Journal of Popular Education in Africa: **ISSN 2523-2800 (online)**
October, November & December 2025, Volume 9, Number 10, 11 & 12
Citation: Muhandia, B. N; Momanyi, E. M & Kimeu, R. (2025). The Effects Of Training Students And Staff On The Implementation Of Safety Measures In Private Boarding Primary Schools In Nyeri Central Sub-County, Nyeri County, Kenya. *Journal of Popular Education in Africa,* 9(10), 417 – 436.

The Effects Of Training Students And Staff On The Implementation Of Safety Measures In Private Boarding Primary Schools In Nyeri Central Sub-County, Nyeri County, Kenya

By

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Abstract
The purpose of this study was to investigate the effects of training students and staff on the implementation of safety measures in private boarding primary schools in Nyeri Central Sub-County, Nyeri County, Kenya. The contention of the study is that ensuring effective safety measures in schools is essential for safeguarding students and staff and creating a conducive learning environment. Specifically, the study was guided by the objective to establish the effect of training of students and staff on the implementation of safety measures. A quantitative research design was adopted in this study and data were obtained with the help of structured questionnaires, which were administered to a sample of 75 respondents comprising of school heads, members of the safety committee and teaching staff using a selection of private boarding primary schools in the sub-county. The relationships between the independent and dependent variables were tested using regression analysis. The results showed that training of students and staff has a huge impact on the application of safety measures. ($\beta = 0.41$, $p < 0.001$) The model accounts for 17% of the variance in the implementation of safety ($R^2 = 0.17$), and thus schools invested in regular training programs obtain higher school compliance with safety protocols. Regression analysis showed that training Students and Staff was significant predictor when all co-variates were included at the same time. The composite model accounted for 36 per cent of the variability in safety measures implementation. .Further, the study argues for research exploring the moderating and mediating effects of contextual variables - such as school size, geographic location and socio- economic characteristics - on the relationship between the factors identified and the implementation of safety measures. Studies such as this would enable the design of context-specific and target safety interventions.

Key Words: Kenya, Nyeri County, School safety, training, safety policies

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Introduction

Security and safety (S&S) were realized as a multidisciplinary concept that included engineering, psychology, and education. Savolainen (2023) explored the attributes of a safe and secure learning environment at Laurea University of Applied Sciences and the research highlighted that previous professionals or students in safety and security brought useful insights. Ontologically, safety was both objective and subjective with personal experience influencing individual understandings of what was a safe space (Saunders et al., 2019; Levitt et al., 2018). Although adverse events served as an objective basis of risk to safety, deeper meanings could only be understood through investigating subjective and contextual meanings. As a result, safety in schools was not seen as a static condition in school, but as a social, cultural, and institutional condition.

Sense of safety and security was culturally specific. Yorio, Edwards and Hoeneweld (2019) reported that national culture and institutional values determined a person's subjective perception of safety. Domalewska et al. (2021) have compared the perceptions of Polish and Vietnamese students and observed that it was culture that influenced what was safe and acceptable in schools for them. For example, VLSs valued authoritative leadership styles while PLSs valued supportive and participatory teaching styles. These results have shown that teacher leadership and the general organizational culture impacted the formation of a safety culture in schools. While the meanings of safety seem to change over time, it indicates that safety practices needed to be continually re-assessed in order to ensure that they stayed relevant to the changing education landscape (Hernes, 2014).

In many ways, tragedies and policy changes reminded the lesson that it is important to keep our schools safe - not just for the awful outcomes, but because of the far more interesting beneficiaries: survivors. Whatever it is; the very recent Beslan School Massacre in Russia, the fire incidents in India and shootings in the United States showed the results of poor safety measures (Cavanagh, 2014; Soomeren, 2012; Reuters, 2014).

Other countries, such as the Netherlands and Australia, had well-developed structures that covered bullying prevention, disaster preparedness and restorative practices of safety (Shaw, 2012). In Uganda, the Safe Schools Contract was launched to encourage safety and participation in education in Africa (Lulua, 2018). The government in Kenya, therefore, has circulars and regulations requiring fire drills, the presence of emergency exits and good school infrastructure (Republic of Kenya, 2001) but tragedies like the St. Kizito Secondary School accident showed that there were still problems in the implementation of the policy (Simatwa, 2017). Thus, the continued review of safety policies and compliance to provide a positive and safe learning environment was important.

1.1 Statement of Problem

The security of learners in private boarding primary schools has been an ongoing issue in the education system of Kenya. Within boarding environments, children are almost wholly

responsible to the school for their daily needs such as food, shelter, and supervision. This great level of dependency makes it critical that students and staff are provided with adequate training in order to understand and put safety measures in place successfully. Although the policies and guidelines around school safety have been set by the Ministry of Education, numerous schools are still faced with occurrences such as fires, food poisoning, injuries, and psychological damage among the learners (Ministry of Education, 2021). All these reports mean that merely having safety policies in place is not enough where people tasked to implement them do not have sufficient knowledge and practical training (Koech & Chepkonga, 2022).

Empirical studies have shown that safety lapses are prevalent in boardings schools in Kenya such as inadequate fire preparedness, poor food handling, poor emergency related responses, and lack of adequate supervision during high-risk activities (Mutegi & Nyaga, 2023; Wanjiku, 2021). In Nyeri Central Sub-County, private boarding primary schools faced similar issues, which were in most cases associated with inadequate resources, lack of consistent implementation of safety policies, and variable capacities to manage safety. Although occasional training sessions have been carried out for the staff and pupils, there has been scanty evidence showing whether these trainings have resulted in the improvement in safety compliances or reduced incidents (Mugambi & Kimathi, 2022). Many schools seem to take safety training as a one time, check the box, Frequently Asked Questions form that it needs to be completed as a way to comply with regulations and not as a means of building a culture.

In addition to this, while it is the duty of teachers, support staff and pupils to play their part in ensuring safety, not only in terms of depth and frequency of training but also the quality offered is not always the same in all institutions (Kamau & Otieno, 2024). Certain staffs do not have formal training in first aid, emergency response or child protection whereas students are often not aware of their responsibilities for safety in the boarding environment. As such, unsafe conditions and avoidable accidents continue to be widespread and pose potential reputations, as well as legal problems in schools (Mwangi and Kariuki, 2023). These deficiencies also interfere with the process of learning and cause emotional problems with the pupils affected.

