementing the safety standards for schools.

4.3.1 Age of principals of and guidance and counseling HODs

The study collected data on the age of principals and guidance and counseling HODs. The findings are presented in Figure 4.1

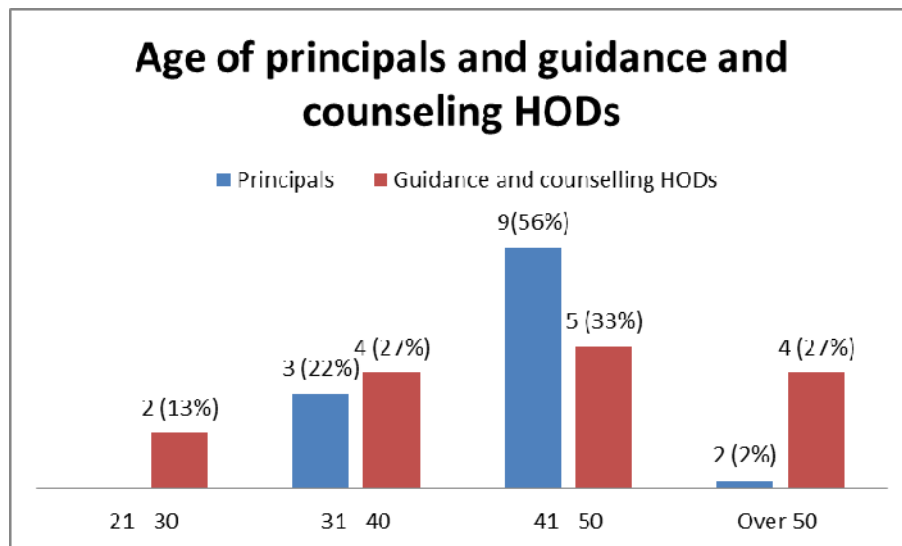


Figure 4.1 Age of principals of and guidance and counseling HODs

Findings in Figure 4.1 show that most 14(48%) of the participants were aged between 41 years and 50 years. The findings show that the implementation of

the safety standards was in the hands of principals of prime age. This can be attributed to the number of years of experience a teacher requires to qualify to be appointed to the post of principal. This means that most principals in public secondary schools are aged 40 years and above.

4.3.2 Gender of principals and guidance and counseling HODs

The study collected data on the gender of principals and guidance and counseling HODs. The findings are presented in Table 4.1

Table 4.1 Gender of principals and guidance and counseling HODs

Gender	Principals		Guidance and counseling HODs		Total	
	F	%	F	%	F	%
Male	10	71	8	53	18	62
Female	4	19	7	47	11	38
Total	14	100	15	100	29	100

The majority (62%) of the participants in the study were male. The findings show that the implementation of the safety standards was in the hands of more male teachers than females. The gender disparity among the principals and guidance and counseling HODs is quite large. This could be due to the fact that there are more boys' public secondary schools than girls' schools in Nyeri Central District.

4.3.3 Level of education of principals and guidance and counseling HODs

The study sought to establish the participants' level of education. This was achieved by recording of the highest academic qualification achieved by the principals and guidance and counseling HODs in the study. The findings are presented in Table 4.2

Table 4.2 Level of education of principals and guidance and counseling HODs

Level of education	Principals		Guidance and counseling HODs		Total	
	F	%	F	%	F	%
Diploma	4	29	9	60	13	45
Bachelor's degree	5	42	6	39	11	38
Postgraduate degree	4	29	1	1	5	17
Total	14	100	15	100	29	100

Findings in Table 4.2 show that most (45%) of the principals and guidance and counseling HODs in the study had a college diploma as their highest academic qualification. The findings show that the participants in the study had acquired higher education. This means that the schools administrators in public secondary schools in Nyeri District were academically knowledgeable to enable them implement the safety standards manual to the letter.

4.3.4 Job experience of the principals and guidance and counseling HODs

The study sought to establish the job experience of the participants in the study. This was achieved by asking the principals and guidance and counseling HODs to record the number of years they had been serving in their current positions respectively. The findings are presented in Figure 4.2.

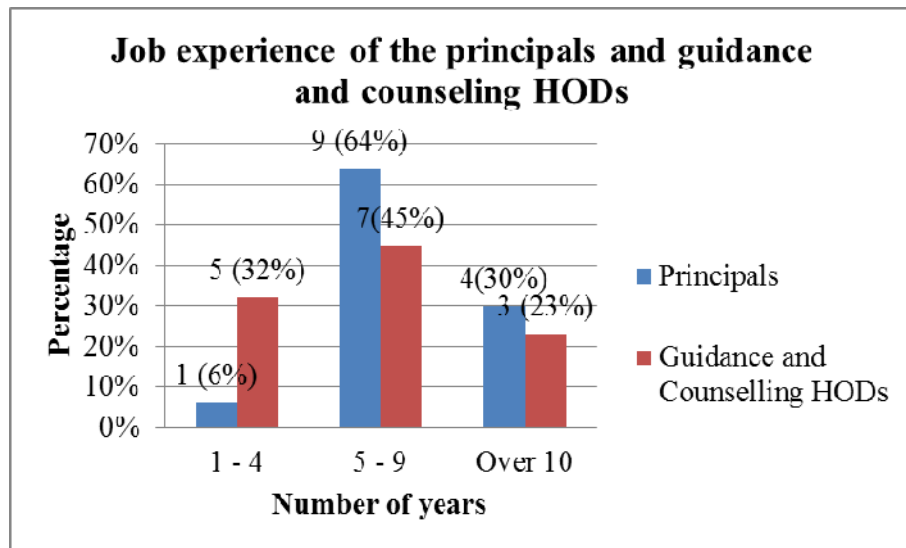


Figure 4.2 Job experiences of the principals and guidance and counseling HODs

Findings in Figure 4.2 show that the majority (55%) of the principals' and guidance and counseling teachers had an working experience of between 5 and 9 years. The findings show that the participants in the study had acquired enough working experience to provide relevant information relating to the implementation of the standards manual.

4.4 Awareness and familiarity with the 2008 safety standards manual

The study sought to determine whether the participants in the study were aware or familiar with the 2008 safety Standards Manual. The findings would assist the study to make conclusions about the schools administrators’ awareness of the safety standards as a factor influencing the compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County.

The study sought to find out from the principals’ whether they were familiar with the 2008 safety standards manual. Figure 4.3 presents the findings on the responses from the principals on their familiarity with the safety standards manual.

