Factors Influencing the Implementation of Safety Standards and Guidelines in Public Secondary Schools in Garissa Township Sub-County, Kenya

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Authors’ contributions

This research work was carried out in collaboration among all authors. Author MHM designed the study, performed statistical analysis, wrote the protocol, wrote the first draft of the manuscript, edited and made all the corrections. Authors JMG and SKR supervised all the processes involved in preparing the manuscript. All the authors read and approved the final manuscript.

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ABSTRACT

Although the essential component of teaching and learning success is school safety, physical infrastructure in most of the schools Garissa township Sub-County does not comply with the safety standard as recommended by the ministry of education. Even more importantly, most schools do not have enough financial resources on the implementation of the safety standards as the training of teachers is not adequately done to implement safety standards. Despite vast research on safety standards and school safety, their findings on relationship between implementation of safety standards and guidelines in public secondary school in Garissa township Sub-County are
inconclusive findings, hence this study. The goal of this research was to assess factors influencing the implementation of safety standards and guidelines in public secondary school in Garissa township Sub- County. This research used a survey research approach, with the 10 principals and 320 teachers in Garissa Township sub-county as the target population from where as sample of 106 respondents was obtained. Data was gathered using questionnaire interviews from where data was analyzed using Pearson r’ and verbatim respectively. The results show that at 5% significance level, safety sub-committee (r = 0.280, p<0.01), physical infrastructure (r = 0.405, p<0.01), financial resources (r = 0.588, p<0.01), and training of teachers (r = 0.469, p<0.01) had statistically significant and positive relationship with implementation of school safety standards and guidelines in public secondary schools in Garissa Township Sub- County.

Keywords: Implementation; financial resources; physical infrastructure; safety standards and guidelines; safety sub-committee; training.

1. INTRODUCTION

1.1 Background to the Study

Education is an important aspect that forms the foundation of the social and economic growth of a country [1]. This calls for need to address school safety and security issues adequately since quality education can only be achieved in an environment that is conducive [2]. Literature show that school safety is a cornerstone to quality education, compelling every government to introduced a strategy for the implementation of basic safety in the learning institution, (Koskey & Inyega, 2018). This envisioned mission of achieving good quality education could not be attained without creating conducive environment for teaching and learning for both the teachers, learners and staff. The physical surroundings, including, classes, dormitories, play grounds should be free from any hazard or threat that may directly or indirectly endanger the lives of learners, [3]. Unsafe schools are associated with truancy, rise of indiscipline cases, escaping of learning activities and other immoral behaviors whereas the safe schools inculcate the learners' good values and enhances quality education [4,5].

So, there should be avenues to impart important skills and attitudes that allows learner to realize their potential and foster community development hence needs to be safe and secure (MOE,2008). Accordingly countries around the globe such as United States are implementing education policies framework to guide the schools structural designs on its premises to ensure safety, the enforcement of its policies are strictly adhered the schools devised mechanisms which embodies evacuation procedures, fire precautions and provision of guidance and counseling helped the institution of learning to predict and assess risk factors in the schools (International Center for Education Statistics, 2015; O’Halloran, 2017). This has been duplicated in Africa where the incidences of unsafe school remain challenge [6,7]. The Kenyan government introduced the Education Act in 1980, which became the foundation of safety laws and standards [8]. The basic education act ensures that children are protected from abuse and supports the integrity of Kenyan child. Despite these attempts, many children continue to suffer. Violence against children is on the rise [9]. Kenyan government directives on safety is often neglected manifesting into lack of infrastructural facilities, safety Sub-committee, inadequate financial resource and inadequate capacity building for instructors on safety standards and rules (Jepkorir, Ogoma & Munyua, 2020).

1.2 Statement of the Problem

The essential component of teaching and learning success is school safety. School safety concern has a direct bearing to students’ retention and enrolment, [10]. Despite the concerted effort of the government of Kenya in advocating for the implementation of safety standards and guidelines, most schools are facing challenges on safety of their children [3]. More so, most of the secondary schools’ administration has lost focus on the implementation of safety standards, with only few having safety facilities such as fire extinguishers; a situation has been worsened by the limited number of schools assessments done by the ministry of education quality assurance, (Akali,2011). Notably, most of the schools do not have substantial school sub-committee on safety while others lack the prerequisite training in their execution of their role in the implementation of safety standards [11,12]. This is manifesting itself
in form of horrendous incidences of school unrest and school fires leading loss of lives and ravaging important school infrastructures. In the year 1998, 26 young girls perished in a fire at dormitory at Bombolulu secondary school near Mazeras area, (Oring, 2001).4 years later in 2002, 67 boys burnt to death after their dormitory was burnt down at Kyanguli High secondary in Machakos, [13]. In 2010 2 boys died in their dormitory at Endarasha Boys secondary [14] and recently in 2017 Moi girls secondary school 10,teenage girls lost their lives after incident of a fire [15]. With fire tragedies in the country goes unabated school in Kenya continue to experience disasters. This is attributed to failure of school administration to adhering to the safety regulations and standards [16]. Despite vat empirical research on safety regulations and standards, factors contributing to implementation of safety regulations and standards are yet be resolved, hence this study, hence this study.

