BOARDS OF MANAGEMENT GOVERNANCE STRATEGIES: PREDICTORS OF SAFETY STANDARDS IN PUBLIC SECONDARY SCHOOLS, KENYA

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ABSTRACT

The safety of learners is ultimate in the provision of quality education. Secure school environments foster quality teaching and learning (Ministry of Education, 2008). However, the well-being of school children remains a global problem due to the recurrence of tragedies and safety management in schools remains a growing concern. Adequate management of safety is obligatory to save lives. The study aimed to examine the influence of Boards of Management governance strategies on compliance with safety standards in public boarding secondary schools in Embu County, Kenya. Two objectives guided the study; To examine the influence of planning for disasters by Boards of Management on compliance with safety standards in public boarding secondary schools in Embu County; To establish the effect of training of stakeholders on safety knowledge and skills by Boards of Management on compliance with safety standards. Pragmatic philosophy and convergent mixed-method design were adopted. The study targeted five sub-counties and 64 public-boarding secondary schools. BoM and Parents Association chairpersons,

BoM secretaries, Heads of Departments (HoDs) and Sub-County Quality Assurance and Standards Officers (SCQASOs) participated. Simple random, stratified and purposive sampling gave a sample of 55 schools and 5 SCQASOs. The total number of respondents was 445. Data were collected using a questionnaire, interview and observation schedules. Expert judgement determined the validity while Cronbach's Alpha computed confirmed reliability. Quantitative data were descriptively analysed, while qualitative information was analysed thematically. The study revealed a strong correlation between governance strategies and safety. The study also confirmed the significant influence of governance strategies on school safety. The study concluded that governance strategies are strongly associated with and significantly influence school safety. The Ministry of Education and schools should plan for safety and train human resources for disaster management.

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

INTRODUCTION

The well-being of school children has remained a global problem due to the recurrence of tragedies. Limber and Kowalski (2020) state that school shootings have taken many lives and caused extensive fear in the United States. In the recent past, Sandy Hook Elementary School lost 26 people, Marjory Stoneman Douglas High School lost 17 students, and in a Texas School, ten lives were lost (Limber & Kowalski, 2020). In 2014 the Taliban pounced on the Peshawar Army School, 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 characterise a lack of safety in schools. Several students have died from school fires (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). The developers believed compliance with the standards would see schools propagate safe and secure environments at all levels.

Despite the government's efforts, learners have continued to lose lives in school fires, attacks and accidents. In 2017, eight students died, and dozens were injured in Moi Girls, Nairobi School dormitory fire (Wanzala, 2017). 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 2020, 14 learners died in a stampede at Kakamega Primary due to structural weaknesses (Nyaundi, 2020).

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 realising inclusive safety. 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). Bakwai, Yisa, Musa, 2015; Eslinger, 2017 and Mgadla, 2014 confirm management by boards in British Colombia, School-Based Management Committees in 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 all aimed at ensuring the 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. Planning 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).

BoMs' planning includes having a safety budget, a site plan showing infrastructure placement, a safety committee, a committed guidance and counselling team, well-stated health and safety rules and good 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 guards, 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 needed more safety committees, thus a setback for school safety programmes.

Rinaldi (2016) over that school safety depends on the capacities gained through training that aim to equip participants with safety competencies, knowledge and skills needed to tackle safety issues. However, Dube and Orodho, 2016; Kukali, 2013; and Nyakundi et al., 2014 found that most schools needed more training programmes to equip stakeholders with safety knowledge and skills/abilities for prevention, response, mitigation and recovery processes.

Schools are expected to be sanctuaries of all school-going children, as learner safety is crucial to delivering quality education.

In Kenya, secondary schools continue to experience shocking incidents of arson, unrest, armed conflict and drug abuse. Embu County has been experiencing high student unrest with arson cases targeting dormitories. The National Crime Research Centre (2017) confirmed that over 130 schools (an average of three per county) were closed down in 2016 due to unrest, violence and arson targeting dormitories, and Embu County was not exceptional. Ndonga (2016) reports that Embu and Nakuru counties were among the counties that had recorded a high number of cases in 2015 and made a comeback in 2016 with an equally high number of cases (six 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. The county has led in cases of arson especially targeting dorms. While the county recorded nine cases in 2018, the neighbouring counties of Tharaka-Nithi recorded six; Machakos two; Muranga-zero and Kitui-two (MoE, 2018). According to the Regional Director of Education- Eastern (2021), Embu County was leading in nationally the region's post-COVID-19 number of arson cases. In addition, Embu has recorded other unique cases of safety breaches. In 2019, a student from a boarding school died after being allegedly beaten by a teacher (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 a lack of safety leading to property damage, a threat to student and staff well-being and lives, and loss of cherished learning time.

