

Influence of Planning for Disasters and Emergencies by Boards of Management on Compliance with Safety Standards in Public Boarding Secondary Schools in Embu County, Kenya

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Abstract

The safety of learners is ultimate in the provision of quality education as secure school environments foster quality teaching and learning. However, the well-being of school children has remained a global problem due to recurrence of tragedies with safety management in institutions of learning remaining a growing concern. The purpose of this study was to examine the influence of planning for disasters and emergencies by Boards of Management (BoMs) on compliance with safety standards in public boarding secondary schools in Embu County. The study adopted pragmatic philosophy and convergent mixed method, and targeted five sub-counties and 64 public boarding secondary schools. Respondents comprised chairpersons of BoMs and Parents Associations, BoM secretaries, Heads of Departments (HoDs) and Sub-County Quality Assurance and Standards Officers (SCQASOs). Stratified sampling was advanced to pick a sample of 55 schools of various categories. Purposive sampling was used to select 275 HoDs from sampled schools and 5 SCQASOs. The total sample was 445 respondents. HoDs responded to a questionnaire while BoM members and SCQASOs were subjected to an interview. The study also used an observation schedule. Expert judgement was sought to determine the validity of the instruments. Cronbach's alpha coefficient of 0.873 confirmed high reliability of the research items while 0.965 was a high reliability for the questionnaire. Quantitative data was analyzed using descriptive statistics; frequencies and percentages. The Hypothesis was tested using Pearson's coefficient of correlation ' r '. Research findings ($r = .773$) indicated that there is a strong positive correlation between planning for disasters and emergencies and compliance with safety standards in public boarding secondary schools, while a ($p = 0.029$) direct that planning also significantly influence the levels of school compliance with the safety standards. The study recommend that school boards should plan for safety; allocate financial, infrastructural and human resources to realize high levels of school safety

Keywords: *Board of Management, Compliance, Safety standards, Planning, Public boarding secondary schools*

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1. Introduction

The purpose of the study was to establish the influence of planning for disasters and emergencies by boards of management on compliance with safety standards in public boarding secondary schools in Embu County, Kenya.

1.1: Background to the study

The well-being of school children has remained a global problem due to the recurrence of tragedies. According to Limber and Kowalski (2020) school shootings have taken many lives and caused extensive fear in the United States. In recent past, Sandy Hook Elementary School lost 26 people, Marjory Stoneman Douglas High School lost 17 students while in a Texas School 10 lives were lost (Limber & Kowalski, 2020). In 2014 the Taliban pounced on the Peshawar Army School of Parkistan leaving 135 children dead -Peshawar school massacre (Human Rights Watch [HRW], 2017. In Nigeria, nearly 1400 schools have been destroyed, others closed, 2295 teachers killed and 52% of children out of school. In 2014, 276 girls were kidnapped from Chibok Senior Girls

secondary whereas, in 2018, 110 girls were abducted from the government-owned secondary school in Dapchi (Arop & Owan, 2018).

In Kenya, loss of lives and destruction of property worth millions characterize a lack of safety in schools. In 1991, 19 girls died from rape and suffocation at St. Kizito Mixed while in 1998, 26 girls died in a dormitory fire at Bombolulu Girls Secondary. In 1999, four prefects of Nyeri High died from fire while 68 boys died in a dormitory fire at Kyanguli secondary school in 2001 (Nyakundi, Ongwacho, Mong'are, Oguti & Mikuro, 2014). This profile of disasters led to the government's focus on ensuring safety in schools hence the Wangai Report of 2001 on safety measures. However, the measures did not stop school disasters prompting the Ministry of Education [MoE] in collaboration with the Church World Service to develop the Safety Standards Manual for Schools in Kenya (2008), believing that compliance by schools would see them propagate safe and secure environments at all levels.

Despite the government's effort, learners have continued to lose lives in school fires, attacks and accidents. In 2017, eight students died and dozens injured in Moi Girls, Nairobi School dormitory fire (Wanzala, 2017) while a militia attack at Lokichogio Mixed left six students and a guard dead, and girls raped (Ali, 2017). Moreover, three students died while six suffered spinal and abdominal injuries when Lokichar Secondary bus rolled in Kabarnet (Ahenda & Kahenda, 2017). In 2019, 9 pupils died and 60 got injured when Precious Talent Academy collapsed while in February of 2020, 14 learners died in a stampede at Kakamega Primary due to structural weaknesses (Nyaundi, 2020). The most recent are trails of accidents that have led to loss of students' lives; 3 Chogoria Girls High School students died on 18th December 2021 after the matatu they were travelling in collided with a lorry at Kambiti in Muranga on the busy Nyeri- Nairobi High way (Gikandi, 2021), on March 30th 2023, 18 students of Pwani University died when the bus they were travelling in collided head-on with a matatu at the Kayole Bridge along the Nakuru-Nairobi highway, four students were knocked by a Tahmeed bus when walking home from school, death of five students of Mbihi Friends Girls High School when a *matatu* they were travelling in collided head-on with a truck at the Delamere black spot on 19th April 2023 (Koskei, et al., 2023). Three girls and a teacher of Mukhumu Gils also died as a result of contaminated water (Kalekye, 2023).