1.3 Objectives the Study

The purpose of this study was to assess factors that influence the implementation of the safety standards and guidelines in Public secondary schools in Garissa township Sub-County as specifically;

1. To examine the influence of safety Sub-committee on the implementation safety standards and guidelines in public secondary schools in Garissa township Sub-County.

2. To establish the influence of physical infrastructure on implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County.

3. To assess the influence of financial resources on the implementation of the school safety standards and guideline in public secondary schools in Garissa township Sub-County.

4. To determine the influence of training of teachers on the implementation safety standards and guidelines in public secondary schools in Garissa sub-county.

2. LITERATURE REVIEW

This research reviewed related literature on factors influencing the implementation of safety standards and regulations, the literatures as discussed by various authors to objectively relate this to the variables under discussion which focused on physical infrastructure, safety sub-committee, financial resources and trainings.

2.1 Theoretical Framework

This study concentrated on Abraham Maslow's hierarchy of needs theory, that was proposed in his 1943 in which the theory contends that psychological needs and safety are classified as basic needs, while love, self-esteem, and self-actualization are classified as secondary needs [17]. According to Maslow's hierarchy of requirements, a person can only achieve self-actualization if their bodily, safety (security), love, and esteem needs are actualized (Okombe,2008). These hierarchical needs coherently interrelate to each other and the fulfillment of one lead to the achievement of the other. Safety being determinant factor in the Maslow's hierarchical theory of needs, it compels the government and other stakeholders to prioritize the safety of learners to achieve the target goals in the provision of quality education.

2.2 The School Safety Sub-committee and Implementation of Safety Standards and Guidelines

The safety standard manual places the roles of ensuring the school safety on a specified Safety sub-committee while the school administration consists of board of management (BOM) who are obligated for the smooth running of the school programs (Magiro,2012). Kitheka (2016) however argues that, formation of safety sub-committee whose function and duties are clearly spelt out specifically their roles should include, inspections, audit and prevention of accidents may help prevent a disaster. According to Washington state schools ‘directors association’ (2015), USA give guidelines that school managements execute the envisioned roles of the institution, design amicable policies, allocate enough resources and ensure transparency and accountability [18] (Guthoni,2013). Nhaya [19] reveals that only a few institutions have established a safety sub-committee unfortunately the deputy and principal had not attended the meetings of sub-committee as demanded in safety manual this shows a worrying trend on the conduct of the schools’ administration in regards to safety implementation in the schools. Based on these findings, the study formed the hypothesis that;

\[ H_0 : \text{There is no significant relationship between school safety sub-committee and the} \]

16
implementation of the school Safety Standards and Guidelines in public secondary schools Garissa Township Sub-County

2.3 Physical Infrastructure and Implementation of Safety Standards and Guidelines

The physical infrastructure of a determinant factor of whether or not a student receives a good education, [3]. In their study, Maier et al. [20] notes that African schools are not seen as safe as they should be. Notably, insecure school environments, on the other hand, foster moral decadence and the purposeful absence of learning activities, which has negatively impacted on the acquisition of quality education, which is accessible to all learners without any discrimination [21]. Bulle et al. (2017), Most schools in African countries learners struggle with lack of the basic hand wash after using the restroom. In their study, Koskey and Inyega (2018) revealed that, most schools lacked lockable gates, water for hand washing after bathroom visits, first aid kits, fire extinguishers, among other things, the study also reveals that majority of instructors lacked emergency preparedness and risk reduction training. Meanwhile, Ronoh [22] agrees with these findings to show that some schools in Turkana County exhibited poor infrastructure which has adversely affected academic performance and enrolment in the schools. Wanderi [23] acknowledged that some important schools infrastructural facilities were wanting in some of the classes had not been renovated the doors and windows of classrooms were not appropriate as recommended in the safety standards manual criteria [18] (Kang’ethe & Ciera, 2017). Accordingly, this study drew hypothesis that;

H02 There is no significant relationship between the physical infrastructure of the school and the implementation of school Safety Standards and Guidelines in secondary schools in Garissa township sub-county

