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**Influence of School Management Practices on Implementation of  
Safety Standards Policy in Public Secondary Schools in Kenya:  
Case of Machakos County**

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**Abstract**

*Despite existence of safety policies in secondary schools in Kenya, student mortality rates are estimated to be on the rise from 3% to 7% annually. This study therefore, investigated school management practices as a predictor variable in the implementation of safety standards in public secondary schools in Machakos County. The study adopted purposive, stratified and simple random sampling techniques in which a sample size of 11 school heads, 44 teachers and 264 students was drawn from 35 public secondary schools in Machakos County, Kenya. Questionnaire and observation checklist were used to collect data. Quantitative data was analyzed using descriptive, correlation and regression analysis while, the qualitative data from open-ended questions was analyzed thematically and presented using descriptive statistics. The results revealed that school management practices in the County such as; allocation of adequate funds and system support had a significant influence in coordination of implementation, evaluation and control of safety standards in public secondary schools. However, the findings showed that: the school heads lacked security plans or effective ways of sensitizing students and the staff on safety standards; Quality Assurance and Standards Officers (QASOs) from the Ministry of Education neither visited schools nor facilitated training on disaster management as required. Based on these findings school management should frequently organize seminars for training staff and school workers on disaster management. In addition, there is need for QASOs and school heads to intensify supervision in schools and create awareness on the need for school safety among staff and students.*

**Key words:** Management Practices, Implementing School Safety Standards Policy, Safe School Environment and Safety Standards Awareness.

## Background to the Study

Effective learning process is conceptualized to be a function of student safety in the school context (Sekiwu & Kabanda, 2014). As opined in Abraham Maslow's Hierarchy of Needs Theory, safety is considered to be the basic fundamental need for any effective learning process. Learners in any learning systems are expected to concentrate and perform effectively in academic and co-curriculum activities if the environment in which they study in is safe and secure (Maslow, 1943). Effective implementation of safety standards in learning institutions is viewed to be the critical factor that facilitates effective teaching and learning (Omolo & Simatwa, 2010). Squelch (2001) defines a safe school as one that is free from danger and possible harm, where non educators, educators and learners can work, teach and learn without fear or ridicule, intimidation, harassment, humiliation or violence. This indicates that a safe learning environment is the key to effective learning.

Omolo and Simatwa (2010) opine that safe school environment is essential to high level learning. Similarly, Oguye (2012) further asserts that students learn best and achieve to their fullest potential when they are taught in a safe environment. Therefore, a school should provide a safe environment to foster learning. Even though learning institutions must provide security to staff and learners, it is indicated by UNESCO (2018) that many learning institutions around the world are experiencing potential threats to security. For example, due to laxity of the school administration on safety measures in India, 400 students were victims of fire tragedy that broke out in 1995 (Omolo and Simatwa, 2010).

It is generally accepted that different countries face unique school safety challenges. School violence is a serious safety challenge affecting schools in US (Shaw, 2002). A US national survey on indicators of school crime and safety confirmed that there are increasing cases of school violence in US schools. Due to its seismic location, China is prone to severe floods and earthquakes which cause high fatalities when they occur. Van Jaavelde (2011) opines that there is a deep-rooted culture of violence in South African schools that has made schools unsafe and insecure. In response to school safety concerns, countries have developed safety measures and policies to be implemented by schools to improve school safety.

Considering the fact that safety of learners is a global concern, learning in 67% of the primary and secondary schools in African countries such as Nigeria has been greatly affected by terrorism activities. Organized militia groups such as Boko Haram have not only affected smooth learning in schools but also the national security operations. Human Rights Watch (2018) reported that issues of kidnapping of teachers and school going children are increasing on a daily basis in Nigeria. Similarly, Human Rights Watch (2018) have reported that issues of school insecurity in Nigeria has not only violated human rights and freedom, but also contributed to forced marriages and intentional murder for non-adherence to ideological beliefs of the militia groups. Abduction of 276 secondary school girls in 2017 from Chibok, Borno State is a reflection of how the government security agencies have failed to provide security in learning institutions and inability of the schools to develop and implement safety measures.

In Uganda, Sekiwu and Kabanda (2014) assert that several hazards in schools are attributed to failure to implement safety policies. For example, in 2009, 20 students and two unidentified adults perished at the Buddo Primary School fire. Addressing the Uganda National Assembly on this matter, the Minister for Education and Sports reported that the Inspector General of police had identified lack of safety provisions as being the main contributing factor to this disaster.

Kenya has a history of tragic school safety incidences blamed on failure to implement safety policies. Cases of mortality rates attributed to failure of implementing safety standards have been on the rise (Ministry of Education, 2018). For example, it is reported by Simatwa (2007) that in 1991, 19 girls were killed in a dormitory raid at St.