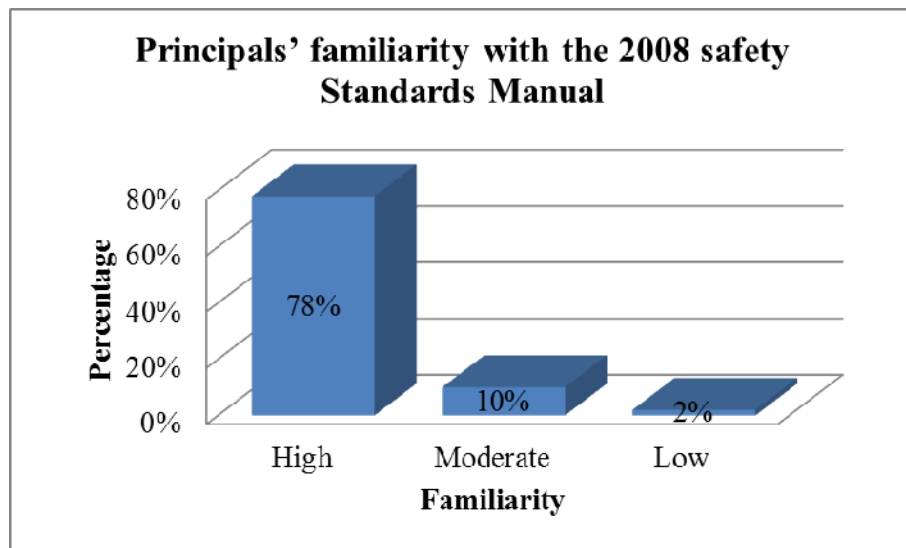


Figure 4.3 Principals' familiarity with the 2008 safety standards manual

According to the majority (78%) of the principals in the study, they were aware of the contents of the 2008 safety standards manual. This shows that the majority of the principals who participated in the study were knowledgeable enough regarding the safety standards and therefore could adequately contribute to the study on the factors influencing the compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County. Awareness of principals on the safety standards cannot be over emphasized because they are the persons charged with overseeing the implementation of the safety standards manual. These findings are in contrast with findings from Muigai (2011) study which found that the knowledge of the MoEST safety guidelines among the institutional head teachers was poor.

The study sought to find out the awareness and familiarity of the heads of guidance and counseling departments with the 2008 safety standards manual. Table 4.3 presents the findings from the responses from the guidance and counseling heads of departments on their familiarity with the safety standards.

Table 4.3 Guidance and counseling HODs' familiarity with the 2008 safety standards manual

Familiarity	Frequency	Percentage
Very familiar	1	7
Moderately familiar	4	27
Not familiar	10	66
Total	15	100

Findings in Table 4.3 show that the majority (66%) of the Heads of Departments were not familiar with the 2008 safety standards manual for schools in Kenya. This shows that awareness of the safety standards was low for other members of staff in public secondary schools apart from the principals. Some of the HODs indicated that they had never heard or even seen the manual.

While this lack of awareness among teachers could be a failure on the part of the principal to distribute the information, this low awareness could also be attributed to lack of interest and negative attitudes by the heads of departments. This low awareness among members of the teaching staff is worrying because they are the persons expected to enforce the safety standards and create awareness among the students. These findings are in agreement with findings from Muigai (2011) study which found that the knowledge of the MoEST safety guidelines among the institutional teachers was poor.

The study sought to find out whether the students' were aware of the 2008 Safety Standards Manual for Secondary Schools. Table 4.4 presents the findings from the students' responses on their familiarity with the 2008 safety standards manual.

Table 4.4 Students' familiarity with the 2008 safety standards manual

Familiarity	Frequency	Percentage
Very High	3	6
High	7	15
Average	6	13
Low	22	46
Very low	10	21
Total	48	100

Findings in Table 4.4 show that the majority (67%) of students in the study had little or no awareness of the safety standards. This could be attributed to the lack of awareness of the students' teachers who are supposed to create awareness of such standards such as laboratory safety rules as well as what to do in case of a fire. These findings are in agreement with findings from Muigai (2011) study which found that the knowledge of the MoEST safety guidelines among the institutional students was poor.

4.5 Extent of compliance with the safety standards

The extent to which the schools in the study had complied with the 2008 Safety Standards Manual for Schools guidelines was of interest to the study. This is because the purpose of the study was to investigate the factors influencing the compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County.

The principals were asked to rate the extent to which their respective schools had complied with the 2008 Safety Standards Manual for Schools. Table 4.5 presents the findings from the responses of the principals' on their school's compliance with safety standards.

Table 4.5 Extent of compliance with the safety standards

Extent of compliance	Frequency	Percentage
To a large extent	2	14
To a fair extent	8	57
To a low extent	4	29
Total	14	100

Findings in Table 4.5 show that the majority (57%) of the schools had complied with the 2008 safety standards manual to a fair extent. This shows that the compliance with the safety standards was not very good. The majority of the principals explained that they had complied with having windows and doors without grills and installed fire extinguishers but other equipment was not procured due to financial constraints. These findings are in agreement with findings of Musimba (2005) who found lack of finance as the main cause of failure in levels of implementation of the guidelines.

The study sought to establish whether the schools in the study had complied with the safety standards in terms of facilities and infrastructure. The findings would assist in determining the compliance with safety standards among the schools in the study. Table 4.6 presents information gathered via an observation checklist.

Table 4.6 Presence of safety equipment and infrastructure

Item	Percentage of schools where the equipment was present (n=17)
Fire extinguishers in strategic places	70
Sand buckets	30
Fire assembly points	30
Lab safety rules in the labs	100
Spacing in dormitories and classes	90
Drugs free zone notice in strategic place	60
Emergency doors in dormitories and halls	70
Fire cautions in strategic places	10
Fence around the school compound	90
Workshop safety rules	30
First aid box	80
Wheelchair ramps	15
Direction signposts	40
No trespassing signs	10
Grass covered playing field (s)	80

Findings in Table 4.6 show that laboratory safety rules, spacing of beds and dormitories as well as fencing of the school compound were adhered to by most of the schools in the study. The findings show that fire cautions in strategic places, wheelchair ramps and no trespass signs and were not present in the majority of the schools.

These findings are in agreement with findings of Wanyama (2011) who found that all the schools in the study had over 60% compliance in provision of perimeter fence, doors to the buildings opening outwards, stairs on both ends of storey buildings, emergency exits on laboratories, halls and dormitories, removal of window grills and long walls of classrooms running from east to west. The findings are also in agreement with findings of Omolo and Simatwa (2010); the researchers in a similar study found that dormitories in 70% of the schools had emergency doors and 96.7% of the schools had first aid kits.