2.4 School Financial Resources and Implementation of Safety Standards and Guidelines

Financial resources are a crucial portion of physical capital, which serves as the foundation for the acquisition, usage, and upkeep of all resources [24]. For this reason, Kitheka [25] advises the government to device a mechanism to fund school safety since schools need to purchase safety equipment and disaster preparedness training. When the financial allocation for the implementation of safety standards and guidelines is adequate, the risk of insecurity is reduced because the school will be able to purchase the necessary infrastructure in advance and improve existing channels to close all loopholes in order to avoid the threat of poor budgetary allocation, [21]. Omolo et al. [26] found that insufficient funds delayed school fee payment and led to; poor enrolment, inadequate time, and inadequate. Migiro (2012) discovered that lack of financial resources is the most significant constraint to the implementation of safety standards in public secondary schools. In a similar findings Nderitu (2009) established those financial constraints was a major blow to efficient compliance to safety standards. According to Usman [27], financial resources are monetary resources that are required for the proper operation of a learning institution and whose absence causes the institution’s operation to suffer. The findings of Kitheka’s [25] study shows that inadequate financial resources were an impediment to the implementation of safety standards. Wanderi [21] found that schools lacked adequate resources to enable the improvement of existing and additional physical infrastructure. Nyabuti (2018) observed that there was insufficient execution of safety regulations due to a range of causes, including insufficient funding. These findings led to coming up with hypothesis that;

H03 There is no significant relationship between school financial resources and the implementation of school safety standards in secondary schools Garissa Township Sub-County

2.5 Training of Teachers on the Implementation of Safety Standards and Guidelines

Training of teachers impart important skills on safety to students to deal with emerging safety concerns in the schools set up (Armstrong,2006). Wanyama [28] and Mburu [29] discovered that most schools had not established safety committees and that the majority of teachers had not been trained. They also discovered that where safety standards had been implemented, teachers had not been involved in sensitising students on safety standards and guidelines. According to Ng’ang’a [30], a research conducted in Nyeri county indicated that instructors and
students in public secondary schools were unaware of safety standards. According to Udali [25], students and staff in public boarding secondary schools in Trans-Nzoia County, Kenya were not instructed on safety standards as per the Ministry of Education Safety Manual. As a result, they were unaware of the safety precautions. The safety guideline should be communicated to students, teachers, and other stakeholders. To avoid insecurity concerns in boarding schools, school principals should guarantee that all students and staff are informed on safety procedures and allow time allocation for safety education, [3]. Muthiani [31], it was revealed that the most common hurdle was a lack of time for training [19]. Omolo & Samatawa (2011) reveals that, the school administrators had inadequate capacity on safety standards, most of them were not conversant to basic content of the safety standard manual (2008). Magiro (2012) research found that for most of teachers despite being sensitised on the safety standard, little was done on the ground to implement safety standards. Omolo [31] agrees that, proper understanding of disasters may likely reduce the catastrophic consequences this preparedness may include existence of the relevant equipment and strategies that may neutralise its severe impacts. The hypothesis drawn from these findings was:

\[ H_0: \text{There is no significant relationship between the training of teachers and the implementation of school safety standards and guidelines in public secondary schools Garissa Township Sub-County} \]

3. RESEARCH METHODOLOGY

3.1 Research Paradigm

In this analysis it was intended that the research employs positivism that advocates the application of natural science to the study of social reality and beyond Creswell [32]. The objectivity given was measurable using properties which were independent and well-defined structures during studies and realizes a quantitative data that was more reliable than qualitative [33].

3.2 Research Design

The descriptive research design was used in this investigation. This is a method in which the researcher investigates the use of questionnaires and document analysis in gathering information from members of the target [34]. The research design is appropriate for the study since it allowed the data to be gathered without having to manipulate any factors; frequently in the form of a questionnaire administered in person to a big number of people. The survey design allowed the researcher to synthesize data in a coherent and ordered manner in order to properly depict the existing connection.

3.3 Target Population

Target population, according to Cooper and Schindler [35], is described as the whole stream of constituents from which an analyst hopes to derive conclusions. This study targeted 10 public secondary schools thus 10 principals and 304 teachers.

3.4 Sampling

The study required a sample of administrators and instructors. All the selected respondents formed part of the sample. The researcher used census for sampling to have all principals for interview [36]. According to Gall, Gall, and Borg [36], qualitative studies should include at least 10% of the overall population, whereas quantitative studies should include 30% of the total population. The researcher use 30% of the target population to get at the sample of teachers. To arrive a sample for teachers the researcher employed a simple random sampling method. All the teachers were given numbers ranging from 01-320 and the researcher randomly picked the number from a container and used those numbers picked in the study.

3.5 Instrumentation

The research used questionnaire and interviews; where questionnaire was used to collect data from teachers while interview was used to collect data from principals. The use of questionnaires for this study was appropriate as they are able to collect large amount of information within a short period and are easy to complete and permit use of standardized questions, (Orodho, 2009). Interview was appropriate for principals because they are few in number and are key informants [37].

3.6 Validity of Research Instruments

The instrument's validity refers to how well it examines what it claims to measure. The information chosen and included in the
Table 1. Research reliability statistics

<table>
<thead>
<tr>
<th>Item</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of safety standards &amp; guidelines</td>
<td>0.886</td>
</tr>
<tr>
<td>School safety sub-committee</td>
<td>0.971</td>
</tr>
<tr>
<td>Physical infrastructure</td>
<td>0.897</td>
</tr>
<tr>
<td>Financial resources</td>
<td>0.888</td>
</tr>
<tr>
<td>Provision of training</td>
<td>0.892</td>
</tr>
<tr>
<td><strong>Cronbach’s Alpha = 0.926, N= 5</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Research Data (2022)*

questionnaire should be related to the variable being researched for the survey instrument to be accepted, [34]. The researcher was guided by the supervisors who are specialists in the field to evaluate the validity of the tool. Once they determined that the tool was in order, it was used for data collection.