The Basic Education Act of 2013 tasks Boards of Management to uphold students' welfare and human rights and ensure their safety (RoK, 2013). Schools must be governed adequately to ensure safety for quality education. Compliance with the Safety Standards Manual (2008) is expected to make schools safe and secure environments. Studies on school safety have focused on compliance levels, and challenges to schools and have yet to investigate the influence of Boards of Management governance strategies on compliance with safety standards. There was a need, therefore, to examine the influence of BoMs' planning for disasters and the training of stakeholders on compliance with safety standards in public boarding secondary schools.

OBJECTIVES OF THE STUDY

(i)   To examine the influence of planning for disasters by Boards of Management on compliance with safety standards in public boarding secondary schools in Embu County

(ii) To establish the influence of training of stakeholders on safety knowledge and skills by Boards of Management on compliance with safety standards

Research Hypotheses

H01: There is no significant relationship between planning for disasters by Boards of Management and compliance with safety standards in public boarding secondary schools in Embu County

H02: There is no significant relationship between training stakeholders on safety knowledge and skills by Boards of Management and compliance with safety standards

REVIEW OF RELATED LITERATURE

Planning for safety is obligatory to save lives if disaster strikes (IFC, 2010). This may mean planning to ensure safety on school grounds, infrastructure, health and hygiene, food, and drug and child abuse. Planning ensures the safety of children with special needs, safety in transport and disaster risk reduction. This requires a site plan, a safety budget, a safety committee, and a guidance and counselling team to direct behaviours compliant with the recommended safety standards for schools. Haphazard site planning or none may hinder safety as site access and passage by fire brigade are limited, and drainage, electricity, utility holes, fences, gates, and fire hydrants may fall out of place. All infrastructure should comply with safety standards.

Sufficient funds for safety equipment and emergency response are required, while guidance and counselling will deter destructive student behaviour. Maynard (2017) notes that the need for a budget (financial plan) for components of the school safety plan was likely to hinder boards' attempts 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 installing safety measures.

Mgadla (2014) notes that planning for safety starts with the 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: Dube and Orodho, 2016; Ibrahim and Orodho, 2014; King'oina, Ngaruiya & Mobegi, 2017; Kukali, 2013; Nyakundi et al., 2014; Pillar, 2016; Rinaldi, 2016; and Tipler, 2017 revealed that schools had not constituted safety committees.

Training equips all with safety knowledge, skills and attitudes through workshops, drills and display of safety materials. Training should equip stakeholders with the safety

knowledge, skills and attitudes needed to deal with safety issues. Publicising school shootings in America has created safety awareness, with educators focusing on making schools safer (Pillar, 2016). Tipler (2017) posits that educating people about vulnerabilities and how to respond can save lives. Awareness helps people to be proactive and not reactive. Rinaldi (2016) notes that the promotion of school safety and threats mitigation are subject to acquired knowledge and skills.

RoK (2018) holds that proactive and preventive safety management requires all stakeholders to have knowledge and capacities for averting and responding to disasters and building resilience by enhancing their abilities to detect early warning signs and take dynamic and preventive measures. Dube and Orodho, 2016; Kimanthi, Mugwe and Thinguri, 2019 agree that preparation and response to crises rely on people's understanding of the policies and procedures and knowing what to do. This is only achieved through training. In their descriptive research, Dube and Orodho (2016) used purposive and stratified random sampling of 150 respondents with questionnaires, interview schedules and observation checklists to collect data. They found that only a few schools knew how to respond or prepare for disasters. The researchers concluded that school disaster preparedness could counteract imminent

disasters or abate their effects. They recommended that schools enhance and sustain disaster preparedness through planning, exercising, evaluating, and taking corrective action.

The current convergent mixed method research sought to establish the influence of planning for disasters regarding having a site plan, copies of the safety manual, safety committees, guidance and counselling, strategically placed suggestion box, well-stated health and safety rules, COVID-19 supplies and admitting students based on bed capacity by BoMs on compliance with safety standards in public boarding secondary schools in Embu County. Further, the current study investigated whether BoMs are planning for and executing capacity-building programmes to impart safety knowledge, skills, and attitudes among boarding secondary school stakeholders in Embu County.

RESEARCH METHODOLOGY

The section describes the research design, target population, sample size and sampling procedure, data collection instruments, instrument validity, reliability, data collection procedures and data analysis techniques. The study adopted the 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 understand the problem best (Creswell, 2014). The study also used convergent mixed method design, which entails collecting and integrating quantitative and qualitative data in a study. The design involves examining and incorporating both data to compare the outcomes (Leavy, 2017). This approach was appropriate as this study aimed to describe, explain, and examine school safety, a complex problem.