The study sought to establish the condition of the various safety equipment and infrastructure. This was important for the study to establish the compliance with safety standards among the schools in the study. Table 4.7 presents findings on the condition of safety physical facilities. This information was collected through an observation checklist.

Table 4.7 Condition of safety equipment and infrastructure

Item	Perfect condition	Fair condition	Poor condition
Fire extinguishers in strategic places	13	63	24
Sand buckets	47	48	5
Fire assembly points	65	38	7
Lab safety rules in the labs	82	18	
Enough spacing	23	18	59
Drugs free zone notice	69	24	
Emergency doors	89	11	
Fire cautions	24	56	20
School fence	75	23	2
Workshop safety rules	73	22	5
First aid box	92	8	
Wheelchair ramps	56	41	3
Direction signposts	34	65	11
No trespassing signs	12	47	41
Grass covered playing field	17	65	18

Findings in Table 4.7 show that first aid box, emergency doors and laboratory safety rules were the safety equipment that were in great condition in the

schools where they were found. The findings also show that spacing in classes and dormitories was poor in most schools. The findings are in disagreement with Wanyama (2011) who in a similar study found that most schools had not complied in the area of emergency response against fire.

4.6 Influence of student population on compliance with safety standards

The study sought to find out from the principals in the study on the influence of student population on compliance with safety standards. The findings would enable the study to answer question one of the study which sought to establish the extent to which the school student population influences the compliance with safety standards in public secondary schools in Nyeri Central district. The findings are presented in Table 4.8.

Table 4.8 Principals’ responses on the effect of student population on compliance with safety standards

Effect	Frequency	Percentage
High effect	10	72
Moderate effect	1	6
Low effect	3	22
Total	14	100

Findings in Table 4.6 show that the majority (72%) of the principals opined that the increasing student population had a high effect on the compliance with

the safety standards. This is as a result of over-enrolment. The findings suggest that the increasing student population was a challenge to achieving successful implementation of safety standards because there was congestion among the students. The findings are in agreement with Muthuiya (2013) and Chabari (2010) who in their studies had found that free secondary education had allowed more students to pursue secondary education which in turn increased school population ultimately stressing the schools' resources and facilities compromising both the quality of education as well as the safety of the students.

The study sought information from the guidance and counseling Heads of Department regarding the influence of student population on compliance with safety standards. The findings would enable the study answer question one of the study which sought to establish the extent to which the school student population influences the compliance with safety standards in public secondary schools in Nyeri Central district.

All the guidance and counseling Heads of Departments (n =15) confirmed that there was congestion in their respective schools which posed a challenge to compliance with safety standards. These findings collaborated findings from principals (Table 4.8). The findings are in agreement with those of Omolo and Simatwa (2010) who found that there was crowding in 70% of the schools and 93% of them had inadequate toilets therefore the overall implementation of safety policies fell short of the requirements.

The study sought information from the students regarding the student population. The findings would enable the study answer question one of the study which sought to establish the extent to which the school student population influences the compliance with safety standards in public secondary schools in Nyeri Central district. Table 4.9 presents the findings from the students' responses on the effect of student population on compliance with safety standards.

Table 4.9 Students' responses on congestion

Response	Frequency	Percentage
Strongly agree	21	44
Agree	14	29
Uncertain	3	6
Disagree	4	8
Strongly disagree	3	6
Total	48	100

Findings in Table 4.9 show that the majority (73%) of the students agreed that there was congestion of students in their respective schools. The students explained that congestion was evident both in class and the dormitories. These

findings are in line with responses from both the principals and heads of departments which showed that congestion was a problem. The congestion can be attributed to the subsidized secondary school education which have enabled more students to access secondary school education. The findings are also in agreement with Frederiksen (2011) who concluded that Kenya education is fundamentally flawed because there aren't enough spaces in secondary schools. According to the author, the physical infrastructure has been over-stretched to the point of compromising safety standards in these schools.

4.7 Influence of school physical environment on the compliance with safety standards

The study sought to find out from the principals the extent to which the school physical environment influences the compliance with safety standards. The findings would enable the study to answer question two of the study which sought to establish the extent to which the school physical environment influences the compliance with safety standards in public secondary schools in Nyeri Central district Nyeri County. Table 4.10 presents findings on the schools' physical environment that is in line with the safety standards.

Table 4.10 Schools' physical features

Feature	Frequency	Percentage
Emergency doors	14	100
Enough lighting in rooms and pathways	14	100
Adequate ventilation	14	100
Wheel chair ramps	5	36
Grass covered fields	11	79

Findings in Table 4.10 show that emergency doors that open outwards, enough lighting as well as ventilation in rooms and pathways were the present in all schools. These findings are in conflict with Gathoni (2013) who established that some buildings in schools in her study were unsafe for teachers and students in terms of structural designs and space. The findings are also in contrast with Gathanwa (2011) who established that there were no emergency doors in most pre-schools and in the few that had, they were not well labeled.

The study sought to find out from the students on whether their school environment had taken safety into consideration. The findings would enable the study to answer question two of the study which sought to establish the extent to which the school physical environment influences the compliance

with safety standards in public secondary schools in Nyeri Central district Nyeri County. The findings are presented in Figure 4.4