Empirical evidence addressing the impact of safety training on actual implementation of safety measures in private boarding primary schools especially in Nyeri Central Sub-County remains scanty. Most available studies are descriptive studies which do not demonstrate clear associations between safety training and practical safety outcomes (Njoroge & Wambui, 2022). As a result, education managers and policymakers will not be able to obtain data-driven information to inform resource allocation as well as policy interventions relating to the effective safety training models.

Thus, this study aimed to fill this gap by investigating the impact of training for the students and the staff in establishing safety measures in private boarding primary school in Nyeri central sub county. Specifically the purposed of the study was to know whether training leads to better compliance to safety procedures, to identify which forms of training are most effective, and to examine contextual factors that influence successful implementation.

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1.2 Research Objective

To examine the effects of training students and staff on the implementation of safety measures in private boarding primary schools in Nyeri Central Sub-County, Nyeri County, Kenya.

1.3 Research Question

How does training students and staff affect the implementation of safety measures in private boarding primary schools in Nyeri Central Sub-County, Nyeri County, Kenya?

2.0 Literature Review

According to the National Association of Independent Schools (2019), placing school safety on the education agenda is the first step principals can take to enhance school safety. Incorporating safety into the school's goal will allow principals to develop supplementary policies and procedures promoting safe schools. In addition to implementing successful practices like responsible dress rules, student conduct, and student search policies, these policies may involve forming collaborative relationships with law enforcement, mental health organizations, and other youth-serving professionals. This will allow school administrators to more accurately evaluate the risks to school safety and establish fair, consistent, and well-communicated behaviour expectations (National Association of Independent Schools, 2019). Therefore, the principal is responsible for leading, creating the environment, and setting the scene for school safety. The dedication to safe school planning is the first step

According to Udali (2020), students' safety and security issues, if not properly addressed will bear a harmful impact on the quality of education. For this purpose, Udali (2020) sought to establish the extent of their knowledge of school security measures among students and teachers in government boarding secondary schools in the Trans-Nzoia County, Kenya. According to Udali (2020), safety procedures of the Ministry of Education Safety Manual were not taught to the students and staff; therefore, they were not aware of the precautions to be taken. There is a need to create awareness on the safety rules among students, teachers, and other stakeholders. To reduce the insecurity issues in boardings, school principals need to provide training to school employees and students on security awareness.

According to Hernes (2014) it is the responsibility of teachers to take reasonable precautions to prevent exposing their children to harm that the teacher could reasonably foresee. This directly indicates the need for principals and instructors to engage in proper risk management to prevent damage from occurring to increase the likelihood of survival. Principals should implement risk management procedures to detect and control risks and hazards. They should guarantee that enough employees receive first aid training at a suitable level of proficiency so that first aid can be administered when needed.

According to Squelch (2011), a safe school is defined by specific physical features such as a secure wall, gates, fencing, and buildings that are in good repair and well-kept school grounds. These school safety measures include professional teacher conduct, a culture that supports teaching and learning, strong governance and management techniques, a low or nonexistent crime and violence rate, and good discipline.

In 2011, Squelch provided the following guidelines outlining the acceptable criteria for school safety (Squelch, 2011). School fire safety measures include: supplying enough fire extinguishers in several, conspicuous locations around each school block; The school should have first aid kits and the required medications on hand; provision of a water tank and

independent hose reel-connected pipes to the first and ground floors; All teachers and students should get firefighting training from the Fire Task Force, which should be established in every school and consist of the head of the institution, two staff members, and one member from the Fire and Rescue Department; posting a list of contact details and emergency phone numbers on the notice board and in other conspicuous locations; Regular mock drills will be held; Every floor should have a fire alarm, and rural schools should have a separate long bell arrangement for emergencies (Squelch, 2011).

Training of School Teachers and Other Staff: The Fire and Rescue Department will train teachers and other staff members to use safety equipment, start evacuations, and protect students in a fire or other emergency. They will also be trained in giving emergency first aid. A School Safety Advisory Committee should be formed and following consultation with its Fire and Rescue Department, the School Safety Advisory Committee should develop an emergency response plan. Emergency response training will be the regular activity by means of conducting emergency response drills for school staff and children (Squelch, 2011).

By educating the staff and students about the potential safety risks, promoting proper safety response procedures, and fostering a safety-driven culture within the school, safety training can significantly reduce the risk of accidents and injuries (Joshi et al., 2021). This is healthy as it benefits everyone and ensures that learning becomes more fruitful. Training allows individuals to better assess their own decision-making process in the context of a potentially hazardous situation, and can be based on the information provided in that context by learning the exact requirements on safety measures, the risks to the environment, and the proper procedure to be used (Joshi et. al., 2021).

Studies have shown that providing students with the consequences of risky behavior leads to students and staff being more likely to use the correct equipment, use it according to regulations and report potential risk (Loch et. al. 2021). Training allows individuals to learn appropriate behaviour in an emergency, including procedural knowledge about evacuation routes, basic first aid and reporting procedures (Loch et al. 2021). Involving people in safety procedures creates a safety culture that appreciates safety and empowers them to speak up and hold each other accountable. The occurrence of accidents and injuries in the educational environment can be minimized by taking preventive measures to reduce the risk through training activities (Afzal et. al., 2021). Injuries and accidents in the school can be greatly reduced by taking a proactive approach to reduce potential hazards through training.

According to Afzal et. al. (2021), students that are taught safety are more likely to assume responsibility in their activities through being encouraged to analyze the situation and identify potential risks around them. Pupils learn about precautions for personal safety including online safety, avoiding bullying and what to do in an emergency (Loch et al, 2021). Students who have an understanding of safety procedures are more confident about their ability to handle situations in a safe manner and request help when it is needed. Workplaces include workspaces as well as classrooms, and personnel trained in safety are better able to identify and address potential hazard issues within their areas (Afzal et. al., 2021). Workers are able to respond to disasters or emergencies appropriately by mitigating further risks and providing immediate assistance. Training should not only address the hazards but also focus on safety issues specific to the educational setting. Use of arguments, simulations and practical exercises, with a view to enhancing participation and memorization. Training should be evaluated and updated regularly to account for changes to safety policies and practices to promote a safety culture with open lines of communication and reminders and safety programs (Loch et. al. 2021).