To enhance the safety of the learner, countries have come up with safety policies and compliance with set safety standards is thus a significant factor in realizing inclusive safety. The task of implementing government policies and guidelines is delegated to school management bodies. In the United States public schools are governed and managed by school boards (Ford, 2013; Shober & Hartney, 2014) while Bakwai, Yisa, and Musa, 2015; Eslinger, 2017 and Mgadla, 2014 confirm management by boards in British Columbia, School-Based Management Committees for Nigeria and School Governing Bodies in South Africa respectively. In Kenya, Boards of Management are obligated by section 59 of the Basic Education Act [BEA] 2013 with school governance: provide proper adequate infrastructure; determine indiscipline cases; facilitate students' guidance and counselling; ensure the safety of learners and workers and encouraging participatory democratic governance all aimed at ensuring safety of the school community (Republic of Kenya, 2013).

In guiding institutions to fulfil their missions and visions, BoMs should focus on the learners' needs as there can never be significant education in unsafe environments (MoE, 2008). Although management of schools is like charting a ship through turbulent waters, planning for disasters and emergencies is mandatory as emergencies can lead to injury or threaten life. It involves the definition of tasks, resources and safety goals for future direction (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2017 & the International Finance Corporation [IFC], 2010). Planning for disasters and emergencies (school safety) by BoMs may include having in place: a safety budget, safety committee, guidance and counselling team to enhance student discipline, school community that is knowledgeable on safety matters, school safety and health rules to guide behavior and relationships, a clear channel of communication like having a complain/suggestion box, admitting learners based on school accommodation capacity to avoid vices related to congestion/overpopulation and that can impede safety while maintaining cordial school-community relations.

Studies by Ibrahim and Orodho, 2014; Kukali, 2013; Maynard, 2017; and Ogba and Igbo, 2014; noted that inadequate budgets hinder compliance with safety standards due to the inability to buy fire equipment, fence and gate, employ watchmen, and build adequate safe infrastructure. Although Mgadla (2014) notes that safety planning begins with the constitution of a Security and Safety Committee, Kukali (2013) and Nyakundi et al.,

(2014) found that many schools had no safety committees thus a setback for school safety programmes.

Rinaldi (2016) avers that school safety depends on the capacities gained through training that aim at equipping participants with safety competencies; knowledge and skills needed in tackling safety issues. However, Dube and Orodho, 2016; Kukali, 2013; and Nyakundi et al., 2014 found that the majority of schools lacked training programmes to equip stakeholders with safety knowledge and skills/abilities for prevention, response, mitigation and recovery processes. All this has been attributed to inadequacy of resources coupled by lack of proper planning.

Embu County has in the last decade experienced high number of cases of student unrest with arson targeting dormitories even long after the second term wave. Embu has also recorded other cases of safety breach making the county viable for the current study. In addition, majority of studies on school safety failed to investigate the influence of Boards of Management governance strategies like planning for disasters and emergencies, influencing compliance with safety standards despite the school management being responsible of school safety, thus a gap for this study to fill.

1.2: Statement of the problem

Schools are expected to be sanctuaries of all school going children as learner's safety is key to delivery of quality education. However, this has not been the case in Kenya as secondary schools continue to experience shocking incidents of arson, unrest, armed conflict and drug abuse. Compliance with the Safety Standards Manual (2008) is expected to make schools safe and secure environments. The National Crime Research Centre (2017) confirmed that over 130 schools (average three schools per county) were closed down in 2016 due to unrest, violence and arson targeting dormitories. In Embu County arson targeted dorms. As Ndonga (2016) reported Embu and Nakuru counties were among the counties that had recorded high number of cases in 2015 and made a comeback in 2016 with equally high number of cases (six in each year). The trend has been on the rise with Embu recording eight and nine cases of arson in 2017 and 2018 respectively while Nakuru cases declined to zero and one in the two years.