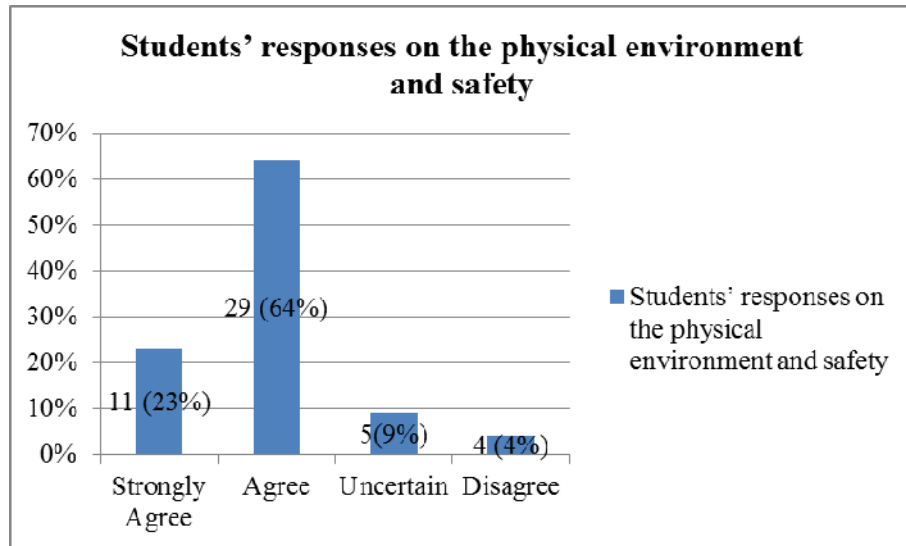


Figure 4.4 Students' responses on the physical environment and safety

The highest proportion 40(83%) of the students agreed that the schools' physical environment had taken safety into consideration. These findings collaborate earlier findings on the same from the principals. This shows that the schools' physical environment complied with the 2008 Safety Standards for Schools. These findings are also in agreement with Picus (2013) who in conducting a similar study concluded that the layout and design of a facility contributes to the place experience of students. Depending on the quality of its design and management, the facility can contribute to a sense of ownership, safety, privacy as well as sociality, spaciousness or crowdedness.

4.8 Student discipline and safety standards

The study sought to find out from the principals on the extent to which student discipline levels affect the compliance with safety standards. The findings would enable the study to answer the third question of the study sought to establish the extent to which student discipline levels influence the compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County.

Table 4.11 Principals' responses on student discipline and safety

Response	Frequency	Percentage
To a large extent	11	82
To a fair extent	1	8
To a low extent	2	10
Total	14	100

The majority (82%) of the head teachers in the study revealed that discipline levels affect the compliance with safety standards to a small extent. This shows that compliance with safety standards was not affected by students discipline or lack thereof. The principals were probed further to find out the indiscipline cases that the participating principals mainly dealt with. Figure 4.5

presents findings from the principals' responses on the popular indiscipline cases.

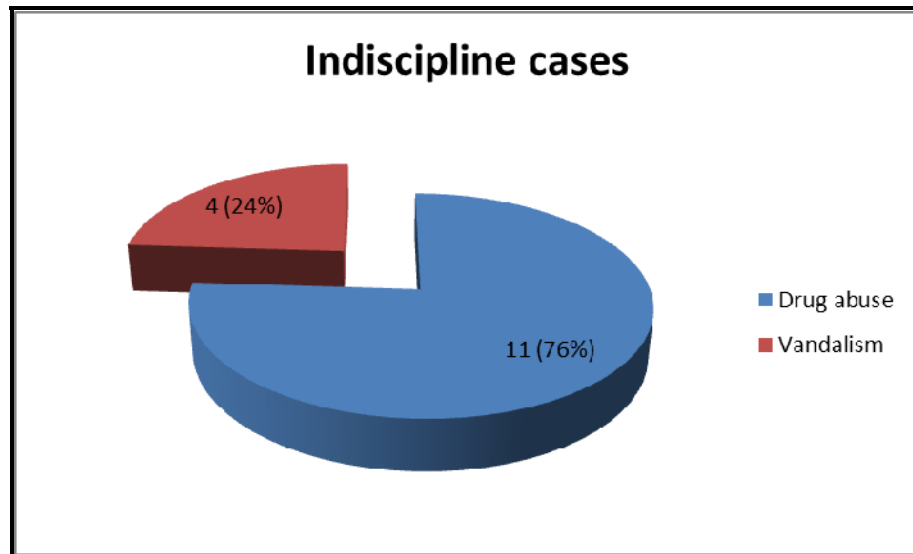


Figure 4.5 Indiscipline cases

The majority 11 (76%) of the head teachers revealed that drug abuse was the most prevalent indiscipline case. Drug abuse commonly involves use of cigarettes, bhang and alcohol which are illegal in public secondary schools. The study sought to find out how the schools dealt with indiscipline cases. Table 4.12 presents the findings from the principals' responses on how the methods used to discipline errant students.

Table 4.12 Methods of dealing with indiscipline cases

Method	Frequency	Percentages
Suspensions and dismissals by the disciplinary committees	14	100
Guidance and counseling	9	64
Both punishment and guidance and counseling.	7	50

Findings in Table 4.12 show that in all the schools from where principals were drawn from, indiscipline cases were dealt with by the disciplinary committee. Some schools (50%) combined suspensions and punishment with guidance and counseling. These findings show that the schools in the study had put discipline in check such that indiscipline cases could not affect learning or security of other students.

The study sought information from the guidance and counseling Heads of Departments on students' discipline. The findings would enable the study to answer the third question of the study sought to establish the extent to which student discipline levels influence the compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County. Figure 4.6 presents the findings from the guidance and counseling heads of departments on students' discipline and safety.

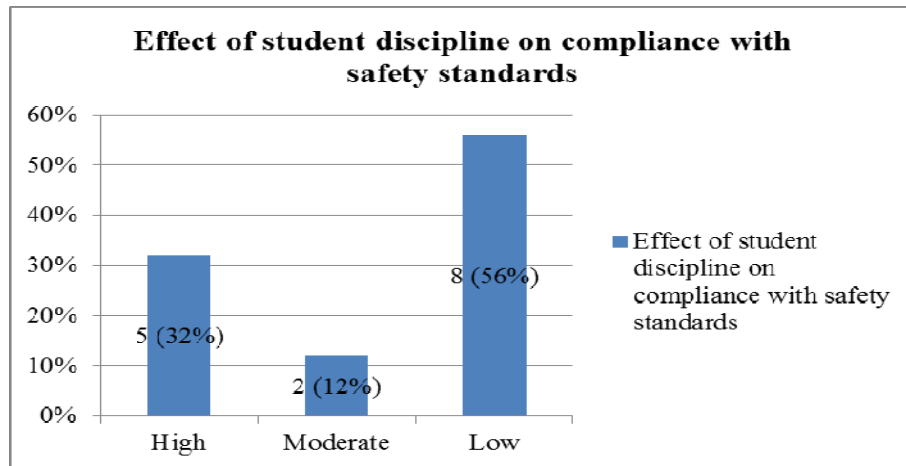


Figure 4.6 Guidance and counseling HODs responses on students’ discipline and safety

According to the majority 8 (56%) of the guidance and counseling heads of Departments, the effect of students discipline on safety was low. The respondents explained that even though there were cases of vandalism and bullying in the schools, the incidents were few and far between. In addition the respondents observed that most schools had not been affected by school strikes. The findings from the heads of departments collaborate findings from the principals’ responses (Figure 4.6) which indicated that indiscipline was not a problem in the sampled schools.