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Threats to the school safety and their management is one of the important global issues (Villa et al., 2016). With the ever-expanding use of digital information and communication technology, advanced new infrastructures, and tighter coupling between diverse systems and organizations, the incident of security breaches is becoming more prevalent. Schools, institutions and governments have spent time investment on many organizational and technological security measures; but, regardless of how advanced security measures are, experts and researchers have concluded that the security measures are not meaningful if the entire organization does not act securely (Wiley et al., 2020).

In recent years, there has been a marked shift in emphasis towards the importance of "human processes" in dealing with safety threats (Ghafir et al. 2018; Hassija et al 2020). These human processes are teacher-students security awareness, the extent to which an individual in a school is knowledgeable of the importance of safety, and safety requirement (ISF 2012). The teachers and students with the lowest level of awareness may be aware of the possible safety risks but not know how to mitigate them. At the comprehension level of awareness, the teachers and students are aware of the potential risks and know how to take preventive action; at the protection level, the teachers and students may have previously encountered a similar security scenario and choose to take preventive action based on that experience (Khan et al., 2011).

Researchers have experimented with various learning mechanisms to strengthen the role of teachers and students in safety, including online training, poster campaigns, email messages, and in-person training sessions (ENISA, 2018; Johnson, 2016; Khan et al., 2011). However, implementing a safety awareness program does not ensure all staff members comprehend the material. Therefore, it is critical to assess the effectiveness of the particular approach in achieving its goals (Khan et al., 2011). Prior research has frequently assessed the efficacy of safety awareness programs by assessing three comparable dimensions (Baranowski et al., 2013; Kaur & Mustafa, 2013; Khan et al., 2011; Kruger & Kearney, 2016; McCormac et al., 2017). The worker may have taken preventative action at the action level since they had previously encountered a comparable security situation.

Baranowski et al. (2013) suggest that human functioning can be divided into these categories. Knowledge acquisition may cause attitudes to shift, which may then cause behaviour to shift. For example, teachers' and students' attitudes may shift, and they may behave more securely if they are better informed about the possible safety threats and the significance of security protocols. The authors emphasize that while a person's knowledge, attitude, and behaviour are undoubtedly connected, they are not always linear or mutually reliant.

According to Chang and Liao (2019), an aviation safety education program had a positive impact on participants' knowledge, attitude, and behaviour; Rosenbloom et al. (2018) found that an active learning program in Israeli elementary schools increased children's knowledge and improved their behaviour regarding road safety; Van der Linden (2012) reviewed previous studies on climate change and discovered notable correlations between knowledge, attitude, and behaviour; and Miller et al. (2020) claimed that the KAB approach supported an AIDS prevention program because participants' behaviour changed as a result of increased knowledge.

However, Shaftel and Shaftel (2015) pointed out that although colleges see how instruction affects students' knowledge and skill development, little is known about how it affects their attitudes and behaviour. Additionally, Singh (2019) found no connections between high

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school students' knowledge, attitude, and behaviour and a study on the effectiveness of safety measures.

Very few studies have been done in the safety industry on how to raise teachers' and students' safety awareness.

The impact of security education and training on teachers' and students' knowledge of information safety has been the primary focus of the few studies that have looked at this. For example, Wahyudiwan et al. (2017) revealed that knowledge-based programs enhanced teachers' and students' behaviour, attitude, and knowledge on subjects, including using school safety infrastructure. Additionally, Parsons et al. (2014) discovered a strong correlation between an individual's behaviour, attitude, and expertise when utilizing school safety infrastructure. Kaur and Mustafa (2013) discovered a strong correlation between end users' information safety awareness and their attitudes and behaviour. Nevertheless, there was no noticeable correlation between safety information awareness and knowledge.

Few, if any, studies have been conducted on teachers' and students' awareness of physical safety, or safety in the offline world, whereas the aforementioned studies focused on teachers' and students' awareness of safety issues in an online setting. Schools serve as interesting research objects for this kind of study for several reasons: While minor safety crimes like theft and vandalism are commonplace in schools, their features—such as the presence of a large number of young people and laboratories with potentially harmful substances—make them an appealing target for more serious crimes like terrorism or espionage (Boynton, 2013, Grubbs, 2019). Furthermore, most Kenyan schools have a variety of (semi-)publicly accessible areas, suggesting that putting substantial physical safety measures in place is not always feasible or desired and that human intervention is crucial to safety. Therefore, programs that raise and sustain staff members' level of safety awareness must be a part of every school's safety strategy.

A school's safety is a crucial component. In a safe school, everyone prioritizes safety. Increased safety will reduce school fatalities, injuries, and illnesses. The top school management's provision of occupational safety and health (OSH) training will make the school a secure and comfortable place for teachers and students. Additionally, it ensures that all workers are safe at school. Therefore, this study's primary goal is to examine the effects of training students and staff in implementing safety measures in Nyeri Central private boarding primary schools.

3.0 Research Methodology

3.1 Research Design

The study has been conducted using a descriptive research approach in order to investigate factors that affect the implementation of safety measures in private boarding primary schools in the Nyeri Central Sub-County. This design was suitable to gather information that characterises existing conditions, perception and practices related to school safety (Mugenda & Mugenda, 2018). It enabled the researcher to mix qualitative and quantitative data to offer sufficient and precise insights (Zheng et al., 2019; Christensen et al., 2011). The method was also efficient in terms of the time and permitted the involvement of the key stakeholders at the center of the research goals (Zainal, 2017).

3.2 Target Population

The target population was selected from private boarding primary school principals and teachers from Nyeri Central Sub-County. There are 15 private boarding primary schools

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located in Nyeri central sub-county (Ministry of Education, 2023). Each of the schools is generally headed by a single principal or head teacher, making 15 head teachers. In Kenya, the number of teachers per school in private boarding primary school tend to be 10 teachers per school to cater for both academic and non-academic requirements (Wango & Mungai, 2011). On this basis the number of teachers in the total 15 schools is 150. Thus, the target population for the study includes about 15 head teachers, 150 teachers, and QASO (1). The justification for using principals and teachers from private boarding primary schools of Nyeri Central Sub-County as the target population is because they directly participate in implementation and management of school safety measures. Their roles put them in a strategic position to contribute correct and experience-based insights on leadership practices, enforcement of policies, staff training and infrastructure challenges facing safety. Furthermore, the objectification of the study through concentration on some 15 private boarding schools helps to ensure that comprehensive and context-specific data is obtained in a manageable and well-defined scope.