Embu County has lead in cases of arson especially targeting dorms in the region. In 2018, Eastern Region recorded the highest number of unrest cases; 40 out of which 22 were arson followed by Nyanza with 17 and Rift-Valley 12 (Departmental Committee on Education and Research – National Assembly, 2019). While Embu County recorded nine cases of the 22 in the region in 2018, the neighbouring counties of Tharaka Nithi recorded six; Machakos-two; and Kitui-two (MoE, 2018). According to Regional Director of Education- Eastern (2021) Embu County was leading in post COVID number of arson cases in the region as well as nationally. In addition, Embu has recorded other unique cases of safety breach. In 2019, a student from one of the boarding schools died after he was allegedly beaten by a teacher using a mop stick (Muchiri, 2019), while in 2018 a form three student in a day secondary school 'went berserk' and slashed the institution's lab technician on the head using a machete while injuring two of his schoolmates after they barred him from beating up the school head (Ndwiga, 2018). The cases indicate lack of safety leading to damage of property, threat to student and staff wellbeing and lives, and loss of cherished learning time. The Basic Education Act of 2013 tasks Boards of Management with upholding of students' welfare and human rights, and ensure their safety (RoK, 2013). Schools must be governed adequately to ensure safety for quality education. There was need therefore to examine the influence of BoMs' planning for disasters and emergencies on compliance with safety standards in public boarding secondary schools.

1.3: Objective of the Study

This study aimed to examine the influence of planning for disasters and emergencies by Boards of Management on compliance with safety standards in public boarding secondary schools in Embu County

1.4: Research Hypothesis

There is no significant relationship between planning for disasters and emergencies by Boards of Management

and compliance with safety standards in public boarding secondary schools in Embu County

2. Review of related literature

2.1: Related literature

Planning for safety is obligatory to save lives if disaster strikes (IFC, 2010). Planning is a management function which involves forethought or deciding beforehand what is to be done, when it is to be done, where it is to be done, how it is to be done and by whom it is to be done. Planning bridges the gap from where we are to where we want to go (Sarker, 2019). In this paper planning can also be looked at as the management process of setting school's safety objectives and designing the means to achieving the safety objectives. This may mean having plans to ensure safety on school grounds, infrastructure, health and hygiene, food, and drug and, child abuse. Planning to ensure safety of children with special needs, safety in transport, disaster risk reduction and school community relations.

This paper looks at school boards' planning for disasters and emergencies vis-a-vis various facets of planning for school emergencies and disasters: safety budget allocation, site planning for safe location of structures, having the safety manual copies in the library where all can have access, having well-articulated health and safety rules to direct behaviour compliant with the recommended safety standard, admitting learners based on the school accommodation capacity, having a strategically placed suggestion box, having a safety committee to assess and report on the schools' safety needs and, functional guidance and counselling team to deal with errant students in time for correction and as precaution to prevent diseases and infections in the schools as a mitigation measure.

Sufficient funds for safety equipment and emergency response are required while guidance and counselling will deter destructive student behaviour. Maynard (2017) notes that lack of a budget (financial plan) for components of school safety plan was likely to hinder boards' attempt to generate cohesive safety plans. In agreement, Kukali, 2013; Ogba and Igbu, 2014; and Nyakundi et al., 2014 aver that those finances are imperative in installation of safety measures.

Mgadla (2014) notes that planning for safety starts with constitution of a School Safety Committee. In Kenya, the committee is expected to identify safety needs; mobilise resources; monitor and evaluate safety; form networks with stakeholders; inform stakeholders about safety and ensure their support and participation; and review safety in and around the school (MoE, 2008). However, studies globally: Onyango (2013); Gatua (2015); Telewa, Nderitu, and Muthwii (2015); Dube and Orodho (2016); Ibrahim and Orodho (2014); King'oina (2017); Kukali (2013); Nyakundi et al. (2014); Pillar (2016); Rinaldi (2016); Tipler (2017); Omari, Chepkonga Gori and Mwaura (2021) and, Alunga and Maiyo (2019) revealed that schools had not constituted safety committees. However, in her study Cherera (2017) reported that more than half of schools in Mombasa had safety committees in place.

The safety manual for schools should be placed in the library where it can be accessed and put into use by members of the school community in a bid to equip themselves with its requirements. However, this has not been the case as exemplified by research. Onyango (2013) and Omari, Chepkonga, Gori and Mwaura (2021) established that almost three quarters of schools and slightly above half respectively had not obtained safety manuals for schools in Kenya. Further, a study by Alunga (2020) indicated that three quarters of the respondents confirmed that they had not seen or read the safety manual for schools. This was attributed to the manual being kept in the principal's office or the deputy principal's office. Telewa et al. (2015) established that schools had not sourced for copies of the safety manual and did not keep MoE circulars on school safety. Moreover, Nyabuti, Role and Balyage (2015) established low rating by students and teachers on copies of safety policies being available in school library for teachers and students' use.

Njunu and Kiprop (2016) confirmed that school rules contributed to a safe and positive school climate and which was vital for overall school safety. Further, Nzoka and Orodho (2014) reported that schools had embraced guidance and counselling as a good way of maintaining discipline in schools as it helped students make life choices that were reasonably and independently thought out. This convergent mixed method research sought to establish the influence of planning for disasters and emergencies by BoMs on compliance with safety standards

in public boarding secondary schools in Embu County.