The study sought to find out from the students the effect of discipline in their respective schools. This was important for the study to answer the third question of the study which sought to establish the extent to which student discipline levels influence the compliance with safety standards in public

secondary schools in Nyeri Central district, Nyeri County. Table 4.13 presents findings from the responses of the students on the school discipline.

Table 4.13 Students’ responses on discipline and safety

Student Discipline	Frequency	Percentage
Very High	6	13
High	32	66
Average	2	4
Low	7	15
Very low	1	2
Total	48	100

The majority (66%) of the students considered the discipline of the students’ to be high. When asked whether they considered students’ discipline to be important in ensuring safety, all the students (n= 48) in the study replied in the affirmative. This shows that the discipline of the students in the schools involved in the study was high. The findings also show that the students valued discipline as a means of ensuring their own safety.

4.9 Student training on safety

The study sought to find out from the principals in what ways the school trained students’ on safety standards. This information was important for the study to answer the fourth question of the study which sought to establish the extent to which student training on safety influences the compliance with

safety standards in public secondary schools in Nyeri Central district Nyeri County.

All the principals in the study (n = 14) revealed that students were trained on First Aid administration. This was done in collaboration with the first aid club which handled minor injuries and emergencies to students. This shows that training of students was low since first aid administration does not exactly protect students' from any harm. Fire drills and evacuation procedures were not conducted in all the schools. The findings are in agreement with findings from a similar study by Mwenga (2012) who found that the schools rarely trained their students on safety measures as indicated by 44.5%, hence the students were not well-equipped with necessary training needed to handle emergencies in the schools. The findings are also in agreement with Wainaina (2012) who found that training on safety measures was hardly offered, and of the few who had a chance indicated that it was not effective and adequate.

The study sought to find out from the students on whether they received practical training on safety. The findings would enable the researcher answer the fourth question of the study which sought to establish the extent to which student training on safety influences the compliance with safety standards in public secondary schools in Nyeri Central district Nyeri County. Figure 4.7 presents the findings from the students' responses on safety training.

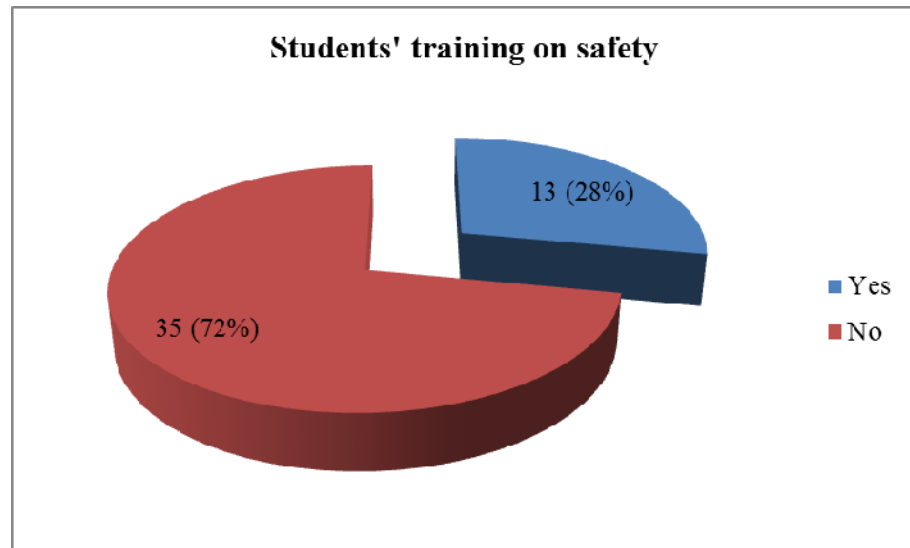


Figure 4.7 Students' responses on training and safety

There was no practical training provided to the students on safety according to the majority 35 (72%) of the students who participated in the study. This can be attributed to the teachers, poor awareness and familiarity with safety standards as found in Table 4.3. The findings are in agreement with findings from a similar study by Gathoni (2013) who established that teachers lack training in firefighting techniques and that most schools, consequently lacked fire fighting preparedness in some sampled Kenyan schools. However, the findings of the current study disagree with Gathoni (2013) to the extent that teachers lack information on safe administration of first aid despite being entrusted with administering the same to their colleagues and students.

4.10 Possible measures to improve schools' compliance with safety standards.

The study asked the principals in the study to suggest ways in which compliance with safety measures could be enhanced. The findings would enable the researcher make recommendations on compliance with safety standards in public secondary schools in Nyeri Central district Nyeri County. Table 4.14 shows principals' responses on possible measures to improve schools' compliance with safety standards.

Table 4.14 Measures to enhance compliance with safety standards

Possible Measure	Frequency	Percentage
Funding and grants to buy equipment	14	100
Training of teachers on safety by the government	9	64

All the principals in the study (n=14) proposed that the best way to enhance compliance with school safety standards was for the government to provide funds and grants to enable the school procure school safety equipment. A significant number of principals (64%) proposed training of teachers on safety to improve their capacity to train students' on safety. These findings are in agreement with Migiro (2012) and Musimba (2005) whose study revealed that the status of school safety was wanting, and that the public secondary

schools that tried to implement the MoE safety standards faced a number of challenges key among them lack of funds. The findings are also in agreement with Wainaina (2012) who found that both the teachers and the principals cited that there was a lack of funding and capacity that hindered the implementation of safety measures in secondary schools in Kiambu County.

The heads of departments in the study were asked to propose ways in which compliance with safety standards could be enhanced. The findings would enable the researcher to make recommendations on compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County. The findings are presented in Table 4.15

Table 4.15 Guidance and Counseling HODs’ responses on measures to enhance safety standards compliance

	Frequency	Percentage
Funding and grants to buy equipment	11	73
Training of teachers on safety	8	53
Government inspection	5	33

The majority (73%) of the Heads of Departments proposed that the government as well as the community and well-wishers should provide funding to the school to procure all the necessary safety equipment. These proposals are similar to the ones made by principals (Table 4.14). However, a section of the heads of departments (33%) proposed more inspection by government supervisors from the Directorate of Educational Standards and Quality Assurance Commission Ministry of Education.

The students who participated in the study were asked to propose ways in which safety in the schools could be enhanced. The findings would enable the researcher make recommendations on compliance with safety standards in public secondary schools in Nyeri Central district Nyeri County. The findings are presented in Table 4.16.