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

population the researcher wants to generalise. Simple random sampling was advanced to pick boarding secondaries that participated in the research using Slovin's formula n=N/ [1+N (e) 2], where n = sample size; N= finite population; e = level of significance; 1= unit or a constant (Matula et al., 2018) to get a sample of 55 boarding schools.

Stratified sampling helped choose schools from each category to ensure a proportional sample size concerning the strata sizes from which they were drawn. Ten boys' and 13 girls' boarding, three girls' day/boarding, six mixed boardings and 23 mixed day/boarding secondary schools were selected. 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 in accidents that could threaten the safety of the students and teachers involved or the entire school. The 5 SCQASOs were also purposively sampled. The total sample was 445 respondents.

Three research instruments were used: a questionnaire, interview schedules and an observation schedule to collect data from participants and the sampled schools. 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 improve the tools. A Cronbach's Alpha of 0.87 and 0.88 confirmed the high reliability of the study items in the questionnaire based on the research objectives.

REVIEW OF RELATED LITERATURE

Planning for safety is obligatory to save lives if disaster strikes (IFC, 2010). This may mean having plans to ensure safety on school grounds, infrastructure, health and hygiene, food, and drug and, child abuse. Planning ensures safety of children with special needs, safety in transport and disaster risk reduction. This requires a site plan, a safety budget, a safety committee, and a guidance and counselling team to direct behaviours that are compliant with the recommended safety standards for schools. Haphazard site planning or none may hinder safety as site access and passage by fire brigade is limited, drainage, electricity, manholes, fences, gates, and fire hydrants may fall out-of-place. All infrastructure should comply with safety standards.

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.

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Training equips all with safety knowledge, skills and attitudes through workshops, drills and display of safety materials. Training should aim at equipping stakeholders with safety knowledge, skills and attitudes needed in dealing with safety issues. Publicising of school shootings in America has created safety awareness with educators focusing on ways of making schools safer (Pillar, 2016). Tipler (2017) posits that educating people about vulnerabilities and how to respond can save lives.

Awareness helps people to be proactive and not reactive. Rinaldi (2016) notes that promotion of school safety, and threats' mitigation are subject to acquired knowledge and skills.

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The current convergent mixed method research sought to establish the influence of planning for disasters in regard to having a site plan, copies of the safety manual, safety committees, guidance and counselling, strategically placed suggestion box, well stated health and safety rules, COVID-19 supplies and admitting students based on bed capacity by BoMs on compliance with safety standards in public boarding secondary schools in Embu County. Further, the current study aimed to investigate whether BoMs are planning for and executing capacity building programmes with a view of imparting safety knowledge, skills, and attitudes among boarding secondary schools' stakeholders in Embu County.

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sampled. The total sample was 445 respondents.

Three types of research instruments were used: a questionnaire, interview schedules and an observation schedule to collect data from participants and the sampled schools. 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. A Cronbach's Alpha of 0.87 and 0.88 confirmed high reliability of the study items in the questionnaire based on the research objectives.

RESULTS AND DISCUSSION

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 were analysed thematically to form themes. Quantitative data was analysed using descriptive statistics and offered in a frequency distribution table.

The results presented in Table 1 shows that most respondents agreed rather positively to the statements as shown by the means above 3 on a scale of 1 to 5. Among the highly rated items are those of the school admitting

students according to be capacity, the school relating well with host community, presence of a suggestion box and on the importance of counseling. The number of of respondents disagreeing shows that the information is not known by some and pointing a need to make the information more available. All in all it was noted that a majority of the schools sampled admit students based on their bed capacity to avoid congestion which is a health and safety hazard and a majority of the schools had constituted safety committees. It was also clear that there was risk of a sizeable number of schools having no site plans hence the risk of haphazardly putting up structures without safety being considered.

The study further sought to investigate the influence of training to impart safety knowledge, skills, and attitudes among boarding secondary schools' stakeholders on compliance with safety standards in Embu County. The study findings are summarized on Table 2.

Table 1: BoMs' Planning for Disasters and Emergencies

Statement	Mean
The school has a site plan	3.7
There are copies of the safety manual	3.4
The school has COVID19 key supplies	3.5
Safety committee identify safety needs	3.7
The school has health and safety rules	3.9
Guidance and counselling promote safe and healthy	4.2
Board admits student based on school bed capacity	4.3
There is a COVID 19 isolation room	4.0
The school relates well with host community	4.3
There is a suggestion box to collect stakeholders views	4.3

Table2: BoMs' training of stakeholders on safety knowledge and skills

	SA		A		N		D		SD		
	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Mean
Safety seminars are organised for the school community	31	12.3	101	39.9	59	23.3	36	14.2	26	10.3	3.3
Local fire brigade is invited to give talks on fire safety	54	21.3	66	26.1	76	30	30	11.9	27	10.7	3.36
Learners are given talks on gender issues and drug abuse	151	59.7	72	28.5	17	6.7	6	2.4	7	2.7	4.4
The management facilitates frequent safety drills	44	17.4	85	33.6	73	28.9	20	7.9	31	12.2	3.36
Parents	4	17	8	34	7	30	2	8.	2	8.	3.4