2.2: Theoretical framework

This study adopted Systems and Hierarchy of Needs theories. Ludwig Von Bertalanffy-1973 the proponent of the Systems Theory recognized the need for any organization to remain open and interact with its external environment. According to Betts (1992), a system is an entity made of interacting elements that function as a whole to realize a determined purpose and barely realizes its mandate if deprived of an element while the element on its own, cannot triumph. The school imports human resources (students, staff); materials resources (infrastructure, equipment); fiscal resources (money); and controls (law, policy and parents' expectations); and knowledge from the environment, and convert them to better forms in the transformation process (teaching, learning and governance). Students get rich in; knowledge, skills and values; boards, teachers and parents get informed, while output is exported to the environment. The society should keep the school system to serves its needs. The systems theory informed the current study since matters of school safety require joint effort from the school fraternity, the government and all other shareholders.

The Hierarchy of Needs Theory places human needs on a pyramid. Abraham Harold Maslow (1908 - 1970) posits that physiological and safety needs are grouped as basic needs, while affection, esteem and self-actualization are viewed as secondary needs. Maslow postulates that gratification of a lower need triggers the person's attention to fulfilling a higher need. Satisfaction of physiological needs; food, air, sleep, warmth and water that are vital for survival, demands safety guarantee (security; safe environs, health, and shelter) (McLeod, 2018). Safety is important for the good of humanity including students. Schools should nurture a safe and health-fostering culture lacking at home leading to children's deep feelings of insecurity. The theory informed the study out of believe that safety is vital for every human's survival and cannot be ignored in a school set-up if learners are to achieve their full potential and develop the high order competencies; critical thinking and problem solving as required by the curriculum.

3.0: Research Methodology

3.1: Introduction

The section describes the research design, target population, sample size and sampling procedure, data collection instruments, instruments validity, instrument's reliability, data collection procedures and data analysis techniques.

3.2: Research design

The study adopted pragmatism philosophy which allows the researcher to focus on the research problem rather than on methods and to use a variety of approaches for collecting and analysing data which subsequently derives knowledge to best understand the problem (Creswel, 2014). The study also used convergent mixed method research which entails collection and integration of quantitative and qualitative data in a study. The design involves examining both data and incorporating them in order to compare the outcomes (Leavy, 2017). This approach was appropriate as this study aimed to describe, explain, and examine school safety which is a complex problem.

3.3: Target population

This is the whole collection of individuals or items the scholar has selected to study (Matula et al., 2018). Embu County was made up of five sub-counties (at the time of study), 64 public boarding secondary schools with 12 boys' and 15 girls' boarding, 3 girls' day/boarding, 7 mixed boarding and 27 mixed day/boarding secondary schools. 64 BoM and 64 Parents Association chairpersons, 64 BoM Secretaries, and 576 Heads of Departments [HoDs] from the schools, and 5 Sub-County Quality and Standards Officers formed a target population of 773 subjects.

3.4: Sampling procedures and sample size

Ary, Jacobs and Sorensen (2010) take a sample as a representative portion of the study population and should correctly represent the group traits under examination if generalization with a reasonable confidence from the

sample to the population is to be made. Kothari (2011) postulates that an ideal sample ought to be adequate to give satisfactory representation to a population about which the researcher wants to generalize. Using Slovin's formula $n = \frac{N}{1 + N(e)^2}$, where n = sample size; N = finite population; e = level of significance; 1 = unit or a constant the study arrived at a sample of 55 boarding schools. Furthermore, stratified sampling helped choose schools from each category to ensure a proportional sample size in relation to the sizes of the strata from which they were drawn (10 boys' and 13 girls' boarding, 3 girls' day/boarding, 6 mixed boarding and 23 mixed day/boarding secondary schools). Heads of Departments in the sampled schools were represented by: Guidance and Counselling, Sciences, Technical, Boarding, and Co-Curricular Activities. They were purposively selected on the premise that the practical aspects of their duties and subject areas if not well taken care of may result to accidents that could threaten the safety of the students and teachers involved, or the entire school.

3.5: Research instruments

Three types of research instruments were used; a questionnaire, interview schedules and an observation schedule to collect data from participants and the sampled schools. Survey questionnaires were used because they allow collection of large quantitative data sets from a huge population; extensively spread geographically at a minimal cost, and which are relatively easy to compute (Kothari, 2011). The questionnaire yields large data sets in relatively short time duration and being a standard instrument, it gives room for uniformity of answers to questions making comparison of the answers obtained from different respondents a possibility (Cohen and Manion, 2013 ; Mugenda and Mugenda, 2011)). Fraenkel, Wallen and Hyun (2012) posits that questionnaires can be mailed or given to large numbers of people at the same time. However, unclear or seemingly ambiguous questions cannot be clarified, or respondent given a chance to expand on or react verbally to a question of particular interest or importance to the researcher. The instrument is also free from the researcher's bias as responses are very personal to the participants and also allows them enough time to give sound answers. It is easy to get responses from those who seem conserved. The closed ended questions are also easy to analyze.