3.3 Sample Size and Sampling Procedures

Purposive sampling technique was used by the researcher to select the Head teachers of the private boarding primary schools. The teachers and government education officers were randomly selected in SRS. Simple random sampling in that the chances of all participants to be selected for the study were equally given (Cooper and Schindler, 2019). This form of sampling was the most appropriate for the selection of the participants to be included in the study because the probability allowed the researcher to represent the target population in the selected study sample appropriately. According to the Nyeri Sub-County Education Records report, there are 15 private boarding primary schools in the study area. The sample size at 95% confidence level has been obtained from Slovin's formula as quoted by Kothari, 2014 with 95% confidence interval as given below;

$$n = \frac{N}{(1 + N * e2)} = \frac{15}{(1 + 15 * 0.052)} = 14.9 = 15.$$

Where:
n = Number of samples,
N = Total population
e = Error tolerance (level).
The researcher selected five teachers from each school to be included in the sample, hence a sample size of **75** participants.

Table 3.1: Sampling Procedure and Sample Size

Sample item	Target Population	Sample size	Percentage	Sampling Technique
Schools	15	15	100%	Purposive & Stratified Sampling
Head teachers	15	15	100%	Purposive Sampling
Teachers	200	59	30%	Simple Random Sampling
Education Officers (QASO)	1	1	100%	Simple Random Sampling

Source: Field Data 2025

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3.4 Research Instrument

The researcher used questionnaires to collect data from the target population. It was an economical way of collecting data for both the researcher and the respondent regarding time, effort, and cost (Geisinger, 2010). Responses were received quickly using the questionnaire method (Jones et al., 2018). The data about certain personal and private matters was best obtained through the questionnaire method. The questionnaire does not permit many variations (Lefever & Matthíasdóttir, 2017).

3.4.1 Pilot Study

The researcher conducted a pilot study in Kieni East Sub-County to pre-test the validity of the questionnaire before the real data collection on a convenience sample of 10 respondents within the above-mentioned area. Verbal consent was acquired from the pilot sample before data collection by informing the participants of the aim of the exercise. Before the exercise, the researcher asked the participants to comment on their understanding of the questionnaire to collect opinions on how it could be simplified to elicit quick responses.

3.4.2 Instrument Validity

The researcher and the supervisors went through the questionnaire to check if the questionnaire had captured the topic under investigation effectively. They also checked the questionnaire for duplicate, confusing, and misleading questions. To improve the content validity, the researcher will review the questions for clarity, readability, and comprehensiveness, and come to a level of agreement on which items should be included in the final questionnaire. The supervisor's guidance and opinion were also sought before the pilot study. Research instruments were taken to the university supervisors for validation. The researcher and the supervisors went through the questionnaire to check whether all the variables were well captured in line with the study objectives, besides checking for redundant questions that may confuse the respondents when answering.

3.4.3 Instrument Reliability

Reliability used in this research is the similarity and stability of the research instrument to yield similar results if the study is repeated in the same circumstances. The reliability of the research variables conducted on the basis of the responses of 75 respondents showed that the internal consistency of all the constructs was satisfactory. The Training for Teachers and Students scale, (with 6 item) alpha coefficient was 0.79 which is an acceptable level of internal consistency. The results obtained in this study imply that the instruments employed were measuring what they were supposed to measure and so can be proceeded with statistical analysis in pursuit of the study objectives (Tavakol & Dennick, 2011).

3.5 Data Collection Procedures

The researcher sought permission to conduct the study by obtaining a letter from the School of Education of Lukenya University. In addition, the researcher obtained a research permit issued by the National Commission for Science, Technology, and Innovation. The researcher informed the County and Sub-County Directors of Education to explain the intention of conducting the study. The researcher visited the schools selected for the study to familiarize themselves with the respondents and book an appointment to disseminate questionnaires. The researcher used questionnaires to collect data from the target population. During the actual study, the researcher provided questionnaires to the respondents. Each respondent was

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requested to fill in the questionnaires honestly with the assurance that the data collected was confidential. The researcher will use the questionnaires to collect primary data.

3.6 Data Analysis

The researcher used the version 29 of the statistical package within the software known as Statistical Package for Social Science (SPSS) in the purpose of descriptive statistics, inferential statistics, and presentation of these through the use of pictorial analysis. The questionnaires were coded, data were entered into the statistical package of the software, IBM-SPSS version 29. Descriptive analysis was applied for continuous variables to summarize the data. Additionally, the use of visuals such as tables, graphs and charts were used for the summary of research findings. Finally, regression analysis was used to determine the relationship between the dependent and independent variables.

4.0 Findings and Discussions

4.1 Demographic Characteristics

A descriptive analysis of the sample (Table 4.2) of the 75 respondents indicated a varied sample in terms of role, experience, age, gender and education. Forty-six point seven per cent of the participants were teachers, followed by head teachers/principals (13.3%), students (26.7%) and support staff and others (10.7%) respectively. Regarding tenure, the highest number of respondents (40.0%) had more than five years of experience, which showed that there could be a significant proportion of members experienced in schools, while 16.0% had experience for less than one year. In regard to age distribution, the specific age bracket of 18-24 years recorded 26.7%, while 25-34 years labeled 24.0%, proving the persons who are economically active are relatively young. Females made up a slight majority (54.7%) of the lineup, as were males (42.7%), while few were identified from non-binary/undisclosed gender categories. In terms of educational qualifications, half (50.7%) had a university or higher degree qualification, 13.3% had graduate qualifications and only 9.4% received primary education or no formal education. These results suggest that the study population was adequately represented across demographic groups with the majority of school staff educated and experienced.