Kizito Secondary School in Meru. The deaths were caused as a result of lack of a perimeter fence around the school compound to guard against arsonists and lack of alternative emergency exit doors in the dormitories for easy escape. Moreover, Nthenya (2011) contends that in 2001, 68 students were killed at Kyanguli Secondary School in Machakos District then due to dormitory fire. The deaths were attributed to lack of emergency exit doors and overcrowded dormitories. The death of 8 girls at Moi Girls' High School in 2017 in Nairobi County was attributed to overcrowded dormitories and lack of fire extinguishers (Achuka, 2017). Further, in 2018, it is reported by Cherono (2018) that 7 students were injured at Jamhuri High School in Nairobi attributed to a religious related confrontation which broke out among the students. This is an indication that school safety is a national concern.

The Ministry of Education in Kenya is striving to implement the safety standards policy in learning institutions including public secondary schools. It is however noted that although these safety standards were developed some years ago, more than 50% of the schools have not fully complied with the safety standards (MoE, 2018). Most of the schools are affected students' unrests, terrorism, natural calamities such as floods, earthquakes and lightening among others, all resulting to loss of property, physical and emotional injuries and even death of students. A report by the Ministry of Education (2016) indicates that despite existence of the Safety Standards Manual in public secondary schools in Kenya, various factors have been identified to hinder schools from implementing the requirements of the Safety Manual such as; negative attitude of head teachers, staff training, lack of financial resources and safety awareness; school culture, management practices, high students' enrolment, the physical environment and students' indiscipline.

### **Statement of the Problem**

Cases of student mortality rates and injuries in public secondary schools in the recent past has increased from 7% to 11% annually and have been attributed to challenges of implementing Safety standards (MOE, 2018). Human Rights Watch (2018) indicates that high prevalence of student deaths recorded in schools in Kenya has not only undermined human rights and freedom but also caused psychological trauma among students, teachers and parents. Obiamaka (2015) and Nthenya (2011) indicate that issues of overcrowded dormitories, classrooms, non-compliance to safety measures such as installation of fire extinguishers and inability to establish alternative exit emergency doors and inability of schools management to create awareness about safety among students, are issues of concern from different stakeholders such as students, parents, the government and quality assurance regulatory bodies in Kenya.

The Ministry of Education (MOE, 2018) indicates that despite existence of safety standard manuals in public secondary schools in Kenya, cases of insecurity and student safety were on the rise by 11% annually. Physical infrastructural challenges and lack of awareness on safety were pointed out as the main issues of concern. Reports obtained from Machakos County Education Office (2018) indicate evidence of overcrowded dormitories and classrooms; porous perimeter fences; existence of grilled windows; lack of emergency doors in the dormitories and classrooms; inadequate fire extinguishers and nonexistent repairs of physical infrastructure. On this basis, the study sought to establish the influence of management practices on the implementation of safety standards in public secondary schools in Machakos County.

### **Study Objectives**

The specific objectives of the study were to:

- i. Assess the extent to which school management coordinate the implementation of safety standards in public secondary schools in Machakos County.

- ii. Determine the resources allocated by school management towards implementation of safety standards in public secondary schools in Machakos County.

### **Review of Related Literature**

Management of schools is viewed as a process where school managers or administrators can plan, communicate, evaluate and control safety regulations to achieve the intended objectives (Wahura, 2013). According to Makau (2016) security management are efforts made to protect the environment where students learn and teachers teach in a warm and welcoming environment, free from intimidation and fear of violence. Earthman (2002) asserts that school management practices should include monitoring, identifying damages and repairing of safety systems, installation of guide signage at the gate, patrol by the school personnel and provision of armed security guards in the schools.

Cosmas and Kuttickatta (2011) conducted a research in South Africa to establish the most prevalent form of indiscipline among the learners and how it affects their safety and security. The study disclosed that schools managements were unable to contain truancy, fighting, theft, bullying, vandalism, gunshot and other threatening behaviours among students. Furthermore, Muthiani (2016) established that implementation of safety standards was not only influenced by one factor but also a combination of factors such as training, budget allocation, monitoring, management knowledge and management good will to embrace safety policies in schools.

Dimsey (2008) defines security management as a process of creating conducive and proper internal environment in the school. This indicates that security management are efforts made to protect the environment where students learn and teachers teach in a warm and welcoming environment, free from intimidation and fear of violence. School heads management practices on school safety may include monitoring, identifying damages and repairing of safety systems, for example; alarm systems, drainage systems, sanitation, electrical and securing fire systems in proper locations (Van, 2011). Obegbulem (2011) affirms that, to overcome or minimize student mortality and injury rates in learning institutions, it is the responsibility of school managers to plan, organize and facilitate communication; train and to lead the system on safety measures. School heads are therefore required to coordinate security programs in their schools.