3.7 Reliability of Research Instruments

The study using Cronbach’s alpha approach, tested for reliability obtain Cronbach’s alpha. The data for reliability testing was collected from twelve (12) teachers from two (2) schools in Tana River, a neighboring county [34]. These respondents were given one (1) week to respond to the questionnaire. The data was analyzed as shown in the Table 1.

Based on the results in Table 1, the Cronbach’s alpha (α) coefficient of the study variables (N=5) was 0.926, which was an indication of highly reliable (consistent) tool since the reliability coefficient 0.926, which way above the 0.7 threshold (Kothari, 2012). Thus, the tool was having high internal consistency and specifically each of Implementation of safety standards & guidelines (α = 0.886), School safety sub-committee (α = 0.971), Physical infrastructure (α = 0.897), Financial resources (α = 0.8885), and Provision of training (α = 0.882) was highly consistent since it was greater than 0.7. So, the research retained all the data item in the tool for administration.

3.8 Data Analysis

The qualitative and quantitative data from the surveys was used by the researcher in this study. Data from questionnaires was processed using the Statistical Package for Social Science (SPSS). Quantitative data was examined and displayed in tables using Pearson r. The qualitative data was evaluated in its entirety using verbatim.

4. DATA ANALYSIS, RESULT AND DISCUSSION

4.1 Study Response

While 10 principals were conducted for participation in the interview, 96 pieces of questionnaire were administered to the respondents. During data gathering, as 10 principals were interviewed, 86 teachers responded by returning completely filled questionnaire. The response rate for the principals was 10(100.00%) while that for teachers was 86(89.58%). While majority of the respondents, 62(74.70%) showed that they were male, a minority of 21(25.30%) indicated that they were female. Thus, most of the teachers including principals working in Garissa township Sub-County were male with almost a quarter of them being female.

The results on highest level of education show a majority of 68(81.93%) were university undergraduate; possessing bachelor’s degree as 10(12.05%) indicated that they had a Diploma while 4(4.82%) had masters degrees and 1 (1.20%) has other unspecified qualifications. While a majority of 58(69.88%) showed that they had in that school for between one (1) and five (5) years, 26(12.44%)indicated that they were in the school for less than one year and 21(25.30%) showed that they had been in that school for between six (6) and 10 years and 4(4.82%) indicated that they had stayed in the school for more than 10 years.

4.2 Analysis, Presentation and Interpretation of Results

In this thesis, the study adopted a mixed approach that is qualitative and quantitative
analysis. For the quantitative analysis, the research tested the hypothesis using Pearson’s product Moment (PPM) correlation analysis at 0.05 significance level and at 84 (86-2) degrees of freedom (df). It should however be noted that although the response rate was 84.

Before analysis was done the researcher come up with the Means and Standard deviations for all the independent and dependent variables as shown in Table 6. This was done because it is the Means and Standard deviations of each independent variable that were compared with the mean and standard deviation for the dependent variable when testing the relationships [36].

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Before analysis was done the researcher come up with the Means and Standard deviations for all the independent and dependent variables as shown in Table 2. This was done because it is the Means and Standard deviations of each independent variable that were compared with the mean and standard deviation for the dependent variable when testing the relationships [36].

Table 2. Means and standard deviations of study variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Sub-committee</td>
<td>2.49</td>
<td>0.94</td>
</tr>
<tr>
<td>Physical infrastructure</td>
<td>2.96</td>
<td>1.03</td>
</tr>
<tr>
<td>Financial resources</td>
<td>2.24</td>
<td>0.95</td>
</tr>
<tr>
<td>Training of teachers</td>
<td>2.34</td>
<td>0.93</td>
</tr>
</tbody>
</table>

Source: Research Data (2022)

4.3 Influence of Safety Sub-Committee on the Implementation Safety Standards and Guidelines

On assessing objectives 1, To examine the influence of safety sub-committee on the implementation safety standards and guidelines in public secondary schools in Garissa township Sub-County. The study tested the first hypothesis which was

\[ H_0 \] There is no significant relationship between School Safety Sub-committee and the implementation of the school Safety Standards and Guidelines in public secondary schools Garissa Township Sub-County.