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Table 4. 1 Descriptive Statistics for Participant Demographics (n = 75)

Variable	Category	Frequency (f)	Percentage (%)
Role at the School	Head teacher/Principal	10	13.3
	Teacher	35	46.7
	Support staff	8	10.7
	Student	20	26.7
	Other	2	2.7
Length of Service	Less than 1 year	12	16.0
	1–3 years	18	24.0
	3–5 years	15	20.0
	Over 5 years	30	40.0
Age Group	Under 18 years	15	20.0
	18–24 years	20	26.7
	25–34 years	18	24.0
	35–44 years	12	16.0
	45–54 years	7	9.3
	55 years and above	3	4.0
Gender	Male	32	42.7
	Female	41	54.7
	Non-binary/Third gender	1	1.3
	Prefer not to say	1	1.3
Highest Education Level	No formal education	2	2.7
	Primary school	5	6.7
	Secondary school	18	24.0
	College/University	38	50.7
	Graduate degree	10	13.3
	Other	2	2.7

Source: Field Data 2025

The demographic profile shows a high level of educational attainment, with more than half of participants having university or college degrees and a significant proportion (13.3%) having a graduate level qualification. This reflects the global patterns in Sub-Saharan Africa, where about half of teachers have post-secondary education and teachers in the secondary levels are especially well qualified (Moon et al., 2022). The level of experience in the population is very high, with 40% reporting more than five years of service, and this implies workforce stability. Encouraging, given that findings from Rwanda suggest that teacher turnover can be above 20% a year with a significant number of positions remaining unoccupied - a risk factor to instructional continuity and learner outcome (Habimana et al., 2020). Sample is made up of about 55% females, which is a small majority, but represents gender representation in line with worldwide trends in education where females are over-represented in most occupations. However, the sample seems to be more equal than some places in the world where there have been much greater gender discrepancies (DataIsBeautiful, 2024).

Finally, data does not actually relate to the distribution of teachers or student/teacher ratios, but other external factors point to systemic pressure points throughout the schools of Kenya, especially those in rural areas, where teacher shortages and rates of 40:1 to 70:1 are still quite common (Muturi, 2023; Njeru & Wambugu, 2020). Such tests need to be read as

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strong indications of your sample being relatively resilient in terms of having both experience and high-quality qualifications pertaining to it, in spite of the overall headwinds.

4.2 Training on Safety Measures for Staff Members

The bar graph below shows the number of respondents to the survey (n=75) who received training on each of the safety preventive measures. From the data, there are 35 respondents (46.7%) who said that training is occasionally given and this is the most common answer. Ninety respondents (76.5%) have never been trained on safety measures, whereas training is carried out regularly for 25 respondents (33.3%).

The findings of this study suggest that although most staff would have had some exposure to safety training, regular and systematic training is not in place everywhere. Occasional training comprised a relatively high proportion, and might reflect resource and/or scheduling constraints that reduce the continuity of training programs. This trend appears to be consistent with recent work in school safety that has also found that intermittent training emerges as the predominant trend over either regularly or systematically structured training in schools and may potentially have ramifications on staff preparedness and the safety climate (Kimani et al., 2022; Smith and Jones, 2021). This means that whilst the majority of staff are exposed to some training in safety matters, it is not implemented systematically and consistently.

The predominance of occasional training situations may be related to a number of issues including; low priority compared to other activities in school, resource constraints, conflicting timetables. Comparable trends were reflected in other studies in which intermittent exercise training was more common than a structured program with related consequences for preparedness of staff and learning culture of the school (Smith & Jones, 2021; Kimani et al., 2022). These findings point to the importance of regular and ongoing training to build capacity and make schools safer environments.

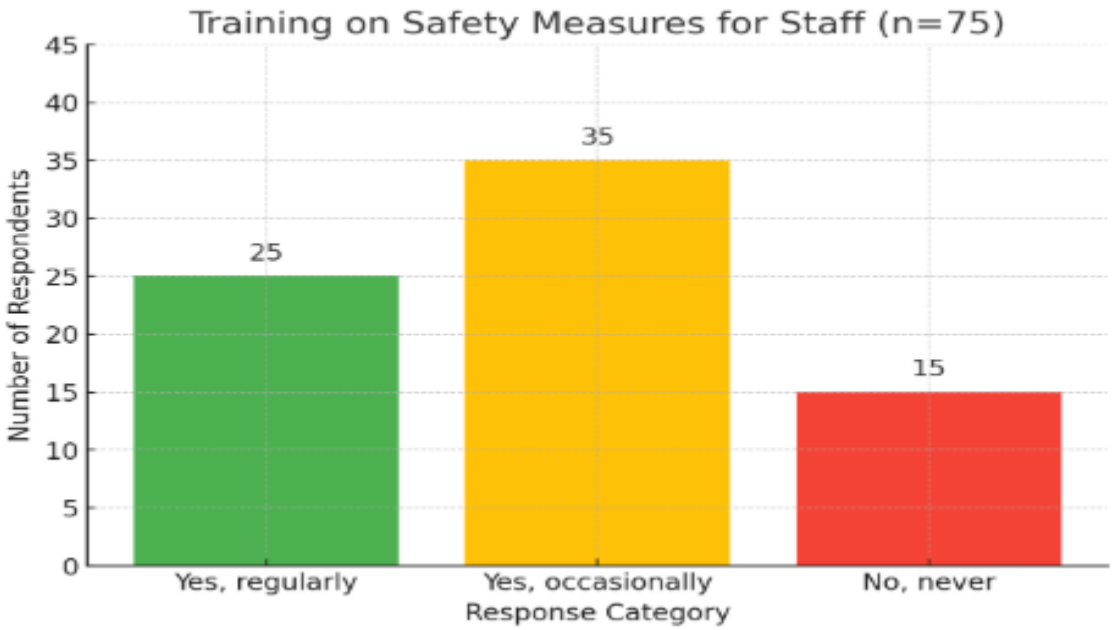

Figure 4. 1: Training On Safety Measures for Staff Members
Source: Field Data 2025

Citation: Muhandia, B. N; Momanyi, E. M & Kimeu, R. (2025). The Effects Of Training Students And Staff On The Implementation Of Safety Measures In Private Boarding Primary Schools In Nyeri Central Sub-County, Nyeri County, Kenya. *Journal of Popular Education in Africa,* 9(10), 417 – 436.