As observed by Cosmas and Kuttickatta (2011), in South Africa established that cases of fighting, student bullying, theft, suicide and threatening behaviors were on the rise in South African schools due to negligence of school management to implement safety regulations. It was noted that despite existence of documented policies, school heads had no good will to implement the policies. The study further revealed that inability to implement safety policies was hampered by poor planning and communication techniques used by school administrators. Similarly, Makau (2016) pointed out that student mortality rates were largely attributed to failure of the school management to create maximum awareness among teachers and students about safety measures. This study sought to establish the influence of school management practices on implementation of safety standards in public secondary schools in Machakos County.

### **Theoretical Framework**

This study was anchored on Abraham Maslow's Hierarchy of Needs Theory (1943). The theory argues that human beings are driven by five basic needs which include; physiological, safety, social, esteem and self-actualization. Physiological needs that drive human behavior are oxygen, food, and water. Safety needs include physical security and financial security. Social needs are affection and group acceptance. Esteem needs entail; self-concept and respect to others while self-actualization is the ability of the individual to become what he or she

wants on earth. Safety in public secondary schools is considered to be one of the factors that will stimulate learners to seek education services thus leading to effective performance.

Effective implementation of safety standards in public secondary schools as stipulated by the Ministry of Education Safety Standards Manual (2008) is in line with Maslow's theory in that it will motivate learners and promote a conducive learning environment. For example, installation of surveillance cameras, construction of modern dormitories and classrooms equipped with safety facilities will not only encourage learners to work hard but also promote their social well-being. Cases of sexual harassment, bullying, physical violence and verbal abuse are likely to be minimized if management of public secondary schools can embrace safety standards as stipulated in the Safety Standards Manual (2008) of the Ministry of Education.

This theory was relevant to this study based on the assumption that students of public secondary schools in Kenya are likely to avoid safety related incidences such as school fires, sexual assault, physical abuse, bullying and verbal abuse if they are sensitized about safety standards and the school administration is willing to provide necessary support in implementing Safety Standards Manual (2008) of the Ministry of Education in Kenya.

### Research Methodology

The study adopted descriptive research design to investigate school-based factors influencing implementation of safety standards in public secondary schools in Machakos County, Kenya. This study targeted school heads, teachers and form three students in the County. The units of analysis were teachers and students of 35 public secondary schools while unit of observation was public secondary schools in Matungulu Sub-County in Machakos County. The sample size is as shown in Table 1.

**Table 1: Sample size**

Category	Sample Size					
	Target Schools	Schools	Heads	Teachers	Students	Total
Girls' Only	5	2	2	8	48	58
Boys' Only	3	1	1	4	24	29
Mixed	27	8	8	32	192	232
<b>Total</b>	<b>35</b>	<b>11</b>	<b>11</b>	<b>44</b>	<b>264</b>	<b>319</b>
		<b>Total</b>				

The study collected primary data using structured questionnaires with open and closed-ended questions. Questionnaires were self-administered to teachers and students of public secondary schools as the key respondents. After data collection, questionnaires were cleaned, edited and sorted to facilitate data analysis. Responses from questionnaires were coded in the computer systems to facilitate quantitative data analysis. Statistical Package for Social Sciences (SPSS version 24) was used to analyze data quantitatively. To ensure ethical considerations, the researchers ensured there was informed consent and voluntary participation before issuing the questionnaires to respondents.

## Results and Discussion

### Availability of Safety Standards Manual for Schools in Kenya

Head teachers and teachers were asked if their schools had a copy of the Safety Standards Manual (2008) for Schools. The responses from these respondents were analyzed and results presented as shown in Table 2.

**Table 2: Responses of School heads and teachers on having a copy of Safety Standards Manual for Schools in Kenya**

	School Heads (N=9)		Teachers (N=41)	
	Frequency	Percent	Frequency	Percent
Yes	9	100.0	28	68.3
No	0	0	13	31.7
Total	9	100.0	41	100.0

Table 2 shows that all the school heads affirmed that the schools had a copy of the Safety Standards Manual (2008) for Schools in Kenya. It is also clear that 68% of the teachers confirmed schools had a copy of the Safety Standards Manual for Schools in Kenya; while, 32 % said that there were no copies of the Manual. The respondents who confirmed the availability of the Safety Standards Manual in their schools were further asked about the ease of accessibility of the Safety Standards Manual in their schools. With regard to ease of accessibility of the Safety Standards Manual to all the members of the school fraternity, respondents' views were as shown in Table 3.