Table 3. Pearson’s correlation analysis of the relationship between the safety sub-committee and implementation of school safety standards and guidelines in public secondary schools in Garissa township sub-county

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Implementation of safety standards &amp; guidelines</th>
<th>school safety sub-committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of safety standards &amp; guidelines</td>
<td>Pearson Correlation 1</td>
<td>0.280**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) 0.009 86</td>
<td></td>
</tr>
<tr>
<td>school safety sub-committee</td>
<td>Pearson Correlation 0.280** 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) 0.009 86</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Data (2022)
The correlation analysis, which was performed, using the Pearson’s product method (PPM) at 0.05 level of significance produced results in Table 3.

The correlation analysis results in Table 3, show that under the Pearson correlation at 0.05 significance level, safety Sub-committee had a moderate \((r = 0.280, p = .009)\) significant relationship with implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County. The p-values \((p = .009)\) for the relationship was less than \(\alpha (0.05)\) (that is p-value < 0.05), which implies that there was a significant relationship between safety Sub-committee and the implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County. Therefore, reject null hypothesis. Based on these results, there is sufficient evidence to conclude that there is significant relationship between the safety Sub-committee and implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County.

The interview schedule consisted 12 questions items, where item 1-3 discussed safety sub-committee. In the interview schedule, the interviewer was guided by question 1, 2 and 3. While question 1 was to establish about existence of safety sub-committee in the school, question 2 was to find out whether the school safety Sub-committee meet identify safety needs of the school question 3 was to establish the frequency the school safety sub-committee meet to discuss safety concerns. According to 6 principals who represent 60% of total interviewed principals established that Safety sub-committee was instituted in the school but they remained dysfunctional and was rarely involved in safety situations in the school, despite the requirement of the ministry of education to formulate sub-committee little is done to ensure the safety sub-committee performs its mandate effectively and efficiently. Principals are the only people who make decision of safety matters [38-41]. The safety sub-committee are relevant in the school and their roles should be clear and the administration should be able to give them logistical and the moral support needed to ensure they execute their mandate well on implementation of safety in the schools. 4 out of 10 principals which represent 40% of the schools safety sub-committee doesn’t exist which means there is an existing gap on the implementation of safety standards in those schools. In those schools which have not formed Safety sub-committee the principals have taken the roles of the safety matters in the school with little consideration on the formation of safety sub-committee which contravenes safety standards manual (2008), despite the busy schedule of the principals handling matters of school safety may prove difficult for them thus they need to delegate the responsibilities of by forming safety sub-committee who understands their mandate in making sure the school safety is guaranteed. 40% of principals interviewed reported that safety sub-committee meets quarterly in the year to deliberate on issues of safety in the school while 6 out of 10 which represent the majority of the schools reported that safety sub-committee doesn’t meet to deliberate safety concern in the schools meeting. Safety sub-committee need to meet to strategize and forge a head resolution on safety preparedness which informs the school administration on the where to prioritize on the course of action as far as safety is concerned. The school safety sub-committee within the schools should discuss certain pertinent issues including the security guards, training of teachers on safety preparedness, procurement of safety equipment which includes fire extinguishers.

Most principals don’t attend the meetings of the safety sub-committee they are either represented by a teacher or do not attend thus making the safety Sub-committee report on low participation of school administrators in the sub-committees. Nonetheless, Kitheka [1] however argues that, formation of safety sub-committee whose function and duties are clearly spelt out specifically their roles should include, inspections, audit and prevention of accidents may help prevent a disaster. Meanwhile Kirui et al. [18] agrees with the study that improving school safety requires a specialised safety sub-committee which should be entrusted with the responsibility of supervising school safety. Therefore most schools lacked active safety sub-committee as their responsibilities where shouldered by heads of schools and members of the BOM were accountable for making key safety choices. These contrives the ministry guidelines on the implementation of safety standards. The safety sub-committee roles should be clearly spelt out to avoid confusion and mix up of roles this will streamline the duties effectively and efficiently in enhancing implementation of safety standards and regulation. The safety sub-committee are expected to responsive towards any distress or in the event of accidents in order to reduce or neutralise the impact of the fatalities.
Transparency international Kenya, (2014), the school safety sub-committees have no capacity to prevent disasters, this is however an impediment to the safety committee in the day-to-day execution of their duties.

Despite the introduction of safety standards manuals most schools disregards its adherence because the government doesn’t provide the funding to support the safety need [19]. The safety sub-committee should be whistle blowers to the school administration on the lapses of the safety situations in the school. The safety sub-committee should be given the moral and logistical support to execute their duties properly in their mobilisation of resources and coordination of safety programs with the stakeholders. The school administration which consists board of management should swiftly move into action upon receiving advisory from the safety sub-committee on issues of safety, the safety sub-committee may make a requisition of safety facilities required to ensure safety.

4.4 Influence of Physical Infrastructure on the Implementation of School Safety Standards and Guidelines in Public Secondary Schools in Garissa Township Sub-County

This research tested the hypothesis.

\[ H_{02} : \text{There is no significant relationship between physical infrastructure and implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County.} \]

Based on Pearson’s correlation analysis carried out, at 0.05 level of significance based on hypothesis, the results in Table 4 were obtained.