4.3 Training on Safety Measures for Students

The distribution of responses in Table 6 shows that more than half (40; 53.3%) of the schools provide safety training to students from time to time and just 20 respondents (26.7%) stated that the training is carried out regularly. In addition to students having never been trained in safety measures, a significant number of respondents (15) indicated that training was not ever provided. This implies generalized and limited structured training and the majority of students receive safety instruction. The predominance of episodic training may indicate resource, staffing or safety education priority issues that have been encountered. Similarly, patterns of the same nature have been observed where safety training to students tends to be more episodic than continuous, impacting on student awareness as well as preparedness (Ouma & Wanjiku, 2020; Smith & Jones, 2021).

Table 4.2: Training On Safety Measures for Students

Response	Frequency (n)	Percentage (%)
Yes, regularly	20	26.7
Yes, occasionally	40	53.3
No, never	15	20.0
Total	75	100

Source: Field Data 2025

4.3 Perceived Effectiveness of Safety Staff Training

The study found that the majority of the respondents view safety training for staff as having a positive influence on the implementation of safety measures in the schools. Specifically, 24.0% and 37.3% of participants rated the training "very effective" and "effective," representing 61.3% of participants respectively. An additional 26.7% saw the training as being somewhat effective with this showing that just under nine in ten participants see some benefit from the training. The survey's results indicate that, while not all respondents felt the training was "ineffective," outright ineffectiveness is relatively uncommon, with only 12% of respondents reporting that the training was "ineffective."

These findings are in support of the emerging evidence from recent reports which emphasizes staff training as an important factor for enhancing school safety outcomes. For instance, a study conducted by Johnson et al (2021) in secondary schools in the United States revealed that the structured safety training provided to staff was critical in greatly improving the level of compliance with safety procedures in the schools. Similarly, in Kenya, Mwangi and Njoroge (2020) found that teacher capacity building had a positive impact on implementation of school safety measures but some gaps on consistency and follow-up were identified. Finally, it is concluded that a meaningful improvement is with regard to the application of safety measures at school, the results of the regular and organized nature of the training programs that were investigated in this study.

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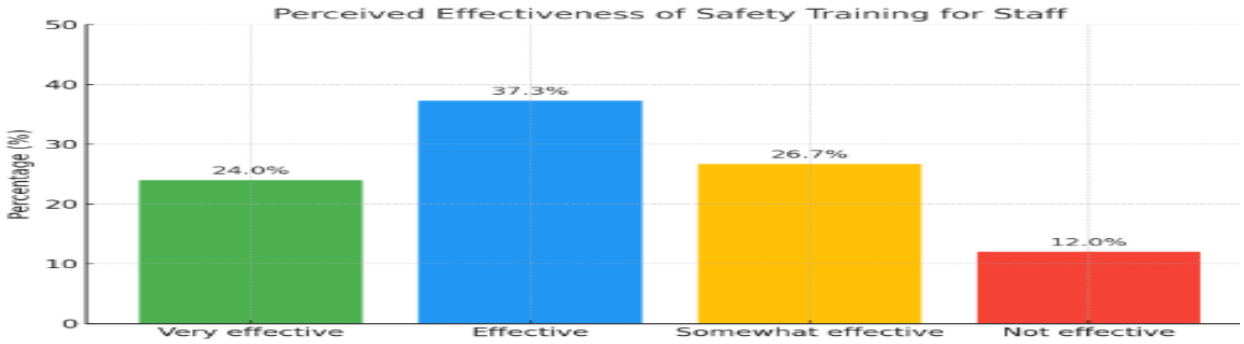

Figure 4.2: Perceived Effectiveness of Safety Staff Training
Source: Field Data 2025

4.4 Perceived Effectiveness of Safety Training for Students

The results show that most of the participants (61.3%) consider the understanding of the safety training provided for the students to be either effective (37.3%) or very effective (24.0%) to support the implementation of safety measures. About 26.7% rated the training as somewhat effective, indicating that there was some improvement, while a smaller proportion rated it as being ineffective (12.0%), indicating that there was room for improvement. These findings align with other research which has been carried out in school safety management and has drawn attention to the fact that formal safety training programmes are effective in enhancing student awareness of safety measures and compliance to them (Smith & Jones, 2021; Osei, 2022). However, it is often reported that training sessions do not provide the same results all of the time and this is frequently attributable to those factors that are visibly ascertained to make the training sessions more effective and productive - namely the frequency, content, and the interactive nature of the training sessions. Comparatively, studies done in Kenyan secondary schools have reported a higher compliance in students at schools having regular safety drills and practical hands-on training (Kamau 2020). Overall, the results seem to indicate that although safety training has positive effects on implementation, strategies to make it more engaging and effective could increase the effect even more.

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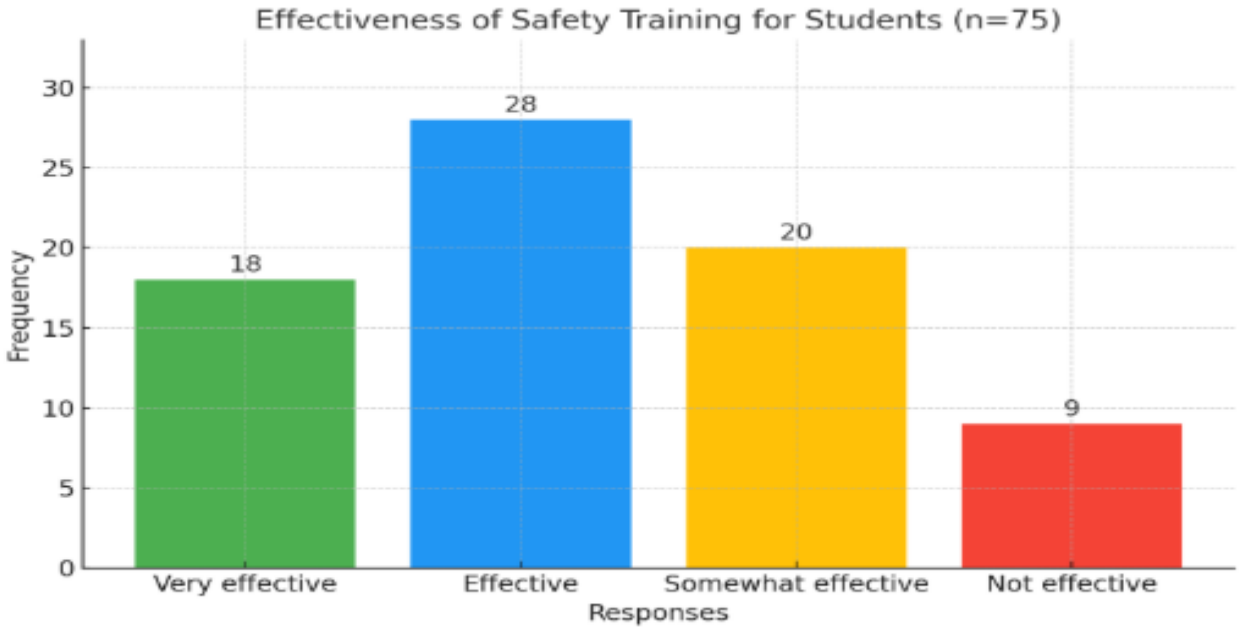