**Table 3: Accessibility of Copies of Safety Standards Manual for Schools in Kenya by School Heads and Teachers**

	School Heads (N=9)		Teachers (N=41)	
	Frequency	Percent	Frequency	Percent
Yes	9	100	24	85.7
No	0	0	4	14.3
Total	9	100	28	100

The results in Table 3 shows that among the school heads who agreed that there were copies of the Safety Standards Manual for Schools in Kenya in their schools, all of them agreed that the copies of the Manual were easily accessible. On the other hand, among the teachers who agreed that there were copies of Safety Standards Manual in their schools, about 86% of them agreed that the copies of the Manual were easily accessible while, 14% said that the copies of the Safety Standards Manual for Schools in Kenya were not easily accessible.

While explaining their positions regarding ease of accessibility of the manuals, majority of the school heads qualified their response based on an open ended question, by saying that the manuals were easily accessible claiming that apart from the copies of the Safety Standards Manual being kept in the school heads' office, schools had made copies that were being kept at the school library. They further reported that the manuals were available to administrators, Board of Management and teachers. However, teachers felt that these manuals were kept exclusively at the school head's office thus making them difficult to access. This finding could indicate that school managers have not created awareness on the need for familiarization with the safety manuals and school

safety in general. This finding is in line with Ng'ang'a (2013) who found out that the awareness of safety standards was low in schools.

### **Extent schools have implemented the Ministry of Education Safety Standards**

This study further sought to find the extent to which the schools had implemented the Ministry of Education safety standards in schools. In this case, a common question was asked to both the school heads and teachers to rate their views on an ordinal scale with regard to the extent of implementation. The measure of extent was ranked on a continuum and numerical figures were assigned to give an interpretation as follows: 4 = To a very large extent; 3 = To a large extent; 2 = To a moderate extent; 1 = To a small extent.

In light of the foregoing data with regard to the extent to which schools have implemented the Ministry of Education safety standards was analyzed collectively for both school heads and teachers and presented in Table 4.

**Table 4: Extent the School has implemented the Ministry of Education safety standards**

	School Heads (N=9)		Teachers (N=41)	
	Frequency	Percent	Frequency	Percent
To a small extent	0	0	4	9.8
To a moderate extent	2	22.2	24	58.5
To a large extent	6	66.7	11	26.8
To a very large extent	1	11.1	2	4.9
<b>Mean</b>	<b>2.89</b>		<b>1.68</b>	

As noted from Table 4, majority of the school heads (about 67%) were of the view that to a large extent the school had implemented the Ministry of Education safety standards. About 11% of the school heads concurred that their schools had implemented the Ministry of Education safety standards to a very great extent. However, about 22% of the school heads opined that schools had implemented the Ministry of Education safety standards to a moderate extent. Similarly, about 59% of the teachers were of the view that schools had implemented the Ministry of Education safety standards to a moderate extent while about 27% of them agreed that schools had implemented the Ministry of Education safety standards to a large extent.

Overall and in line with the interpretation schema presented in this section where 4 represents to a very great extent and 1 representing to a small extent, it can be seen that the mean value depicting extent to which the schools have implemented the Ministry of Education safety standards by school heads was found to be 2.89 while, that of the teachers was 1.68. This implies that school heads were in agreement that the schools had implemented the Ministry of Education safety standards to a large extent while teachers on the other hand were of the view that implementation had been done to a moderate extent.

### **Discussions of Safety Standards Manuals for School**

Both school heads and teachers were asked if they do discuss Safety Standards Manual for Schools in Kenya with other stakeholders in the school. The responses from school heads and teachers were analyzed and results presented as shown in Table 5.

**Table 5: Views of School Heads and Teachers on Discussions of Safety Standards Manuals for School**

	School Heads (N=9)		Teachers (N=41)	
	Frequency	Percent	Frequency	Percent
Yes	7	77.8	19	46.3
No	2	22.2	22	53.7
Total	9	100.0	41	100.0

Table 5 shows that about 78% of the school heads were in agreement that they do discuss the Safety Standards Manual for Schools while, 22% of the school heads were of the opinion that they do not discuss Safety Standards Manual for Schools. 54% of the teachers were of the opinion that they do not discuss Safety Standards Manual for Schools, while 46% reported that they discussed Safety Standards Manual for Schools. An open ended question was put to both the school heads and teachers to explain reasons for their responses in view of the foregoing question. From the responses, it emerged that school heads had to some extent discussed Safety Standards Manual for Schools with teachers, support staff and students.

Notably, the head teachers argued that they had held discussions with students during assemblies while they discussed with teachers during staff meetings and with the BOM during board meetings where they sensitized all stakeholders on how to handle themselves in case of an emergency within the school. This was not however the case with teacher respondents. According to the teachers they categorically affirmed that there has never been a forum organized by the school to discuss safety issues although but they only they hold conversations as colleagues rather informally but have never been involved by the school administration. This finding could indicate that there is need for head teachers to facilitate formal discussions specifically on school safety with all stakeholders in the school.