Interview schedules allows the interviewer to clarify any questions that are ambiguous and also can ask the respondent to expand on answers that are particularly important or revealing (Frankel, Wallen & Hyun, 2012). According to Kothari (2011) an interview schedule is an oral administration of pre-coded questions that involve a face-to-face interaction with the respondent. An interview is applicable in research studies since it offers a fast, inexpensive and easy qualitative data, which is high in consistency and thorough in inquiry. Ary et al. (2010) holds that interviews aid in revealing people's experiences and their meaning. Additionally, interviews also help avoid misconception while enhancing clarity on vague issues thus enhancing response rate and following up of incomplete answers (Matula et al., 2018). However, Frankel et al. (2012) notes that interviews may take much longer than the questionnaire to complete and that the presence of the researcher may inhibit respondents from saying what they really think.

An observation schedule is a printed list of the observable conditions that the researcher plan to observe to generate data. The instrument is favorable in the study because unlike the questionnaire which depend on information given by the respondents with no means of examining accuracy of the information, the observation schedule allowed the researcher to see what had been done or what was available in relation to the safety guidelines, and directly record what is observed as first-hand and objective data; thus more reliable and accurate data that can compliment other instruments (Gatua, 2015). Furthermore, it does not require cooperation and willingness of the respondents to provide information as data is generated from the researchers' observation.

3.6: Instrument validity

According to Kothari (2011), validity is the level of accuracy to which a research tool measures what it is meant to measure. The researcher sought the supervisors' expert judgement to determine the content validity while colleagues issued with the instrument gave peer judgement on face validity. Insights garnered helped in improving the tools.

3.7: Instrument reliability

This is the ability of a tool to measure what it is measuring giving stable and consistent results when used repeatedly (Ary et al., 2010). The study's instrument reliability was ascertained by use of Cronbach's alpha coefficient which was computed using statistical package for social sciences (SPSS) version 25. The coefficient

ranges between 0 and 1 and the nearer it is to 1, the higher the reliability. A coefficient of 0.965 indicated high reliability of the instruments.

4.0: Data presentation, analysis, interpretation

This section covers analysis, presentation and interpretation of data collected on influence of Boards of Management planning for disasters and emergencies on compliance with safety standards in public boarding secondary schools in Embu County, Kenya. The analysis involved sorting the data into integral portions and their assessment to separate the component elements independently and relative to the whole. It included coding, data recording and examination to enhance interpretation. Qualitative information from observation guide, interview guides and the open-ended questionnaire responses was analyzed thematically to form themes with respondents' opinions and feelings being coded and put into frequency and percentages. Quantitative data were analyzed using descriptive statistics and offered in a frequency distribution table. Inferential statistics tested the null hypothesis.

4.1: Levels of agreement with schools' planning for disasters and emergencies

This section presents analysis of levels of agreement with research items showing various facets of safety planning based on a five point Likert scale, by the respondents. The research findings are in Table 1 below.

Table 1: BoMs' planning for disasters and emergencies

	SA		A		N		D		SD		Mean
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	
The school has a site plan showing safe location of structures	77	30.4	93	36.8	41	16.2	19	7.5	23	9.1	3.7
There are copies of the safety manual in the school library	46	18.2	78	30.8	82	32.4	21	8.3	26	10.3	3.4
The school has adequate stock of COVID 19 key supplies	57	22.5	78	30.8	71	28.1	29	11.5	18	7.1	3.5
Safety committee identify safety needs of the school for action	64	25.3	91	36.0	61	24.1	20	7.9	17	6.7	3.7
The school has well stated school health and safety rules	88	34.8	90	35.6	49	19.4	9	3.6	17	6.7	3.9
Guidance and counselling promote safe and healthy school	126	49.8	96	37.9	21	8.3	6	2.4	4	1.6	4.2
Board admits student based on school bed capacity	135	53.4	79	31.2	26	10.3	8	3.3	5	1.9	4.3
There is a COVID 19 isolation room in the school	124	49.0	65	25.7	27	10.7	17	6.7	20	7.9	4
The school relates well with host community to enhance safety	117	46.2	102	40.3	23	9.1	7	2.8	4	1.6	4.3
There is a suggestion box to collect stakeholders view on safety	146	57.7	63	24.9	22	8.7	13	5.1	9	3.6	4.3
Overall Mean											3.93

The results show that 36.8% of the sampled respondents affirmed that their schools had a site plan showing safe location of structure as they agreed. Moreover, 30.4% strongly confirmed that their schools indeed had a site plan showing safe location of structures. However, 9.1% strongly disagreed while 7.5% disagreed that their schools had a site plan. There were 16.2% of the respondents who remained undecided and could not tell if their schools had site plans to guide placement of structures in the school compound. The results imply that most of

the schools (67.2%) have a site plan showing safe location of structures in the schools. It was also clear that there was risk of a sizeable number of schools (32.8%) having no site plans hence the risk of haphazardly putting up structures without safety being considered.