Statement											
are sensitized on need for disabled children's education	5	.8	8	.8	7	.4	2	7	1	3	5
Covid 19 awareness messages are posted in strategic areas	136	53.7	83	32.8	25	9.9	6	2.4	3	1.2	4.36
Teachers can identify signs of drug and substance abuse	131	51.8	97	38.3	15	5.9	4	1.63	6	2.4	4.36
Students are aware of harmful cultural practices	119	47	105	41.5	17	6.7	11	4.4	1	0.4	4.3
All teachers are trained in first aid skills	43	17	76	30	80	31.6	35	13.9	19	7.5	3.35
School community is trained on management of COVID 19	66	26.1	93	36.8	56	22.1	16	6.3	22	8.7	3.65

The research findings on Table 2 indicate that 101 (39.9%) of the respondent agreed while 31 (12.3%) strongly agreed that safety seminars were organized for the school community. However, 36 (14.2%) disagreed while 26 (10.3%) strongly disagreed that their schools organized safety seminars for the school community. Furthermore, 59(23.3%) remained neutral. The results imply that safety seminars were on the average organized for the school communities as reported by 52.2% of the respondents. This could mean that a good number of the respondents (47.8%) were not well prepared in face of disasters or situations that could threaten individual or school safety.

Safety policy requires that learners are not only sensitized about dangers of fire through the related sections of the curriculum but the local fire department should be invited to give talks on fire prevention in a school context (MoE, 2008). With this emphasis on use of experts to relay information, the researcher sought to establish if the local fire brigade was ever invited to talk about fire safety in the boarding secondary schools in Embu County. From the responses, 76 (30.0%) of the respondents remained neutral whereas 66 (26.1%) agree and 54 (21.3%) strongly agreed that local fire brigade was invited to give talks on fire safety in their schools. However, while 30 (11.9%) disagreed, 27 (10.7%) strongly disagreed that local fire brigade was invited to give talks on fire safety in their schools. 76 (30.0%) of the respondents remained neutral. From the research finding, it can be alluded that there was effort by boarding secondary schools to invite the fire department to give talks on fire safety as confirmed by 47.4% of the respondents.

The implication could be that in most of the schools in Embu County (52.6%) if a fire broke out, the students, teachers and non-teaching staff may not know what to do because of lack of fire safety knowledge and skills. The questions would thus remain, "Do students start dormitory fires due to lack of knowledge?" and "Do the school fires cause destruction of properties worth millions due to lack of safety skills by the Embu County boarding schools' communities?"

Of major concern to school management today is the increasing problem of drug and substance abuse among learners. This has been cited as one of the main cause of student indiscipline and school unrest in the country. As a result, this study wanted to find out whether learners were given talks on gender issues and drug abuse. From the Table 4.2 research findings 151 (59.7%) strongly agreed while 72 (28.5%) agreed that learners were given talks on gender issues and drug abuse. Moreover, 7 (2.8%) strongly disagreed while 6 (2.4 %) disagreed that learners in their schools were given talks on gender issues and drug abuse. 17 (6.7%) of the respondents remained neutral. From the results, it can be argued that most of the learners in Embu County boarding secondary schools were given talks on gender issues and drug abuse. Safety policy requires that learners are not only sensitized about dangers of fire but the local fire department should be invited to give talks and demonstrations to the school community on fire prevention in a school context (MoE, 2008). Further, the study wanted to investigate whether the school management frequently facilitated safety drills as a means to equipping the school community with safety knowledge and skills in the face of disasters and emergencies in the schools.

The results on Table 4.2 indicated that 85 (33.6%) of the respondents agreed while 44 (17.4%) strongly agreed with the idea of their school managements having frequently facilitated safety drills in the schools. However, 31 (12.2%) strongly disagreed while 20(7.9%) disagreed that safety drills were frequent in their schools. It was also noted that 73 (28.9%) of the respondents were neutral. The results show that on the average (51.0%) management in boarding secondary schools in Embu County do facilitate frequent safety drills in the schools. Moreover, there was a good number of the respondents' (49.0%) schools' boards had not facilitated safety drills. This agrees with the findings by Alunga (2020) that majority (60.0%) of the teachers in Trans-Nzoia reported that students and staff had not been taken through security drills to equip them handle security threats and emergencies and thus the likelihood that they are not aware of the measures and how to combat insecurity cases.