The correlation analysis results in Table 4, show that under the Pearson correlation at 0.05 significance level, physical infrastructure had a moderate \( r = 0.405 \), \( p =.000 \) significant relationship with implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub- County. The p-values (\( p =.000 \)) for the relationship was less than \( \alpha (0.05) \) (that is p-value < 0.05), then the null hypothesis is rejected. This implies that there was a significant relationship between physical infrastructure and the implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County.

The physical infrastructure being an important component in teaching and learning 80% of the principals agrees that existing infrastructure are regularly maintained and refurbished through a government funds in every financial year, according to principals the ministry of education introduced funds in 2018 which totals to Ksh 5000 per learner in every financial year as a maintenance and improvement this has to larger extent helped to improve some of the infrastructures in the school, however these infrastructures doesn’t include safety facilities these funds are not enough . The school physical infrastructure should be refurbished and renovated to ensure learners safety. Despite the regular renovation and maintenance of the school infrastructure, 2% of school’s principals reported classes which had notably had some

| Table 4. Pearson’s correlation analysis of the relationship between the physical infrastructure and implementation of school safety standards and guidelines in public secondary schools in Garissa Township Sub-County |
|-----------------------------------------------|------------------|------------------|
| Correlations                                | Implementation of safety standards & guidelines | physical infrastructure |
| Implementation of safety standards & guidelines | Pearson Correlation | 1 | .405 |
| | Sig. (2-tailed) | N | .000 | 86 |
| physical infrastructure                      | Pearson Correlation | .405 | 1 |
| | Sig. (2-tailed) | N | .000 | 86 |

Source: Research Data (2022)
cracks, dusty floor and rusted roof tops which need refurbishment. Conducive learning environment lures learners and feel motivated and thus enhances their attendance rate in contrast however learners who are learning under dilapidated infrastructures makes learners to shun away from learning hence low enrolment and delinquencies are reported. Most Principals reported that there are no semi-permanent infrastructures in these schools however 2 out 10 principals reported the existed semi-infrastructure in the school are used as stores and school bakeries however 80% of the schools had permanent infrastructures. 6 out 10 school principals responded that the classes which is the academic areas lacked fire extinguishers and those that existed was not repaired. 4 out 10 principals had fixed a fire extinguisher in the administration block and the school laboratory. The ministry requires that fire extinguishers be fixed in every block to ensure that in the event of fire it is neutralized. Fire extinguishers are some of the basic safety facilities which are important for every school the ministry recommends they are availed and made accessible in the event of fire it will help reduce the impact. Wanderi [23], however agrees with findings that, the government funding is not enough to purchase this equipment which are important, it is upon the government and the ministry of education to ensure the schools get enough funds to procure such important facilities which enhances safety needs of the school and to ensure safety standards and guidelines are implemented. The physical infrastructures should be appropriate, sufficient and correctly placed with no damages to the users especially with student with special needs and should not endanger the users in the immediate vicinity thus the building are supposed to adhere the norms of the ministry of education (Cap, 211), the public health act (242) and the ministry of the public works (Safety standard manual, 2008). The determinant of successful education goals are good school physical infrastructure, schools with good facilities have been characterized with high turn out on the other hands schools with poor physical facilities remain lagged behind even in the academic performance therefore good physical facilities harness positively the status of education to a notch higher.

4.5 Influence of Financial Resources on Implementation of School Safety Standards and Guidelines in Public Secondary Schools in Garissa Township Sub-County

In this research, there was testing on the hypothesis

$H_{03}: \text{There is not significant relationship between financial resources and implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County.}$

The Pearson’s correlation analysis was carried out to obtain Table 5.

The correlation analysis results in Table 5, show that under the Pearson correlation at 0.05 significance level, financial resources had a moderate ($r = 0.588$, $p = .000$) significant relationship with implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County.

| Table 5. Pearson’s Correlation Analysis of the Relationship between the Financial Resources and Implementation of School Safety Standards and Guidelines in Public Secondary Schools in Garissa Township Sub-County |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Implementation of safety standards & guidelines | Implementation of safety standards & guidelines | financial resources |
| Pearson Correlation | 1 | .588** |
| Sig. (2-tailed) | .000 | 86 |
| implementation of safety standards & guidelines | financial resources | |
| Implementation of safety standards & guidelines | Pearson Correlation | .588** |
| Sig. (2-tailed) | .000 | 86 |
| financial resources | financial resources | |
| Implementation of safety standards & guidelines | Pearson Correlation | .588** |
| Sig. (2-tailed) | .000 | 86 |
| financial resources | financial resources | |

Source: Research Data (2022)
The p-values ($p = .000$) for the relationship was less than $\alpha$ (0.05) (that is $p$-value $< 0.05$). So, null hypothesis was rejected to imply that there was a significant relationship between financial resources and the implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County.