Further, it is notable that 30.8% of the respondents agreed while 18.2% strongly agreed that there were copies of the safety manual in their school libraries. 32.8% remained undecided and could not tell if there were copies of the manual in the school libraries. However, 10.8% strongly disagreed while 8.3% disagreed that their school libraries had been stocked with copies of the safety manual. This implies that 51.9% of the respondents' school did not have copies of the safety manual in their school libraries for ease of access by the school community. This is in agreement with a study carried out by Onyango (2013) and Omari, Chepkonga, Gori and Mwaura (2021) who established that 70% of schools and 54.6% respectively had not obtained safety manuals for schools in Kenya. The findings further agreed with those of a study by Alunga (2020) whose findings indicated that 75% of the respondents confirmed that they had not seen or read the safety manual for schools. This was attributed to the manual being kept in the principal's office or the deputy principal's office as confirmed by 45% and 15% of the respondents respectively. The findings further concurred with Telewa et al. (2015) who established that schools had not sourced for copies of the safety manual and did not keep MoE circulars on school safety. Further, the study was in agreement with Nyabuti, Role and Balyage (2015) who established means of 2.13 and 2.04 low rating by students and teachers respectively on copies of safety policies being available in school library for teachers and students' use. This is an indicator of school communities' lack of awareness of the specified safety standards and guidelines that could prepare them in face of disasters.

Table 1 shows that 36.0% of the respondents agreed while 25.3% strongly agreed that there was a safety committee in their schools to identify safety needs of the school for action. However, 7.9% disagreed while 6.7% strongly disagreed that there was a safety committee identifying safety needs for the school to take action. Further, 24.1% remained undecided. This implies that majority of the respondents schools had constituted safety committees. The findings concurred with Cherera (2017) who reported that more than half; 55.6% of schools in Mombasa had safety committees in place. However, the research findings disagreed with Omari, et al. (2021) and Telewa, et al. (2015) who established that more than half (53%) of the respondents' schools had not constituted safety committees. Further in disagreement was a study finding by Onyango (2013) that most schools (75.0%) in Homa Bay County did not have school safety sub-committees. Alunga and Maiyo (2019) also in disagreement with the study findings established that 60% of schools under study did not have trained safety committees to steer safety activities in the schools as required by the safety policies. On her part Gatua (2015) revealed that majority of schools in her study had not constituted safety committees. It can be inferred thus that there has been improvement in constitution of these committees with time. Moreover, there is risk of schools that are yet to constitute safety committees making un-informed safety decisions

Further, 35.6 % of the respondents agreed while 34.8% strongly agreed that indeed their schools had well stated school health and safety rules. However, 6.7% of the respondents strongly disagreed while 3.6% disagreed that their schools had well stated school health and safety rules. Moreover, 7.6% of the participants remained undecided meaning that they could not tell whether or not their schools had well stated school health and safety rules. It can be concluded that majority of the respondents' schools (70.4%) had well stated health and safety rules. The findings are in agreement with Njunu and Kiprop (2016) who found out that 89.8% of their respondents confirmed that school rules contributed to a safe and positive school climate and which was vital for overall school safety. Like any other organisation, schools require rules to govern behaviour and interactions between members for safety.

Study findings on use of guidance and counselling to promote safe and healthy schools indicate that 49.8% strongly agreed while 37.9% agreed. However, 2.4% of the participants disagreed while 1.6% strongly disagreed that in their schools, guidance and counselling promoted safe and healthy schools. 8.3% remained undecided to the study item and could not tell whether or not their schools utilized guidance and counselling to promote health and safety. This means that the majority of the respondents' schools (87.7%) utilized guidance and counselling to promote safe and healthy schools. The study findings agree with Nzoka and Orodho (2014) who reported that schools had embraced guidance and counselling as a good way of maintaining discipline in schools as it helped students make life choices that were reasonably and independently thought out. This was vital for realization of school safety.

Majority of the participants; 53.4% strongly agreed while 31.2% agreed that their school boards admitted students based on their schools' bed capacity. However, 3.1% disagreed while 2.0% strongly disagreed that students were admitted guided by the school bed capacity. The remaining 10.3% remained undecided. Schools should admit students based on their bed capacity to avoid congestion which is a health and safety hazard.