According to Alunga (2020), this makes students vulnerable in case of any safety risk occurrence. Moreover, Ogbo (2021) notes that there is need for MoE to organize regular professional development programme for principals on the safety measures for personnel management to enable them acquire up-dated skills and knowledge to safeguard the lives of students and members of staff.

It is the policy of the government to integrate children with mild special needs into regular schools where they can inclusively participate in learning without any form of discrimination (MoE, 2008). To achieve this, schools are expected to sensitize parents or guardians and communities so that children with disabilities are taken to school. This study wanted to find out if parents were sensitized on need for disabled children to participate in formal education and in regular schools with other children. The study finding are displayed on Table 4.1. The results show that 88 (34.8%) of the responses given indicated that the respondents agreed while 45 (17.8%) strongly agreed that indeed parents were sensitized on the need for disabled children's education. It can also be noted that 22 (8.7%) of the respondents disagreed while 21 (8.3%) strongly disagreed that parents in their schools were sensitized on the need for children living with disabilities to be educated. Furthermore, 77 (30.4%) remained neutral. The results

indicate that on average (52.6%) parents were sensitized on need for disabled children's education. However, there was risk of the remaining 47.4% remaining ignorant on matters of education for the children living with disabilities.

The researcher wanted to find out from the respondents if COVID 19 awareness creation messages were posted in strategic areas in schools to serve as a constant reminder to the school community of the importance of adhering to the COVID 19 protocols set by the MoE in collaboration with MoH. From the findings on Table 1, 136 (53.8%) of the respondents strongly agreed while 83(32.8%) agreed that COVID 19 awareness messages were posted in strategic areas of their schools. Additionally, 6 (2.4%) disagreed while 3 (1.2%) strongly disagreed that there were awareness messages posted at strategic areas of the schools to remind members of the need to adhere to the recommended protocols meant to reduce infections and spread of the disease. Furthermore, 25 (9.9%) of the respondents opted to remain neutral. It can be inferred that majority; 86.5% of the respondents' schools had COVID 19 awareness messages posted in strategic areas to serve as sensitization apparatus and also equip the school community with information pertaining the pandemic modes of transmission and prevention.

The safety standard No.5 as outlined in the Safety Manual for Schools in Kenya require the school to create a safe and caring environment where learners and staff know the dangers of drug abuse and strive to make their school a drug free zone. Further, teachers are expected to acquire knowledge and understanding about drugs and signs of drug abuse, identify and note the symptoms so as to take the necessary remedial action (MoE, 2008). This study wanted to know from the respondents (teachers) whether teachers could identify signs of drug and substance abuse in schools. The results show that 131 (51.8%) of the respondents strongly agreed while 97 (38.3%) agreed that the teachers in Embu County boarding secondary schools could identify signs of drug and substance abuse in the school community. However, a proportion of 6 (2.4%) strongly disagreed while 4(1.6%) disagreed that teachers in their schools and probably them included could not tell when an individual abused drugs or other substances in their schools.

Moreover, 15 (5.9%) of the respondents remained neutral. From the research responses, it could be inferred that majority of teachers in Embu County were able to identify signs of drug and substance abuse in their schools as depicted by 90.1% of the respondents.

The safety policy requires that stakeholders be well aware of the possible threats to school safety that could emanate from the school's and learners' socio-cultural environment. The school management should sensitize learners, parents or guardians and the community members about negative practices like female genital mutilation (FGM) and child marriages. Such cultural practices are not only a violation of the rights but are also discriminatory as they are effected on the girl child as the resultant health complications lower their self-esteem, rob the victims of their childhood and deny them learning time. This study wanted to find out from the respondents whether students were aware of harmful cultural practices that could threaten their safety and education. From the results 119 (47.0%) of the participants strongly agreed, 105 (41.5%) agreed that students were aware of harmful cultural practices. Further, 11 (4.4%) of the respondents disagreed while only 1(0.4%) strongly disagreed that their students were aware of the harmful cultural practices. There was however 17 (6.7%) of the respondents who remained neutral. The results reveal that students in majority of the boarding secondary schools in Embu County were aware of harmful cultural practices in their surroundings a s reported by 88.5% of the respondents. This awareness is very important as the students can fight for their rights should they be faced with situations that are likely to violate them.

Teachers play an essential role in ensuring the safety of the learners placed under their care besides teaching of the curriculum. First Aid is the first assistance or treatment given to a casualty in an emergency situation before formal and appropriate medical help is accessed. First Aid training for teachers is important as it should aim to equip them with knowledge and skills required in dealing with safety threatening situations such as injuries in the school. First Aid should be administered to preserve life, protect an unconscious victim, prevent worsening of the issue at hand, relief pain to alleviate suffering and promote recovery in case of emergencies. When teachers are trained and thus well prepared to offer the first care, they will feel more confident when dealing with emergencies at the school level.