Table 4.16 Students responses on measures to enhance safety standards compliance

	Frequency	Percentage
Training students'	42	88
Increase number of guards	14	29
Others	7	15

The majority (88%) of the students proposed that they should be trained more on safety. These findings show that the public secondary schools' teachers and students were in dire need of training on safety standards to ensure complete compliance with safety standards manual.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the major findings of the study as well as the conclusions made from them. The section also presents recommendations made by the researcher as well as suggestions for future studies related to factors influencing the compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County.

5.2 Summary of the study

The purpose of this study was to determine factors influencing the compliance with safety standards in public secondary schools in Nyeri Central district, Nyeri County. The study aimed to achieve this by assessing the extent to which student population, school physical environment, students' discipline as well as students' training on safety affected the compliance with the safety standards manual for schools. The study adopted a descriptive research design and targeted all the principals, heads of guidance and counseling departments, student leaders (captains) and First Aid or St John's clubs' students from each of the 17 public secondary school in Nyeri Central District. The study sampled 17 principals 17 heads of departments and 51 students from the 17 public secondary schools in Nyeri Central district, Nyeri County. Data was collected

using questionnaires, interview schedules and an observation checklist. Data analysis involved both quantitative and qualitative techniques. Data was presented in frequencies and percentages in the form of tables and figures. The following are the major findings of the study presented in the order of the objectives

On the extent to which the school student population influences the compliance with safety standards, the majority (72%) of the principals opined that the increasing student population had a high effect on the compliance with the safety standards. All the Heads of Departments (n =15) confirmed that there was congestion in their respective schools which posed a challenge to compliance with safety standards. The majority (73%) of the students agreed that there was congestion of students in their respective schools.

On the extent to which the school physical environment influences the compliance with safety standards All the principals in the study (n=14) confirmed that their schools physical environment catered for the safety standards. Emergency doors that open outwards, enough lighting as well as ventilation in rooms and pathways and grass covered fields were the features present in all schools. The majority (83%) of the students agreed that the schools' physical environment had taken safety into consideration.

On the extent to which student discipline levels influence the compliance with safety standards, the majority (82%) of the principals in the study revealed that discipline levels affect the compliance with safety standards to a small extent.

The majority (76%) of the principals revealed that drug abuse was the most prevalent indiscipline case. Indiscipline cases were dealt with by the disciplinary committee. Some schools (50%) combined suspensions and punishments from school with guidance and counseling. According to the majority (56%) of the guidance and counseling heads of department the effect of students discipline on safety was low. The majority (66%) of the students considered the discipline of the students' to be high. When asked whether they considered students' discipline to be important in ensuring safety, all the students (n= 48) in the study replied on the affirmative.

On the extent to which student training on safety influences the compliance with safety standards, all the principals in the study (n = 14) revealed that students were trained on first aid administration. There was no training provided to the students on safety according to the majority (72%) of the students who participated in the study.

5.3 Conclusions

The student population negatively affected compliance with safety standards. The poor spacing of students' lockers in class as well as beds in dormitories is testament to the problem of congestion in public secondary schools.

The physical environment positively affected compliance with the safety standards. The majority of the physical features and facilities in the schools

catered for the requirements of the safety standards manual. However the schools resources were overstretched due to the increased number of students.

Student discipline did not have an effect on the compliance with safety standards among the secondary schools in the study. Though there were indiscipline cases, they did not pose a threat to the student safety. This is because major indiscipline cases were few and far in between. In addition, the administration dealt with such cases firmly via the disciplinary committees.

Student training on safety negatively affected the compliance of public secondary schools with the safety standards. The poor awareness of students of the safety standards is an indicator of the lack of training. This is a challenge to compliance with safety standards because students need the knowledge on how to prevent themselves from harm in case of crisis such as fire, accidents or pollution.

5.4 Recommendations

The Ministry of Finance should commit more funds in 2014-2015 fiscal year to build new schools and expand the existing ones to decongest the facilities public secondary schools.

The Board of Management of public secondary schools should place a lot of emphasis on making the school physical environment as friendly as possible since such an environment is not only safe but promotes smooth learning.

Guidance and counseling should be employed more in public secondary schools to improve students' discipline especially in regard to drug and substance abuse.

The Ministry of Education in collaboration with the private sector should enhance student training on safety. This will empower students to be safety conscious and make proper decisions in case of a safety crisis.

The MoE Directorate of Educational Standards and Quality Assurance Commission should establish routine inspection to ensure that safety standard guidelines are adhered to at all times.

5.5 Suggestions for further study

The current study has focused on students' training as a factor influencing compliance with safety standards however; the study found that the awareness of the teaching staff was low. This is a concern because these teachers are the ones who are supposed to impart knowledge on safety to the students. Future studies should evaluate teachers' capacity to train on safety to students as well as possible measures to improve teacher awareness of safety standards for schools.

REFERENCES

- Babayusi, K. (2011) *School Security How Safe is the Nigerian Learning Environment?* Nigeria: Damog Ltd.
- Berg, B.L. (1998). *Qualitative methods for the social sciences*. 3rd Edition. Washington: Needham Heights.
- Bureau of School Approval and Facility Management. (2008). *Why School Environment is Important*. Concord: NH Dept of Education.
- Bush, W. G. (2007) *Conference on School Safety*. Maryland National 4-H Youth Conference Center Chevy Chase.
- Chabari, E. B. (2010). *Challenges facing effective implementation of free secondary education in public secondary schools in Kangundo District, Kenya*. Nairobi: Chuka University College.
- Community Education Services, (2012) *Education Reform – Special Report on Education in Kenya*. CES: Canada.
- Cooper, M. (2000) *Towards a Model Of Safety Culture*. Yorkshire: Applied Behavioral Sciences Ltd.
- Earthman, G. I. (1998) *The Impact of School Building condition and Student Achievement and behavior*
- Frederiksen, M. (2011) *Challenges Facing the Kenyan School System*. Nairobi: Canada Community Education Services
- Gathanwa, L. W. (2011). *An investigation into emergency management preparedness of childrens's physical safety in pre-schools in Thika West District*. Nairobi: University of Nairobi.
- Gathoni, J. (2013) *Influence of Occupational Safety, Health and Environment on Teachers' Performance of Duties in Selected Public Secondary Schools of Limuru District, Kenya*.
- Garegae, K. G. (2007) *The Crisis Of Student Discipline In Botswana Schools An Impact Of Culturally Conflicting Disciplinary Strategies*. Gaborone: Department of Mathematics and Science Education, University of Botswana.