### **Implementation of the Government Policy of Safety Standards and Guidelines**

An open ended question was put forth to the respondents with the aim of seeking to establish their opinion regarding the implementation of government policy on safety standards and guidelines. In this regard, the school heads were of the opinion that implementation of safety guidelines has financial implications hence they suggested that the government should factor safety vote head when disbursing Free Secondary Education (FSE) funds. They also observed that safety matters are given more prominence through government interventions only when there are tragedies e.g. fire in a school, a factor which contributes to -implementation of safety standards and guidelines in schools.

Overall, most school heads agreed that the implementation of safety standards and guidelines has been aptly done in most schools. They however suggested that there should be regular follow ups in order to upscale the implementation process for the benefit of the school community. The teachers on the other hand were of the opinion that implementation of the Government Policy on Safety Standards and Guidelines is a good initiative because it enhances safety of both teachers and students. According to the teachers, even though schools have tried to implement the Government Policy of Safety Standards and Guidelines, there is more that can be done to enhance its implementation in totality for the overall benefit of teachers, students and entire school fraternity.

### **Constraints on the Implementation of Safety Standards and Guidelines**

This study also sought to find out the possible constraints which could affect the implementation of safety



standards in schools. On this aspect, respondents were required to choose from the choices given depicting the possible constraints as; inadequate funds, inadequate safety equipment and ignorance. The respondents were to choose what they felt was a constraint on the implementation of safety standards and guidelines. The results of the findings are as shown in Table 6.

**Table 6: Views of School Heads and Teachers on Possible Constraints on the Implementation of Safety Standards and Guidelines**

	School Heads (N=9)		Teachers (N=41)	
	Frequency	Percent	Frequency	Percent
Inadequate funds	7	77.8	29	70.7
Inadequate safety equipment	2	22.2	8	19.5
Ignorance	0	0	4	9.8

Table 6 shows that the school heads were of the opinion that the most possible constraint on the implementation of safety standards and guidelines based on rank was inadequate funds with about 78% followed by inadequate safety equipment at 22%. Ignorance according to the school heads was not a constraint on the implementation of safety standards and guidelines. Just like the school heads, the teachers were also of the opinion that the most possible constraint on the implementation of safety standards and guidelines was inadequate funds at about 71%, followed by inadequate safety equipment at 20%. The least possible constraint on the implementation of safety standards and guidelines was ignorance as depicted by about 10% of teachers. Studies conducted elsewhere also confirm that availability of financial resources is critical in implementation of safety standards in schools. Makau (2016) found that majority of schools were not able to purchase adequate security infrastructure due to unavailability of funds which is in agreement with the current study findings.

### Integration of Safety Activities into Daily School Routine

To begin with, both teachers and school heads were first asked whether their schools integrated safety activities into daily school routine. Tables 7 shows the results as obtained from the school heads and teachers respectively.

**Table 7: Views of School Heads and Teachers on Integration of Safety Activities into Daily School Routine**

	School Heads(N=9)		Teachers (N=41)	
	Frequency	Percent	Frequency	Percent
Yes	7	77.8	21	51.2
No	2	22.2	20	48.2
<b>Total</b>	<b>9</b>	<b>100.0</b>	<b>41</b>	<b>100.0</b>

Results in Table 7 show that about 78 percent of the school heads were in support that schools integrated safety activities into daily school routine while, 22% of the school heads disagreed. On the other hand, teachers were almost equally divided on their opinion where 51% of the teachers were of the opinion that schools have integrated safety activities into daily school routine while 48% were of the contrary view.

### Influence of School Management Practices on Implementation of Safety Standards

The study sought to establish the level of agreement with respect to the statement relating to school management practices. A 5 point Likert scale was used to rate responses of this variable and it ranged from; 1 = Strongly Disagree to 5 = Strongly Agree. The findings representing teachers and school heads view on the parameter are presented in Tables 8 and Table 9.

**Table 8: School Heads Views on School Management Practices**

N=9	SA	A	M.A	D	S.D	
Statement	%	%	%	%	%	Mean
Quality assurance and standards officers visit the school very often.	11.1	11.1	22.2	44.4	11.1	2.67
Trainings on disaster management are frequently held.	0	22.2	11.1	44.4	22.2	2.33
All teachers and support staff have at one point attended trainings on disaster management.	0	33.3	11.1	33.3	22.2	2.56
The school regularly invites resource persons from different safety departments to come and talk to the students and staff about safety.	0	11.1	0	56.6	33.3	1.89
School inspections by the Ministry of Health officers on safety and health status are regularly carried out.	22.2	22.2	0	33.3	22.2	2.89
The school infrastructure is repaired, maintained and serviced	22.2	44.4	11.1	22.2	0	3.67
The school safety committee briefs the head teacher on the school safety situation	0	44.4	11.1	33.3	11.1	2.89
Students often use suggestions boxes to air their concerns	22.2	33.3	44.4	0	0	3.78