Learning institutions just like any other organization needs financial muscle to enhance it is delivery and functions on it is envisioned goals. On whether the schools gets grants from the ministry of education on safety 10(100%) of principals unanimously agrees that use the renovation and maintenance funds which set aside which constitute part of the school fees have benefitted significantly the schools but MoE Transitional free secondary education grants are only given selected schools which is not tenable the schools utilizes optimally these funds in maintenance and improvement funds to build new infrastructure, and also for renovations so to create conducive environment for learning. Majority of schools in Garissa township Sub-county comprises of Day schools which constitute 70% which means the only depend on government funding since the ministry of education has rolled out free day secondary education which has relieved the burden on the side of parent of paying school fees, the parent are only allowed to contribute in the lunch fees. Only 3% of the school are boarding schools which the parent are charged fees for boarding, therefore Kitheka [25] agrees that the government should device a mechanism of funding school safety to help the schools purchase safety equipment and provide teachers with the necessary skills in capacity buildings to enhance safety preparedness. The findings further revealed that all the 10 secondary schools which constitute 100% doesn’t have any income-generating activities to supplement the schools’ budget. These shows that most of the schools in Garissa township doesn’t have any other income-generating activities like school farms which could have provided a supplementary to the school budget to improve infrastructure. Wanyama (2016) concurs with the findings that, most of the secondary schools in Kenya to a larger extent depends on the parent levies (fees), government grants, constituency development funds which in many circumstances delay or diverted for another use therefore recommends the school to look outside the box and be innovative enough to engage in income-generating activities which will help boost the school budget to a certain level and improve the school safety.

On the number of security guards employed in the school only 3 out of 10 schools had adequate security guards compared to the school enrolment, the rest of the other schools had a deficit in the number required in relation to the school enrolment. The security guard plays an important role at the school main gate by capturing the names and the address of the visitors, security guards also ensure the safety of learners in the school premises (Safety standard, 2008). A given school should enough security personnel to keep the school facilities safe and safeguard the learners however due to financial constraints the number of the security personnel employed a few in number compared to the school population which depict a loopholes on the safety of learners Wanyama (2016) concurs with the findings that, when the institutions of learning set aside funds through their budgetary allocation for safety measure the security risk factors will be curtailed because the school will be on high gear in the preparedness on the implementation of safety standards and guidelines. Various activities of the most schools depend on the availability of funds which is instrumental in the procurement and purchase of safety.

### 4.6 Effects of Training of Teachers on Implementation of School Safety Standards and Guidelines in Public Secondary Schools in Garissa Township Sub-County

The research tested the hypothesis;

$H_{04}$: There is not significant relationship between training of teachers and implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County.

Pearson’s correlation analysis at 0.05 level of significance was carried out based on hypothesis and results obtained are shown in Table 6.
Table 6. Pearson’s correlation analysis of the relationship between the training of teachers and implementation of school safety standards and guidelines in public secondary schools in Garissa Township Sub-County

<table>
<thead>
<tr>
<th></th>
<th>Implementation of safety standards &amp; guidelines</th>
<th>provision of training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of safety standards &amp; guidelines</td>
<td>Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>86</td>
</tr>
<tr>
<td>provision of training</td>
<td>Correlation</td>
<td>.469**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>86</td>
</tr>
</tbody>
</table>

Source: Research Data (2022)

The correlation analysis results in Table 6, show that under the Pearson correlation at 0.05 significance level, training of teachers had a moderate ($r = 0.469$, $p = .000$) significant relationship with implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County. The $p$-values ($p = .000$) for the relationship was less than $\alpha$ (0.05) (that is $p$-value < 0.05 hence rejection null hypothesis, which implies that there was a significant relationship between training of teachers and the implementation of school safety standards and guidelines in public secondary schools in Garissa township Sub-County.

Variable 4 was to determine the influence of training of teachers on the implementation safety standards and guidelines in public secondary schools in Garissa sub-county through assessing Question 10, 11 and 12. Question 10 was for establishing whether the school incorporated disaster management in the curriculum. Question 11 was to find out whether teachers enrolled in-service course for disaster management. The purpose of question 12 was to determine the regularity of inviting professionals on safety to give a lecture to learners. On the weather schools in cooperate safety skills on the school curriculum, 7 out of 10 principals interviewed involved learners on basic training simulations and fire drills these institutions partnered with non-governmental organizations (NGO) such as red cross which has given learners training on basic evacuation procedures in the event of emergency.

On the provision of training courses of teachers on safety preparedness 10 (100%) of the principals unanimously reported that ministry of educations has no mechanism in providing training of teachers on safety most of teachers are ready to undertake training on courses of disaster managements but does not have the financial capacity and scholarship on this pertinent course therefore the teachers who has the basic training remain insignificant in relation to the demand of the schools.

Mburu [29] agrees with findings that pre-service and in-service training in essential to ensure the capacities of the principals and teachers are revamped to ensure school safety, the teachers will disseminate the important skills learnt to learners in this regard provision of training on teachers on safety preparedness helps the school to overcome the challenges of safety. The provision of training to teachers by the ministry of education on safety requirement will help to impart learners skills that will help the learners in the event of any emergency or safety situations.