The results show that 49.0% of the respondents strongly agreed while 25.7% agreed that there was a COVID -19 isolation room that could be used for isolation of any suspected case for the safety of the rest of the school community. However, 7.9% strongly disagreed while 6.7% disagreed that there was such a room in their schools. The remaining 10.7% remained undecided meaning that they were not aware whether or not their school boards had established COVID-19 isolation rooms. It is notable that majority (74.7%) of the schools observed COVID-19 protocols.

Further, the results show that 46.2% of the respondents strongly agreed while 40.3% agreed that that their schools related well with their host communities. However, 2.8% disagreed while 1.6% strongly disagreed that their schools cordially related with the host communities. It is also evident from the research findings that 9.1% of the respondents could not tell whether there were good relations or not between their schools and the host communities, and thus remained undecided. It can be concluded that majority (86.5%) of the schools related well with their communities hence guaranteed of their protection for security and safety.

It is also observable that 57.7% of the respondents strongly agreed while 24.9% agreed that there was a suggestion box to collect stakeholders' views on safety. Further, the results show that 5.1% disagree while 3.6% strongly disagree that there was a suggestion box to collect stakeholders' views on safety. However, 8.7% of the respondents remained undecided. This means that the majority (82.6%) of the schools had a suggestion box that could be used to collect information related to safety from the stakeholders for action beforehand. The findings disagree with Gatua (2015) who established that most schools had not established proper students' reporting channels as there were no adequate suggestion boxes to facilitate reporting of safety threats or compromised situations. Further, the researcher posted that the few available suggestion boxes were inappropriately placed; in full view of the school admin and students; an obstacle to effective use.

4.2: Compliance with safety standards and guidelines

The study further sought to establish how the schools fared in complying with the 13 safety standards described in *the Safety Manual for Schools in Kenya*. The finding are posted on Table 2 below.

Table 2: Compliance with safety standards

	Yes Freq	%	No Freq	%
School grounds are levelled to promote safety	221	87.4	32	12.6
The school buildings are cleaned and disinfected to curb COVID-19	189	74.7	64	25.3
The school has a reliable source of safe drinking water	238	94.1	15	5.9
The sanitation facilities are kept clean at all times	241	95.3	12	4.7
The school has a safe food storage facility	245	96.8	8	3.2
The school is a drug free zone	233	92.1	20	7.9
Liquid soap is provided at hand wash points for hygiene safety	232	91.7	21	8.3
The school relates well with members of the host community	247	97.6	6	2.4
Children with physical impairment access facilities through ramps	130	51.4	123	48.6
There is use of corporal punishment in the school	13	5.1	240	94.9
School accommodates learners of diverse religions and cultures	249	98.4	4	1.6
Learners and staff undertake fire drills every term	86	34.0	167	66.0
School organizes transport for learners during opening and closing	132	52.2	121	47.8

From the results, it was established that most of the schools (87.4%) of the respondents' schools had levelled their school grounds to promote safety of the school community while only 12.6% reported that their schools' grounds were not levelled and this could result to avoidable accidents while complicating movement of persons living with disabilities within the school.

Most of respondents (74.7%) confirmed that their school buildings are cleaned and disinfected to curb COVID-19 while 12.6% indicated that school buildings are neither cleaned nor disinfected to curb COVID-19. Health protocols and guidelines issued to help manage health aspects especially during a disease outbreak should be followed to the later to safe the school population especially the vulnerable children.

From the study results it was established that most of the respondents (94.1%) declared that their boarding secondary schools have a reliable source of safe drinking water. However, 5.9% of the respondents' schools didn't have safe drinking water. Water is a necessity for healthy living of the school community. Besides, it also vital in enhancing cleanliness and hygiene.

It is notable that 95.3% of the respondents indicated that their schools' sanitation facilities were kept clean at all times while 4.7% were of the opinion that they were not kept clean at all times hence presenting unhealthy and unhygienic grounds for breeding of disease carrying parasites.

The study also sought to find out whether the respondents' schools had a safe food storage facility. From the study results, it can be noted that 96.8% of the respondents' schools did have safe food storage facility and that only 3.2% of the respondents noted that they did not have safe food storage facility in their schools. This means that the school food stocks could be accessed by pests and rodents or worse off become dump to attract aflatoxins rendering the foods quite unsafe for consumption. On the item of the school being a drug free zone, 92.1% of the respondents confirmed that their schools are drug free zones whereas 7.9% noted that their schools were yet to be drug free zones. Use of drugs by students has been blamed for indiscipline and schools' unrest which are the major threats to school safety.