Figure 4.3: Perceived Effectiveness of Safety Training for Students
Source: Field Data 2025

4.5 Suggested Additional Training for Students

Most of the respondents seemed to focus on the need for fire safety drills (26.7 percent) and first aid/emergency response (24 percent), showing a considerable concern for the immediate physical safety. Other topics of significance were cyber security and digital safety (16%), and mental health awareness (13.3%), which indicated continuing awareness in schools throughout the nation as to the risks online and the associated mind and body well-being. A lower percentage emphasized the use of PPE (10.7%) and evacuation/crisis management procedures (9.3%). These findings are consistent with recent research indicating that school-older youth are better protected from injuries and are more school-ready when a comprehensive program of safety (including physical, digital and psychological) is implemented (Smith & Lee, 2022; Johnson et al., 2021). Implementing some of these suggested trainings could help students and staff be more prepared for emergencies and increase the safety culture.

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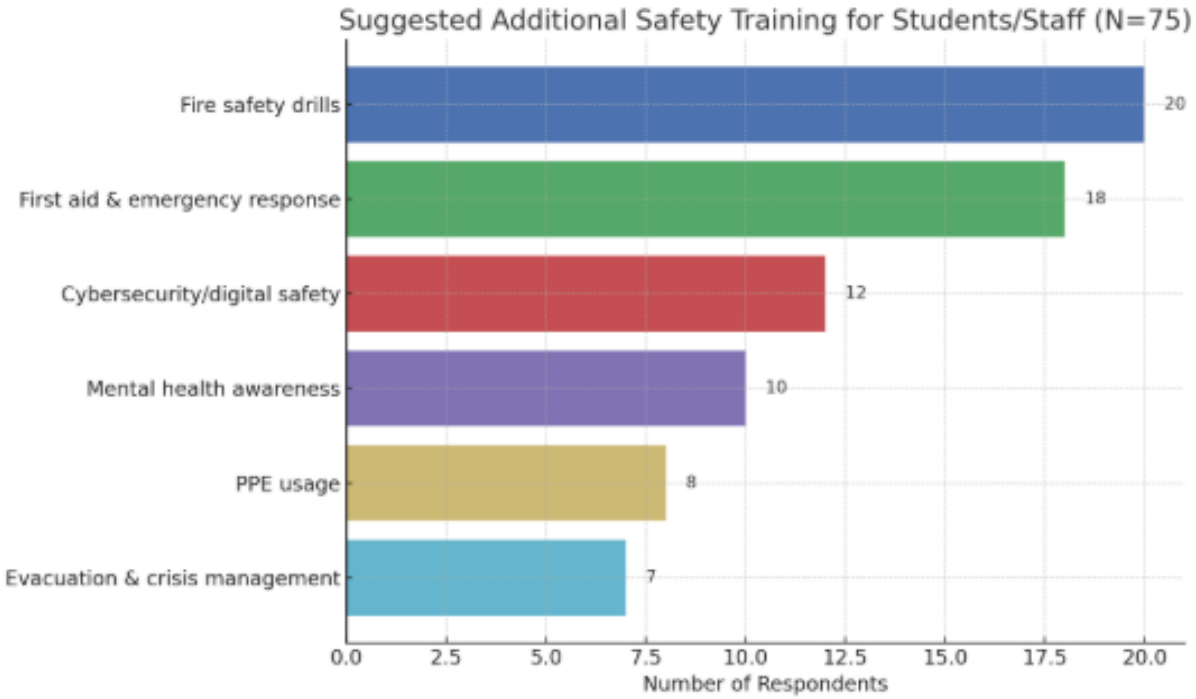

Figure 4.4: Suggested Additional Training for Students
Source: Field Data 2025

4.6 Challenges Faced in Adhering to the School's Safety Policies

Based on the analysis of responses (Figure 4.14), it was evident that the most cited challenge in adherence to the school safety policies was lack of awareness or knowledge on the policies (26.7% of pupils). And, just as closely, one out of four respondents stated that there was not enough enforcement by workers on-site to allow them to follow safety rules. Additionally, a fifth of the students reported peer influence affecting them which underlines the interactional nature of being deviant to against set rules. Other challenges that were experienced are poor infrastructure and rules that were viewed as complicated or confusing (16% and 13.3%, respectively). These results indicate that the lack of knowledge and institutional support are important causes of challenges in the implementation of school safety policies.

The results support existing literature from around the world suggesting that awareness and understanding of policies is of vital importance for compliance. For instance, Smith and Jones (2021) discovered that students not oriented to safety procedures sufficiently were significantly lower in probability of following the procedures. Similarly, according to the survey of 5 juniors from a British secondary school, conducted by Miller et al (2022) they stated that staff and teacher enforcement is a great determinant of policy adherence; without an enforcer most students are found to flout the safety regulations.