This study sought to establish if teachers in boarding secondary schools in the county had been trained on first aid. From the study results on Table 4.3, it is evident that 76 (30.0%) of the respondents agreed while 43(17.0%) strongly agreed that all teachers in their schools had been trained on first aid. However, 35(13.9%) disagreed while 19 (7.5%) strongly disagreed that all teachers were trained on first aid skills. It can also be observed that 80 (31.6%) of the respondent chose to remain neutral on whether all teachers had been trained on first aid skills. From the study results it can be suggested

that slightly above average (52.9%) teachers in boarding secondary schools in Embu county had not been trained on first aid and thus not in apposition to offer the first assistance when required. However, 47.1% could offer the badly required first aid in emergency situations.

Covid 19 pandemic interrupted schooling of more than 18 million learner and trainees in Kenya when all learning institutions were closed on 15th March 2020 to curb the spread of the deadly virus (MoE, 2020).With determination to continue providing quality education amidst COVID-19 while at the same time safeguarding every learner's right to education, health and safety , the MoE in collaboration with MoH developed guidelines to direct the operations of the education institutions before resumption, during and after resumption in the context of the pandemic. The schools were required to sensitize the school communities on prevention and management of the viral disease. Since this study was carried out in the COVID-19 era there was need to establish from the teachers whether the school community was trained on COVID-19 management in face of the pandemic.

It is notable from the results that 93 (36.8%) of the respondents agreed while 66 (26.1%) strongly agreed that the school community was trained on management of COVID-19. Further noted was 22 (8.7%) of the

respondents strongly disagreed while 16 (6.3%) disagreed that the school community was trained on management of COVID-19. However, 55 (22.1%) of the respondents opted to remain neutral. The results indicate that a majority of the respondents 159 (62.9%) confirmed that their school communities were well prepared in the face of COVID 19 as they had been trained on management of COVID 19. However, 94 (37.1%) confirmed that their schools had put little or no effort to train their school communities on management of COVID 19 meaning that the impact of infection would rather be devastating.

The study sought to establish the relationship between planning for disasters by Boards of Management and compliance with safety standards in public boarding secondary schools in Embu County. The results are presented on Table 3.

Table 3: *Correlation between planning for disasters and compliance with   safety standards*

		Planning for disasters	Compliance with safety standards
Planning for disasters and emergencies	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

r =.773   *p*= .029   alpha = .05

Table **3** shows *r* =.773. meaning that there is a strong positive correlation between planning for disasters and compliance with safety standards in public boarding secondary schools. This implies that an improvement in the schools' level of planning for disasters 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 by Boards of Management and compliance with safety standards in public boarding secondary schools"* .

Table 4 shows a *p* value of .029 which was less than .05 level of significance. Therefore, the null hypothesis was rejected implying that there is significant relationship between planning for disasters by Boards of Management and compliance with safety standards in public boarding secondary schools. to establish how the schools faired on in complying with the 13 safety standards. The findings are posted on Table 4.3 below.

Table 4 results shows that 221 (87.4%) schools had levelled their grounds to promote safety of the school community while only 12.6% had not levelled and this could result to avoidable accidents while complicating movement of persons living

with disabilities within the school. additionally, 189 (74.7%) schools' buildings are cleaned and disinfected to curb COVID-19 while 12.6% schools' 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.

Table 4: Compliance with safety standards

	Yes		Mean
	Freq	%	
School grounds are levelled to promote safety	221	87.4	1.1
The school buildings are cleaned and disinfected to curb COVID-19	189	74.7	1.3
The school has a reliable source of safe drinking water	238	94.1	1.1
The sanitation facilities are kept clean at all times	241	95.3	1.0
The school has a safe food storage facility	245	96.8	1.0
The school is a drug free zone	233	92.1	1.1
Liquid soap is provided at hand wash points for hygiene safety	232	91.7	1.1
The school relates well with members of the host community	247	97.6	1.0
Children with physical impairment access facilities through ramps	130	51.4	1.5
There is use of corporal punishment in the school	13	5.1	1.9
School accommodates learners of diverse religions and cultures	249	98.4	1.0
Learners and staff undertake fire drills every term	86	34.0	1.7
School organises transport for learners during opening and closing	132	52.2	1.5

From the study results it is notable that 238 (94.1%) schools have a reliable source of safe drinking water. However, 15 (5.9%) 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. Furthermore, it is notable that 241 (95.3%) schools' sanitation facilities were kept clean at all times while 12 (4.7%) 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 245(96.8%) schools had safe food storage facility and that only 8 (3.2%) did not have. 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. It is also observable from the results that 233(92.1%) schools are drug free zones whereas 20 (7.9%) are not. Use of drugs by students has been blamed for

indiscipline and schools' unrest (National Crime Research Centre, 2017).