- Groves, R.M., Fowler, F.J., Couper, M.P., Lepkowski, J.M. & Singer, E (2009) *Survey Methodology*. Edition 2, New York: John Wiley and Sons.
- Hirano, S. (2009) *Child Friendly Schools and Infrastructure*. Kigali
- Ingubu, M. Wambua, B. K. (2011) *Widening Education Access Its Implications and Challenges on School Facility Exploitation*. Department of Curriculum, Instruction and Educational Media, Moi University
- Kariuki, C. (2010). Masculinity and adolescent male violence The case of three secondary schools in Kenya.
- Kariuki, M. (2007) *Realizing Occupational Safety and Health as a Fundamental Human Right in Kenya*
- KENPRO. (2010). *Challenges Facing the Implementation of Free Primary Education in Kenya*. Nairobi: KENPRO Online Papers Portal
- Kirui, R. K., Mbugua, Z. K. & Sang, A. K. (2011) Challenges facing headteachers in security management in public secondary schools in Kisii County in Kenya.
- Kothari, C. R. (1985). *Research Methodology*. New Delhi: Willy Eastern Limited.
- Kombo, D. & Tromp, D. L. (2006). *Proposal and Thesis Writing*. Nairobi: Pauline Publications, Africa.
- Lazarus, P. J., Jimerson, S.R., Brock, S. (2003) *Responding To Natural Disasters Helping Children and Families* Bethesda: MD National Association of School Psychologists Press.
- Laws of Kenya. (2010) *The Children Act Chapter 141*. Kenya National Council for Law Reporting
- Marshall, M. L. (2004). *Examining School Climate Defining Factors and Educational Influences*
- Mayer, J. E. (2007) *Creating a safe and welcoming school*. Geneva: International Bureau of Education Publications Unit.

- Mburu, D. M. (2012). Factors influencing the implementation of safety standards in secondary schools in Limuru District, Kiambu County, Kenya. Nairobi: UoN.
- Migiro, A. O. (2012). An assessment of the implementation of safety standards in public secondary schools in Borabu District, Nyamira County, Kenya. Nairobi: KU.
- Ministry of Education (2008) *Quality Education for Development Policy Framework for Education (2012)*.
- Mugenda, A. & Mugenda, B. (2010) *Research Methods Quantitative and Qualitative Approaches*. Nairobi: ACTS Press.
- Muigai, W. G. (2011). Assessment of the level of implementation of safety standards guidelines in public secondary schools in Ngong division, Kajiado District, Kenya. Nairobi: Kenyatta University.
- Muindi, B. (2012). *Schools With Student Councils Have Fewer Cases of Indiscipline*. Nairobi: Nation Media Group.
- Musimba, S. K. (2010) A comparative study of the levels of adherence and implementation of safety standards guidelines in secondary schools in Machakos District.
- Muthuiya, K. L. (2013). Emerging issues and challenges facing implementation of Subsidized secondary education policy in Tigania East District, Meru County. Nairobi: Kenyatta University.
- Mwenga, S. B. (2012). *Safety preparedness of secondary schools in Kyuso District, Kenya*. Nairobi: KU.
- Omolo, D. & Simatwa, E. (2010) An assessment of the implementation of safety policies in public secondary schools in Kisumu District And West Districts Kenya.
- Picus, L. O. (2012). *Maintenance and Modernization of School Facilities*. New York: Net Industries.
- Republic of Kenya (2008). Safety standards manual for schools in Kenya. Nairobi: Government Printer.
- Rowe, M. & Bendersky. (2002) *Zero Tolerance and Zero Barriers*. Ithaca Cornell University Press.

- Society of State Leaders of Health and Physical Education. (2010). *Healthy and Safe School Environment*. Arlington.
- Stephens, R. D. (1985) *Safe School Planning The Art of the Possible*. California National School Safety Center.
- The American National Association of Psychologists (2006) *Tips for School Administrators for Reinforcing School Safety*.
- Ngunjiri, J. (2012) *Fire razes Giakanja Secondary School*. Nairobi Nation Media Group.
- The Maryland State Board of Education. (2012) *A Study of School Discipline Practices and Proposed Regulatory Changes*. Baltimore Maryland State Department of Education.
- The Kenya Gazette (1998) *Gazette Notice No. 1761*. Republic of Kenya.
- UNICEF KENYA. (2011) *Education in Emergencies and Post-Crisis Transition 2010 Report Evaluation*
- USAID /Kenya (2010) *Education and Youth Education at a Glance*. US Embassy Kenya
- Wainaina, W. W. (2012). Factors affecting the implementation of safety measures in secondary schools: a case of Kikuyu district, Kiambu county. Nairobi: University of Nairobi.
- Walko-Frankovic, D. (2012) *School Safety Training Needs Assessment Report on Findings*. Richmond VA Criminal Justice Research Center.
- Wanyama, J. F. (2011). Level of compliance with health and safety standards for the emergency response in secondary schools in Sabatia District, Kenya. Nairobi: University of Nairobi.
- WASH in SCHOOLS (2011) *Enabling policy environment for WASH in schools National Bureau of Statistics (2009) Enrolment in Schools*

APPENDICES

APPENDIX I

LETTER OF INTRODUCTION

University of Nairobi
Department of Educational Administration & Planning
P. O. Box 30197
Nairobi.
Date.....

The Head Teacher
.....Secondary School

Dear Sir/ Madam,

RE REQUEST TO COLLECT DATA

I am a post-graduate student currently working on my research project *Factors Influencing Compliance With Safety Standards in Public Secondary Schools in Nyeri Central district, Nyeri County*. Your school has been selected through sampling method to participate in the study.

I hereby request you kindly to fill the enclosed questionnaire as honestly as possible. The information that you will provide will only be used for the purpose of my academic research. Meanwhile your identity will be treated confidentially.

Thank you in advance.

Yours faithfully,

Ng'ang'a Anne Wahura

APPENDIX II

QUESTIONNAIRE FOR STUDENT AND FIRST AID CLUB LEADERS

The objective of this Questionnaire is to collect data on *Factors Influencing Compliance with Safety Standards in Public Secondary Schools in Nyeri Central, Nyeri County*. Kindly read the items carefully and provide a response that best represents your opinion. To provide confidentiality, do not indicate your name on the questionnaire. The questionnaire has several sections. Please answer accordingly with a tick in the provided gaps.