Table 8 shows that majority (about 56%) of school heads disagreed that quality assurance and standards officers visited the school very often while 22% moderately agreed with the statement. The mean of 2.67 indicated that most school heads moderately agreed with the statement. Similarly, majority (about 67%) of the school heads disagreed that trainings on disaster management are frequently held while 22% agreed to the statement. The mean index of 2.33 indicates that most school heads disagreed to the statement, implying that trainings on disaster management were rarely done. About 55% of the school heads disagreed that all teachers and support staff have at one point attended trainings on disaster management while, a third of the school heads agreed to the statement. A mean index value of 2.56 implied that most school heads disagreed that teachers ever attended such trainings.

In regard to the statement that the school regularly invited resource persons from different safety departments to come and talk to the students and staff about safety, majority of the school heads disagreed with the statement. The mean value of 1.89 implies that most school heads confirmed that they do not invite resource people to give talks regarding matters of safety. As to whether school inspections by the Ministry of Health officers on safety and health status are regularly carried out, majority (about 56%) of the school heads disagreed with the statement while 22% agreed and another 22% strongly agreed to the statement. The mean value index to this statement was 2.89 meaning that majority of the school heads agreed moderately to the statement.

Further, as to whether the school infrastructure is repaired, maintained and serviced, a majority of about 67% of the respondents either agreed or strongly agreed that school infrastructure are usually repaired, maintained and serviced while, 22% of the respondents disagreed. The mean value index of 3.67 implies that majority of the school heads agreed that there were regular repairs and maintenance of school safety infrastructure. Moreover, a 44% of the school heads agreed that the school safety committee usually briefs the school heads on the school safety situation. About 33% of them however disagreed and 11% strongly disagreed to the statement. With the mean value index of 2.89, it means that most school heads moderately agreed that such briefs were in existence.

Finally, it can be noted that majority (about 56%) of the school heads either agreed or strongly agreed that students often use suggestions boxes to air their concerns while 44% of them moderately agreed to the statement. This resulted to a mean index level of 3.78, implying that most head teachers agreed that suggestion boxes were a norm in most schools towards addressing students concerns.

**Table 9: Teachers Views on School Management Practices**

<b>N=41</b>	SA	A	M.A	D	S.D	
Statement	%	%	%	%	%	Mean
Quality assurance and standards officers visit the school very often.	2.4	46.3	14.6	29.3	7.3	3.07
Trainings on disaster management are frequently held.	0	22.0	22.0	34.1	22.0	2.44
All teachers and support staff have at one point attended trainings on disaster management.	0	14.6	12.2	48.8	24.4	2.17
The school regularly invites resource persons from different safety departments to come and talk to the students and staff about safety.	0	19.5	17.1	46.3	17.1	2.39
School inspections by the Ministry of Health officers on safety and health status are regularly carried out.	0	36.6	31.7	22.0	9.8	2.95
The school infrastructure is repaired, maintained and serviced.	7.3	46.3	26.8	14.6	4.9	3.37
The school safety committee briefs the head teacher on the school safety situation	0	31.7	29.3	24.4	14.6	2.78
Students often use suggestions boxes to air their concerns.	14.6	43.9	9.8	19.5	12.2	3.29

It can be seen from Table 9 that majority (46%) of the teachers agreed that quality assurance and standards officers visited the school very often; however, there were 29% of the teachers who disagreed with the statement. The mean index value for this statement of 3.07 implies that the teachers agreed moderately with the statement. Majority (56%) of the teachers disagreed that trainings on disaster management are frequently held while, 22% of the respondents moderately agreed to the statement and a similar number also agreed to the statement. The mean value index to this statement was 2.44 implying that there are no frequent trainings in schools for teachers and other staff on disaster management.

The study also sought to establish whether teachers and support staff have at one point attended trainings on disaster management. As can be seen from the table, majority (about 73%) of the teachers disagreed to the

statement while about 15% supported the statement. This statement had a mean value of 2.17 indicating that teachers rarely attend trainings on disaster management. In addition, the study found out that majority (about 63%) of the teachers disagreed that the school regularly invites resource persons from different safety departments to come and talk to the students and staff about safety while, about 20% of the teachers agreed with the statement. Considering the mean value to this statement was 2.39, it can be concluded that seldom do schools invite resource persons to talk to students and staff on safety issues.