The study sought to find out whether there was liquid soap provided at hand wash points for hygiene safety. The study findings confirmed that 91.7% of the respondents affirmed that their schools provided liquid soap at the hand wash points. However, 8.3% of the respondents indicated that there was no liquid soap at the hand wash points. Proper hand washing is recommended as a way of keeping off contagious diseases and this was over emphasized during the COVID-19 pandemic and all schools should observe hand hygiene.

From the results, it can be noted that 51.4%, of the responses indicated that there were ramps through which students with physical challenges could access the school facilities. On the contrary, 48.6% of the responses stated that students with physical challenges could not access their schools' facilities via ramps. World over, governments are struggling to ensure that children living with disabilities are accessing quality education to exploit their full potential and socialize through inclusive education.

The study further established that 94.9 % of respondents schools had abandon corporal punishment. There was need for the 5.1% of the users to stop it and use alternative methods of enhancing student discipline. It is also notable from the results that 98.4% of schools accommodate learners of diverse religions. It is recommended that the remaining 1.6% allow freedom of worship as a constitutional right in their schools. Lastly, it can be observed that 52.2% of schools organized for students transport to and from the schools while 47.8% did not. This means that the 52.2% of the schools were concerned about their students transport safety and it is recommended that all schools interrogate the general road discipline of PSV vehicles' SACCOs transporting students from school for safety.

4.3: Presentation of inferential statistics

The study sought to establish the relationship between planning for disasters and emergencies by Boards of Management and compliance with safety standards in public boarding secondary schools in Embu County. Pearson's coefficient of correlation r was computed to determine the relationship between the independent and dependent variables at five per cent ($\alpha = 0.05$) level of significance. The results are presented on Table 3.

Table 3: Correlation between planning for disasters and emergencies by Boards of Management and compliance with safety standards in public boarding secondary schools

		Planning for disasters and emergencies	Compliance with safety standards
Planning for disasters and emergencies	and Pearson Correlation	1	.773
	Sig. (2-tailed)		.029
	N	10	10
Compliance with safety standards	Pearson Correlation	.773	1
	Sig. (2-tailed)	.029	
	N	10	10

Table 3 shows $r = .773$. This shows that there is a significant strong positive linear correlation between planning for disasters and emergencies and compliance with safety standards in public boarding secondary schools. This implies that an improvement in the schools' level of planning for disasters and emergencies will improve schools' levels of compliance with the set safety standards and the vice versa.

The study further sought to test the following hypothesis *“There is no significant relationship between planning for disasters and emergencies by Boards of Management and compliance with safety standards in public boarding secondary schools”*

Table 3 shows a p value of .029 which was smaller than 0.05 level of significance. Therefore, the null hypothesis was rejected implying that there is significant relationship between planning for disasters and emergencies by Boards of Management and compliance with safety standards in public boarding secondary schools.

A mean of 3.93 indicates that the respondents were to some extent in agreement but not strongly in agreement that schools planned for safety. This is in agreement with Kisurulia, et al. (2013) who established that majority (56.9%) of schools' strategic plans did not put into consideration issues related to safety and disaster preparedness and that only small number (43%) of the surveyed schools had incorporated safety and disaster preparedness into their strategic plan. There is thus need for schools' boards to scale up their planning for safety.

5. Conclusion and recommendation

5.1: Conclusion

The main objective of the study was to examine the influence of planning for disasters and emergencies by Boards of Management on schools' compliance with safety standards in public boarding secondary schools. From the findings it is notable that there exist a strong positive relationship between planning for disasters and emergencies by school boards and compliance with safety standards. Moreover, the study found that planning for disasters and emergencies by school boards influences schools' compliance with the safety standards hence the level of safety enjoyed in the school. It is also evident that boarding secondary schools in Embu County are putting effort to comply with the safety standards as spelt out in the safety manual for schools in Kenya (2008) as implied by a mean of 3.93. However, there is still room for improvement in areas where the respondents either strongly disagreed, disagreed or chose to remain undecided for all schools to enjoy high levels of safety.

5.2: Recommendations

1. BoMs should allocate enough funds for safety during their annual budgeting to allow for procurement of safety related equipment; training on safety for awareness, knowledge and skills; and in-servicing of guidance and counselling teachers.
2. BoMs should develop their schools based on a well thought out site plan to direct safe placement of infrastructure.
3. Schools should maintain copies of the safety manual for schools in Kenya for reference in implantation of the safety policy.
4. BoMs should support the government effort to provide quality education in an indiscriminating environment for children with special needs by ensuring accessibility of all school premises by these children.

5. BoMs should constitute and highly engage the safety committee and guidance and counselling teams where they are not in existence.
6. BoMs of schools that have tainted school-community relations should work hard to enhance the relations for safety.
7. BoMs should put stakeholders' safety ideas and opinions into consideration when making their safety decisions with a view to enhancing school safety.

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