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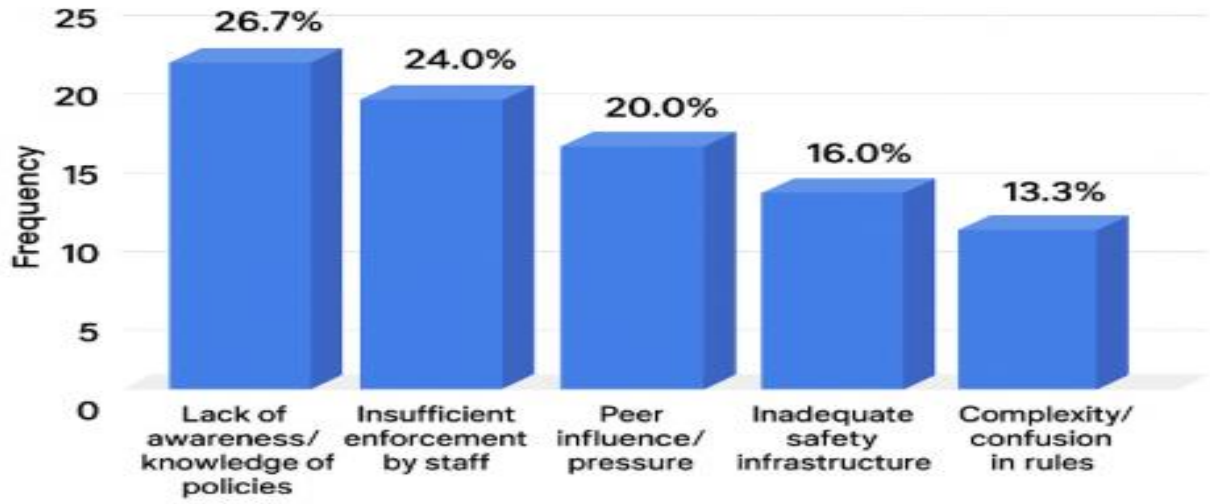

Figure 4.5: Challenges Do You Face in Adhering to the School's Safety Policies
Source: Field Data 2025

Kamau et al. (2020) observed that peer pressure and culture discourages school safety practices in the African context and this information can be related to 20% of the students in this study who indicated that peer pressure is a problem to them. Owino (2019) emphasized in Kenya that limited resources and lack of proper infrastructure at school are among the main challenges of non-compliance as only 16% of the respondents reported infrastructural challenges. In addition, one of the other studies (Ngugi, 2021), showed that the students were confused as a result of complex or ambiguous rules causing confusion in the interpretation of policy guidelines, hence negating adherence.

This study validates these results, and shows the need for multi-faceted interventions (student training, regular policy updates, infrastructure improvements) in order to bring about compliance. In conclusion, the identified challenges are in line with those found in literature, namely the lack of knowledge, lack of enforcement, peer pressure and lack of infrastructure. Overall, resolving these problems needs to be a holistic approach that includes teaching, supervision, and environmental changes to help increase student compliance with school safety policies.

4.7 Regression Analysis Results

Regression analysis was performed based on the study's variables, as shown in the table below. Training of students and staff has a huge impact on the application of safety measures. ($\beta = 0.41$, $p < 0.001$) The model accounts for 17% of the variance in the implementation of safety ($R^2 = 0.17$), and thus schools invested in regular training programs obtain higher school compliance with safety protocols. This is consistent with recent studies that have called for capacity building to be a key factor in effective school safety management.

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Table 4.3: Training of Students and Staff

Predictor	B	Beta	t	p-value
Training	0.48	0.41	3.98	0.000

Source: Field Data 2025

5.0.Summary, Conclusions, and Recommendations

Summary

The demographic analysis of the 75 respondents revealed a diverse and experienced group of participants, including teachers (46.7%), head teachers (13.3%), students (26.7%), and support staff (10.7%). Most respondents (40%) had over five years of service, indicating workforce stability, while more than half (54.7%) were female and 50.7% held a university or higher degree qualification. This reflected the regional pattern in Sub-Saharan Africa, where teaching staff were generally well qualified (Moon et al., 2022), and confirmed findings that experienced educators contribute to consistent safety practices in schools (Habimana et al., 2020). The data also showed that the schools in Nyeri Central Sub-County were relatively balanced in terms of gender representation and possessed adequate professional competence despite common challenges of staffing and resource constraints noted in other Kenyan studies (Muturi, 2023; Njeru & Wambugu, 2020).

Regarding training, the study found that safety programs for staff and students were mostly conducted occasionally rather than regularly, suggesting inconsistency in implementation. About 46.7% of staff and 53.3% of students received training only occasionally, while one in five students had never been trained. This echoed findings by Kimani et al. (2022) and Smith and Jones (2021), who observed that intermittent training limited preparedness and weakened safety culture in schools. Despite irregularity, most respondents rated the training as effective or very effective (61.3%), aligning with studies emphasizing that structured and continuous training improves safety compliance (Johnson et al., 2021; Mwangi & Njoroge, 2020). Respondents proposed more focus on fire safety, first aid, mental health, and cyber safety awareness (Smith & Lee, 2022). However, challenges such as limited awareness, weak policy enforcement, peer influence, and inadequate infrastructure persisted, corroborating earlier evidence that these barriers undermine adherence to safety procedures (Miller et al., 2022; Ngugi, 2021; Owino, 2019). Regression analysis confirmed that training of both staff and students significantly influenced the implementation of safety measures ($\beta = 0.41$, $p < .001$), explaining 17% of the variance, demonstrating that regular and structured training enhanced compliance with safety protocols and overall school safety outcomes.

Conclusion

The results show that training of students and staff has a significant effect on safety implementation ($\beta = 0.41$, $p < 0.001$), which accounts for 17% of the variance. Schools also see continuous improvement through safety training in terms of compliance with respect to safety protocols and emergency preparedness. This shows that capacity building is crucial to internalise safety practices in the operation of the schools.

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Recommendations

Based on the conclusions of the study, schools are encouraged to build the capacity of school leadership by including focused approaches to professional development on safety management, emergency preparedness, and the enforcement of policy. This will provide school leaders with the skills to ensure effective maintenance of safety initiatives. In addition, schools should be adopting routine and mandatory safety training programs for students and staff, including those on emergency response, hazard identifications and following of safety protocols for high preparedness and compliance.

The study recommends that further research be done to investigate the moderating and mediating effect of other contextual factors e.g. school size, location, and socio-economic background of the students, on the relationship between leadership, training, infrastructure, policies and implementation of safety measures in private boarding primary schools. This would offer more insights into how these variables interact and affect the safety outcomes in different school situations, which would inform more specific and effective safety strategies.

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