The study sought to find out whether there was liquid soap provided at hand wash points for hygiene safety. The study findings confirmed that 232(91.7%) schools provided liquid soap at the hand wash points. However, 21(8.3%) schools had 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 emphasised during the COVID-19 pandemic and all schools should observe hand hygiene.

From the results, it can be noted that 130(51.4%) schools had ramps through which students with physical challenges could access the school facilities. On the contrary, 123(48.6%) had no ramps. World over, governments are struggling to ensure that children living with disabilities are accessing quality education to exploit their full potential through inclusive education.

The study established that 240 (94.9%) schools had abandoned corporal punishment while 13(5.1%) were still using it. There was need for the schools to stop it and use alternative methods of enhancing student discipline. It is also notable from the results that 249(98.4) schools accommodate learners of diverse religions while 4(1.6%) did not. It is recommended that all schools allow freedom of worship.

Table 3 shows that 132 (52.2%) schools organised for students' transport to and from the schools while 121(47.8%) did not. Proper transport for students should be organised by the school in collaboration with parents to ensure safety of the learners. Additionally, 167 (66.0%) schools did not facilitate fire drills one every term as required. Only 86(34.0%) did. This implies that majority of schools did not possess the requisite knowledge and skills required to face fir disasters. The It was observed that training of stakeholders on safety knowledge and skills by Boards of Management was critical to compliance with safety standards in boarding schools. Training of stakeholders on safety knowledge and skills intensifies, the levels of compliance with the safety standards increases.

CONCLUSION

The study concluded that planning for disasters by school boards is strongly correlated with compliance with safety standards. Additionally, planning for disasters has a significant influence on compliance with the safety standards and thus the level of safety enjoyed in the school. Furthermore, not all schools conclusively plan for disaster to realise enhanced school safety. The study concluded that training of stakeholders on safety knowledge and skills by Boards of Management moderately and positive correlated with compliance with

safety standards in boarding schools. Furthermore, training of stakeholders on safety knowledge and skills significantly influenced school compliance with the safety standards. Based on the findings the study concluded that boarding secondary schools in Embu County are yet to fully comply with the safety standards as spelt out in the *Safety Standards Manual for Schools in Kenya* (2008).

The head teachers need to create maximum awareness to the parents on their role in participation in the implementation of inclusive education. The head teachers should establish well-structured collaborations with parents which may likely increase the level of involvement. Parents must be educated to understand that having a disabled child is not a curse and that they should expose these kids to all of the educational options the nation has to offer in order to fully realise their potential.

REFERENCES

1. Ahenda, B., & Kahenda, M. (2020). Three students die in dawn road accident. *The Standard.* Retrieved from https://www.standardmedia.co.ke
2. Ali, N. (2017, October 14). Expelled refugee student kills seven in Kenyan school. *Reuters.* Retrieved from https://www.reuters.com.
3. Alunga J. U. (2020). Students and Staff Awareness on School Safety Measures in Public Boarding Secondary Schools in Trans-Nzoia County, Kenya. *European Journal of Education Studies* Volume 7 Issue 122020 DOI: 10.46827/ejes. v7i12.3460
4. Arop, F. O., & Owan, V. J. (2018). Institutional Variables and the Supervision of security in Public Secondary Schools in Cross River State. *International Journal of innovation in Educational Management* (IJIEM); Vol. 2, No.1; September, 2018.
5. Ary, D., Jacobs, L.C., & Sorensen, C. (2010). *Introduction to Research in Education* (8th Ed.). Wards worth Cengage Learning.
6. Bakwai, B., Yisa, H. M., & Musa, R. M. (2015). Assessment of School-Community Relationship in Sokoto State Secondary Schools: The role of School-Based Management Committees. *Studies in Educational Planning and Administration (SEPA), 5(1), 18-27.*
7. Dube, A.K., & Orodho, J.A. (2016). Level of Disaster Preparedness and Policy Implementation in Public Secondary Schools in Rhamu Town, Mandera County, Kenya. *Journal of*

Research & Method in Education (IOSR-JRME Volume 6, Issue 2- DOI: 10.9790/7388-06210611

8. Esliger, J. R. (2017). Creating a safe, caring and inclusive school environment. The *Organizational Improvement Plan at Western University, 19*. Retrieved from https://ir.lib.uwo.ca/oip/19

9. Ford, M. (2013). The Impact of School Board Governance on Academic Achievement in Diverse States. Ph.D. Dissertation in Urban Studies. The University of Wisconsin-Milwaukee

10. Human Rights Watch, (2017). "Dreams Turned into Nightmares". Attacks on Students, Teachers, and Schools in Pakistan. Printed in the United States of America. http://www.hrw.org