Ng’ang’a [30] in his study ‘on the implementation of safety standards guidelines in Nyeri county’ agrees with the findings that teachers and learners in public secondary in schools in Nyeri county were unaware of the safety standards many head of department had not seen the safety standard manual. Most activities concerning safety situations in the schools did not involve teachers making them spectators in
the process of implementing safety standards. Molo et al (2011) confirms that even the quality assurance officials interviewed were ignorant of the safety standards manual rolled out by the ministry of education in 2008 to be a blue print for the implementation of safety standards and regulations in school.

On whether the schools invite professionals to give lectures on the safety 3 out of 10 schools have called the professionals from fire-department to teach learners and teachers on evacuation skills in the event of the emergency, this implies that other remaining schools principals which consist of 70% did not did not invite professionals to discuss with learners on safety mechanisms this depict a gap on the level of preparedness in our schools. Wanyama & et.al (2002) agrees with the findings that majority of the school had not instituted a well elaborate mechanism to deal with disasters such as fire out-breaks because most teachers are not adequately train to implement safety regulation. When teachers are trained well on the basic evacuations’ skills, use of safety gadgets they will remain confident to tackle issue of safety the teachers will provide informal trainings to the learners on safety in the implementation of safety standards. Mayshark & et.al (1968) recommends that school safety measures be taught in the school’s curriculum and incorporated to the school syllabus for the purpose safety implementation.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The study concludes that school safety cannot be underestimated the administration of the schools should strictly adhere to the ministry of education guidelines which outlines safety measures. The safety sub-committee in the school assist to identify safety gaps in the school and provide prompt advice to the school administration. the school safety committee are entrusted with the roles identifying needs of the school and takes necessary action, safety committee mobilize resources required by the school to ensure safety, safety committee monitoring and evaluating the various aspect of the school safety, and safety committee forms a sustainable network with stakeholders to foster school safety.

Safety of the institution depends majorly on the school infrastructure; conducive school environment attracts the learners. For this infrastructure to be safe it should adhere to the ministry of education safety standards guidelines. This size of the classroom should be specified as per MOE building specification, the doorways should be adequate for emergency purposes and opens outwards. Sharing of beds in the school should be prohibited. Dormitory windows without grills and opens should outwards, fire extinguishing equipment should function well and placed at the exit with fire alarms.

Financial resources have significant influence on implementation of school safety standards and guidelines in public secondary schools in Garissa Township Sub-County. Most schools in Garissa depends largely on the government grants to do renovations and refurbishment of the school facilities these funds are used to procure and purchase important safety items such as first aid kits, fencing the institution, fire extinguishers and recruitment of security personnel in the school.

The study exhibits that most of the teachers in Garissa Township lacks basic training in disaster management. The ministry of education has no elaborate mechanism to offer teachers training on the basic evacuation procedures. Most of the teachers lack the capacity to handle safety concerns it will difficult for a teacher to responsive in the event of fire when he has never attended a simple fire drill. sponsoring teachers to be given an in-service training n safety assist to smoothly implement safety standards and guidelines in the schools.

5.2 Recommendations

Firstly, the study recommends that the public secondary schools in Garissa township Sub-County should review their school safety standards and guidelines to ensure that the school safety committee identifies needs of the school and takes necessary action, safety committee mobilize resources required by the school to ensure safety, safety committee monitor and evaluate the various aspect of the school safety, and safety committee forms a sustainable network with stakeholders to foster school safety.

Secondly, the study recommends that the public secondary schools in Garissa sub county should ensure that there is sufficient and effective physical infrastructure to ensure that school safety standards and guidelines are sufficiently implemented. In this case, guidelines should be
perfected to ensure that; the size of the classroom should be specified as per MOE building specification.

Thirdly, the research recommends that public secondary schools in Garissa Township sub-county should provide sufficient financing for ensuring that first aid kits are enough and available, fencing the institution is well done, fire extinguishers are easily accessible and they acquire enough security personnel in the school.

Lastly, the study recommends that secondary schools Garissa Township sub-county should enhance their training of teachers on safety guidelines to ensure that teachers are occasionally trained on the basic evacuation procedures, student and teachers are also practice drill training, student and teachers to be trained on the basic first aid, and teachers to frequently offer guidance and counseling to students.

6. SUGGESTIONS FOR FURTHER RESEARCH

To enhance the scope of the study a similar finding can be carried out in the private secondary schools to ascertain the implementation of safety standards and guidelines. The same study can be replicated in other counties to get different perspectives on safety standards and regulations. Study can be carried out on the influence of the following on the implementation of safety standards and guidelines these include Safety sub-committee, school physical infrastructure, school financial resources and on the training of teachers to diversify the scope of the study.

CONSENT

As per international standard or university standard, Participants’ written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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