Further, the study sought to establish from the teachers if school inspections by the Ministry of Health officers on safety and health status were regularly carried out. Results in view of this parameter showed that about 37% of the respondents agreed to the statement. While about 32% moderately agreed and a similar number also disagreed. The mean value of 2.95 indicates moderate agreement.

It can also be seen that majority (about 53%) of teachers consented to the view that the school infrastructure is repaired, maintained and serviced while about 27% of the teachers moderately agreed to the statement. A mean value of 3.37 depicts that most teachers moderately agreed to the statement. This finding is in line with that of Obiamaka (2015) who investigated security management situations in public secondary schools in Nigeria and found that there were insufficient devices for improving security situations in public secondary schools.

As to whether the school safety committee briefs the school head on the school safety situation, about 32% of the teachers agreed while 29% moderately agreed to the statement. The mean index value of 2.78 depicts moderate levels of agreement with the statement. Finally, most teachers (about 59%) agreed that students often use suggestion boxes to air their concerns while about 32% disagreed to the statement with a mean index being 3.29 implying moderate level of agreement to the statement.

**Table 10: Students Views on Safety Practices**

N=256	SA	A	M. A	D	SD
Safety Practices	%	%	%	%	%
The school has enough security personnel	35. 5	30. 5	20. 7	9.4	3.9
The school has a perimeter fence and a gate manned by a security personnel all the time	37. 1	31. 6	11. 7	11. 3	8.2
The school regularly conducts fire drills	14. 1	23. 8	14. 8	25. 4	21. 9
The students use suggestion boxes to communicate their issues	41. 4	19. 1	9.0	7.8	22. 7
There are regular inspections of students by the teachers	36. 3	27. 0	16. 8	9.8	10. 2
There are regular patrols by the teacher on duty	47. 3	31. 6	5.9	4.7	10. 5

It can be noted from Table 10 that most (66%) of the students agreed that the school has enough security personnel while about 21% of the students moderately agreed to the statement, and only 13% disagreed. Similarly, most of the students (about 69%) agreed that the school has a perimeter fence and a gate manned by security personnel all the time while about 19% disagreed and about 12% agreed moderately to the statement. The findings further suggested that the school regularly conducted fire drills as indicated by about 39% of the students

who agreed to the statement. However, 48% disagreed that schools do conduct regular fire drills.

Regarding whether the students use suggestion boxes to communicate their issues, majority (61%) of the students agreed while 30% disagreed to the statement. Similarly, another majority (63%) of the students agreed and strongly agreed that there are regular inspections of students by the teachers. The respondents were asked to indicate whether there were regular patrols by the teacher on duty, in this regard, majority (about 79%) of the students agreed to the statement while about 16% of the students disagreed with the statement.

**Correlation Analysis on School Management Practices and Implementation of Safety Standards**

Correlation analysis was used to determine the relationship between school management practices and implementation of safety standards in public secondary schools. The result of the correlation analysis is summarized in Table 11.

**Table 11: Correlation Analysis between School Management Practices and Implementation of Safety Standards**

		School Management Practices	Implementation of Safety Standards
School Management Practices	Pearson Correlation	1	.627**
	Sig. (2-tailed)		.000
	N	41	41
Implementation of Safety Standards	Pearson Correlation	.627**	1
	Sig. (2-tailed)	.000	
	N	41	41
**. Correlation is significant at the 0.01 level (2-tailed).			

The correlation analysis to determine the relationship between management practices and implementation of safety standards in public secondary schools shows there is a strong positive relationship;  $r(40) = .627, p \leq .01$ . Hence it can be concluded that a statistically significant and strong positive relationship exists between school management practices and implementation of safety standards.

**Regression Analysis-School Management Practices and Implementation of Safety Standards**

Further to the correlation analysis, regression analysis was conducted to empirically determine whether students' enrolment could predict implementation of safety standards in public secondary schools as analyzed in Tables 12 through 13.

**Table 12: Model Summary- School Management Practices and Implementation of Safety Standards**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.627 <sup>a</sup>	.393	.378	.49384
a. Predictors: (Constant), School Management Practices				

The regression results in Table 12 confirm that the model’s correlation coefficient is .627 as shown from the results of correlation analysis. It further indicates that the coefficient of determination (R square) is .393, implying that management practices as a predictor variable can be able to explain about 39% of the total variance on implementation of safety standards in schools.

As to whether this model was a good fit to enable management practices to predict implementation of safety in schools, the results are as shown in the ANOVA table 13.