11. Ibrahim, A. H., & Orodho, J. A (2014). Strategies Applied by the Board of Management to Enhance Students Academic Performance in National Examinations in Schools in Mandera County, Kenya. *Journal ofEducation and Practice* Vol.5, No.20

12. International Finance Corporation, (2010). Disaster and Emergency Preparedness: Guidance for Schools, International Finance Corporation. World Bank Group

13. King'oina, J. O., Ngaruiya, B. N., & Mobegi, F. O. (2017). The Role of Boards of Management as a Determinant of Pupils' Academic Performance in Public Primary Schools in Marani Sub-County, Kenya. International Journal of Scientific Research and Innovative Technology 4 (6)

14. Kothari, C.R. (2011). *Research Methodology: Methods and Techniques*. New Age International Publishers, New Delhi

15. Kukali, A. N. (2013). Implementation of Safety Policy in Girls' Boarding Secondary Schools in Bungoma East District, Kenya: Challenges and Strategies. *Journal of Education and Practice* Vol.4, No.22

16. Limber, S.P., & Kowalski, R.M. (2020). How Schools Often Make a Bad Situation Worse. *International journal on Child Maltreatment: Research, Policy and Practice (2020) 3:211- 228*

17. Maynard, L. B. (2017). School Safety Preparedness: A Case Study of Three School Districts. Doctor of Education (Ed. D) Capstone; Morehead State University. ProQuest LLL Number 10606109

18. Mgadla, I. X. (2014). A Holistic Approach to Safety and Security at Schools in South Africa. *Mediterranean Journal of Social Sciences* (10.6401/mjss)

19. Ministry of Education, (2008). *The Safety Standards Manual for Schools in Kenya* Nairobi: Church World Service

20. Muchiri, J. (2019, March 14). Ministry Investigating Death of Kangaru Boys student after punishment. *The Standard.* Retrieved from https://www.standardmedia.co.ke

21. National Crime Research Centre, (2017). Rapid Assessment of Arsons in Secondary Schools in Kenya - July-August, 2016. NCRC, Nairobi

22. Ndonga, S. (2016, July 20). 4 More Schools Torched in Rising Cases of Unrest. Retrieved from: https://www.capitalfm.co.ke

23. Ndwiga, A. (2018). A Form 3Student Slashes Lab Technician Who Prevented Him from Beating Head Teacher: Retrieved - https://edaily.co.ke/author/anthonyndwiga/18:48:46

24. Nyakundi O. Z., Ngwacho G. A., & Monga're, E. (2014). Implementation of Safety Standards and Guidelines in Public Secondary Schools in Marani District, Kisii County, Kenya. *Journal of Education and Practice* ISSN 2222-1735 Vol.5, No.13, 2014

25. Nyaundi, L. (2020). Ministry Report: Fight linked to fatal stampede at Kakamega School. The-star.co.ke/news. Retrieved on July 1st, 2020

26. Ogba, F. N., & Igbu, N. C. N. (2014). Realizing Quality Education in Nigeria: The need to Revitalize Secondary Education. *Journal of Educational Research,* 2(3), 57-64

27. Ogbo, R.N., Nawanga, Aligwe, S. Nnebedum & Chidi (2021). Safety Measures Adopted by Principals in Management of Public Secondary Schools in Enugu State, Nigeria. British International Journal of Education and Social Sciences Vol.8, No.1; January- 2021 pg. 26-35

28. Pillar, D.W. (2016). Policies, Strategies, and Procedures: A Study of Indiana School Safety. Doctor of Education Dissertation, Ball State University, Indiana

29. Republic of Kenya, (2013). *The Basic Education Act NO* 14, 2013. Nairobi: Government Printer.

30. Rinaldi, R.P. (2016). Assessing Educators' School Safety and Security Preparedness at a New Jersey K-12 Nonpublic School. Doctor of Education Dissertation, Abraham S. Fischer College of Education, Nova Southeastern University
Shober, A. F., & Hartney, M. T. (2014). Does School Board Leadership Matter? Thomas B. Fordham Institute.

32. Tipler, K.S. (2017). Emergency Preparedness and Response in New Zealand Schools. Ph.D. Thesis in Emergency Management. Massey University; Wellington, New Zealand.

33. UNESCO. (2017). *School Safety Manual: Tools for Teachers*. Addis Ababa, Ethiopia: International Institute for Capacity Building in Africa (IICBA). Wanzala, O. (2017, September 2nd). The death of eight students at Moi Girls School Nairobi on Saturday has once again put into sharp focus the safety of students in boarding schools. *Daily Nation*

34. Wanzala, O. (2017, September 2nd). The death of eight students at Moi Girls School Nairobi on Saturday has once again put into sharp focus the safety of students in boarding schools. *Daily Nation*