Section A Respondent's profile

1. What is your gender

Male ()

Female ()

2. Which class are you?

Form 1 ()

Form 2 ()

Form 3 ()

Form 4 ()

3. What is your role as a student leader?

School Captain ()

Asst school captain ()

Class prefect ()

Dormitory prefect ()

Dining Hall/Games/Compound prefect ()

Others (specify).....

4. What is your position in the club?

Chairman ()

Vice-Chairman ()

Official ()

Section B Factors Influencing Compliance with Safety Standards in the School.

5. How would you rate the safety of students and property in your school?

Very high ()

High ()

Average ()

Low ()

Very low ()

6. The school is congested in terms of student population.

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

7. The existing school physical environment has taken safety into consideration.

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

Explain your answer in (6)

.....
.....

8. How would you rate the students overall discipline?

Very high ()

High ()

Average ()

Low ()

Very low ()

9. Students discipline is important in ensuring school safety.

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

Explain your answer in (8)

.....
.....

10. Do students receive any practical training on school safety?

Yes ()

No ()

If yes, explain the type of training.

.....
.....

10. Rate your awareness of safety standards in your school

Very high ()

High ()

Average ()

Low ()

Very low ()

11. Name three school safety standards that you are aware of.

a.

b.

c.

12. What would you like to see done to improve school safety?

.....
.....

Thank you for your participation.

APPENDIX III

INTERVIEW SCHEDULE FOR PRINCIPALS AND GUIDANCE AND COUNSELING HODS

The purpose of this interview is to collect data on *Factors Influencing Compliance with Safety Standards in Public Secondary Schools in Nyeri Central, Nyeri County*. Kindly answer to the best of your knowledge.

1. What is your designation in this school?

Principal

Guidance and Counseling HOD

2. State your tenure in the school

1-4 years

5-9 years

Over 10 years

3. Please comment on your familiarity with the 2008 Safety Standards Manual for Schools in Kenya?

.....
.....

4. How adaptable is the 2008 Safety Standards Manual for Schools to your school?

.....

.....

5. To what extent has your school has complied with its safety standards?

.....

.....

6. What are the challenges that your school faces in complying with the 2008 Safety Standards Manual for Schools?

.....

.....

7. Please comment on the general status of the safety of students and property in the school.

.....

.....

8. How has student population influenced the school's compliance with safety standards in your school?

.....

.....

9. How has the school physical environment addressed the issue of safety in your school in relation to 2008 Safety Standards Manual for Schools?

.....
.....

10. To what extent do the students' discipline levels influence compliance safety standards in your school?

.....
.....

10. What indiscipline categories would you say are potential threats to safety in your school? (For example vandalism, school strikes, drug and substance , abuse, bullying)

.....
.....

11. How does your school deal with the indiscipline cases that are a threat to the safety of the school?

.....
.....

12. What type of training on safety do you offer your students?

Regular fire drills

Evacuation procedures

First –aid administration

Others (Specify)

.....
.....

13. To what extent has student training on safety been effective in maintaining safety in your school?

.....
.....

14. How can schools be assisted in ensuring complete compliance with the school safety standards?

.....
.....

Thank you for your participation

APPENDIX IV

OBSERVATION CHECKLIST

Item	Presence		Remarks
	YES	NO	
			1 = perfect condition 2 = fair condition 3 = bad condition
Fire extinguishers in strategic places			
Sand buckets			
Fire assembly points			
Lab safety rules in the labs			
Spacing in dormitories and classes			
Drugs free zone notice in strategic place			
Emergency doors in dormitories and halls			
Fire cautions in strategic places			
Fence around the school compound			
Workshop safety rules			
First aid box			
Wheelchair ramps			
Direction signposts			
No trespassing signs			
Grass covered playing field (s)			

APPENDIX V

PUBLIC SECONDARY SCHOOLS IN NYERI CENTRAL DSITRICT

- 1) Kagumo High School
- 2) Gachika Secondary School
- 3) Kiganjo Amboni Secondary School
- 4) Marua Secondary School
- 5) Kiamuiru Secondary School
- 6) Muruguru Girls' Secondary School
- 7) Ithenguri Secondary School
- 8) Giakanja Boys' Secondary School
- 9) Gitathini Secondary School
- 10) Kihatha Secondary School
- 11) Ihwa Secondary School
- 12) Kihuyo Secondary School
- 13) Nyeri High School
- 14) Rware Secondary School
- 15) Riamukurwe Secondary School
- 16) Ngangarithi Secondary School
- 17) Kahiga Secondary School

APPENDIX VI

RESEARCH AUTHORIZATION

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349, 254-020-2673550
Mobile: 0713 788 787, 0735 404 245
Fax: 254-020-2213215
When replying please quote
secretary@ncst.go.ke

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RCD/17/013/20**

Date: **10th June 2013**

Anne Wahura Ng'ang'a
University of Nairobi
P.O Box 92-0902
Kikuyu.

RE: RESEARCH AUTHORIZATION

Following your application dated **22nd May, 2013** for authority to carry out research on "***Factors influencing compliance with safety standards in public secondary schools in Nyeri Central District, Nyeri County.***" I am pleased to inform you that you have been authorized to undertake research in **Nyeri Central District** for a period ending **31st July, 2013.**

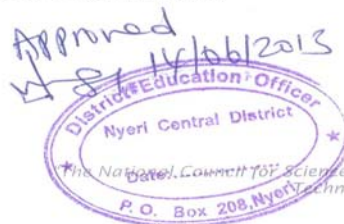
You are advised to report to **the District Commissioner and District Education Officer, Nyeri Central District** before embarking on the research project.

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.


DR. M. K. RUGUTT, PhD, HSC.
DEPUTY COUNCIL SECRETARY



Copy to:
The District Commissioner
The District Education Officer
Nyeri Central District.



APPENDIX VII

RESEARCH PERMIT

PAGE 2

THIS IS TO CERTIFY THAT:
Prof./Dr./Mr./Mrs./Miss/Institution
Anne Wahura Ng'ang'a
of (Address) University of Nairobi
P.O Box 92-0902, Kikuyu,
has been permitted to conduct research in


Location
Nyeri Central
District
Province

on the topic: Factors influencing compliance
with safety standards in public secondary
schools in Nyeri Central District, Nyeri
County.

for a period ending: 31st July, 2013.

PAGE 3

Research Permit No. NCST/RCD/17/013/20
Date of Issue 10th June, 2013
Fee received KSH. 1000



[Handwritten Signature]
Applicant's
Signature

For Secretary
National Council for
Science & Technology