**Table 13: ANOVA on School Management Practices and Implementation of Safety Standards**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.168	1	6.168	25.289	.000 <sup>b</sup>
	Residual	9.511	39	.244		
	Total	15.679	40			
a. Dependent Variable: Implementation of Safety Standards						
b. Predictors: (Constant), School Management Practices						

Table 13 shows that school management practices is the only predictor variable in the model and the implementation of safety standards is shown as the outcome variable. The ANOVA table shows that the model containing the two variables is a statistically significant model that can enable the independent variable to predict the outcome variable;  $F(1, 39) = 25.289$ ;  $P \leq .01$ . In order to ascertain the unique contribution of the independent variable in the model towards prediction of the dependent variable so as to be able to answer the fourth research question for this study which is stated as: To what extent do school management practices influence implementation of safety standards in public secondary schools in Matungulu Sub-County?’, a table of coefficients was generated and is presented in Table 14.

**Table 14: Regression Coefficient-School Management Practices and Implementation of Safety Standards**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.176	.300		7.251	.000
	School Management Practices	.519	.103	.627	5.029	.000
a. Dependent Variable: Implementation of Safety Standards						

Table 14 displays the regression coefficients of the independent variable (school management practices) and its unique contribution to the overall model as measured by the unstandardized and standardized coefficient, Beta. The results reveal that school management practices can statistically and significantly explain the implementation of safety standards in public secondary schools in Matungulu Sub- County;  $t(40) = 5.029$ ;  $p \leq .05$ ;  $\beta = .627$ . From the analysis, it means that a one unit increase in school management practices could influence an increase of about .627 in the level of implementation of safety standards in schools. This therefore implies that school management practices have a significant influence on implementation of safety standards in public secondary schools in Matungulu Sub-County.

### Implementation of Safety Standards

Finally, the study sought to determine the implementation of safety standards in public secondary schools in Matungulu Sub-County. This was the dependent variable and was measured by asking the respondents to respond to various statements describing the implementation of safety standards. A 5 point Likert scale ranging from; 1 = Strongly Disagree to 5 = Strongly Agree was used to measure the responses to the statements posed. These results are presented in Table 15.

**Table 15: Implementation of Safety Standards**

N=41	SA	A	M.A	D	SD
Our school has instituted measures that ensure that:	%	%	%	%	%
There is safety on school grounds	0	9.8	58.5	26.8	4.9
There is safety in physical infrastructure	9.8	48.8	31.7	9.8	0
Health and hygiene safety measures are maintained in school	9.8	56.1	24.4	9.8	0
School environment is safe	12.2	63.4	17.1	7.3	0
There is food safety	12.2	63.4	17.1	7.3	0
Students are secured from drugs and substance abuse	12.2	51.2	29.3	7.3	0
There is safe teaching and learning environment	14.6	56.1	22	4.9	2.4
Socio-cultural environment of the school is safe and secure	17.1	43.9	31.7	7.3	0
The safety of children with special needs is guaranteed	12.2	39.0	26.8	17.1	4.9
There is safety against drug abuse	14.6	53.7	22	9.8	0
There is transportation safety	9.8	29.3	48.8	12.2	0
There are provisions for disaster risk reduction	9.8	26.8	43.9	17.1	2.4

Results in Table 15 indicated that most (about 59%) of the respondents moderately agreed that there is safety on school grounds while other respondents (about 49%) agreed that there is safety in physical infrastructure. The findings further suggested that health and hygiene safety measures are maintained in school as indicated by 56% of the respondents who agreed to the statement. With regards to whether school environment is safe, it is noted that majority (64%) of the respondents agreed to the statement. Similarly, 64% of the respondents agreed that there is food safety in schools while 51% of the respondents agreed that students were secured from drug and substance use.

It is noted that there was safe teaching and learning environment in schools as indicated by 56% of the respondents who agreed to the statement. It is also evident from the findings that socio-cultural environment of the school is safe and secure as indicated by 44% of the respondents who consented to the statement. According to majority of the respondents (39%), the safety of children with special needs is guaranteed in schools. As cited by about 54% of the respondents, there is safety against drug abuse. Further, 49% of the respondents moderately agreed that there is transportation safety and 44% of them moderately agreed that there were provisions for disaster risk reduction in schools.

## Conclusions and Recommendations

This study sought to determine the influence of school management practices on implementation of safety standards in public secondary schools in Machakos County. The results revealed that school management practices had a significant influence on implementation of safety standards in public secondary schools. However, it was noted that school heads of public secondary schools did not have security plans or effective ways of sensitizing students and the staff on safety standards.

It was also noted that to a larger extent, allocation of adequate funds and system support on safety measures was highly influenced by management practices such as coordination of implementation, evaluation and control of safety standards. However, the study revealed that Quality Assurance and Standards Officers (QASOs) from the Ministry of Education did not visit the schools often and trainings on disaster management were not frequently held as required.

On the basis of these findings, the study recommends that: School management should frequently organize seminars for training staff and school workers on disaster management. In addition, there is need for QASOs to intensify supervision in schools and to create awareness on the need for school safety among all stakeholders.

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