



# **Closed Circuit Television (Cctv) System and Management of Students' Discipline in Public Secondary Schools in Imenti North-Sub County, Meru County, Kenya**

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**Abstract:** Discipline amongst students guarantees success in the achievement of school activities and ensures excellent academic performance. However, challenges in monitoring or documenting students' indiscipline cases are mitigated by Closed Circuit Television system which improves the management of student discipline. Therefore, the study investigated the impact of using Closed Circuit Television system to manage student discipline in public secondary schools in Imenti North Sub County in Meru County, Kenya. Systems theory of management by Ludwig von Bertalanffy (1951) and scientific theory of management by Fredrick Winsor Taylor (1909) guided the study. Descriptive survey research design was employed. The target population was 448 respondents. A sample size of 90 participants comprising of principals, deputy principals, class teachers and class secretaries was obtained through Purposive sampling method. Questionnaires and interviews were used to collect data. Piloting was conducted in Meru Central sub county. Content validity was determined by supervisors and experts. Reliability of instruments was confirmed by a Cronbach alpha Coefficient of 0.76. Thematic analysis was used to analyze qualitative data. Quantitative data was examined through descriptive analysis using percentages and averages and analysed with the aid of Statistical Package for Social Science (SPSS) Version 29. Qualitative data was presented narratively while quantitative data was presented in tables and charts. The findings showed that CCTV systems improve monitoring and deter misbehavior, contributing positively to student discipline. The study concluded that CCTV systems protect both learners and property thus resulting in effective management of discipline in schools. The study recommended that the Government, parents and guardians provide adequate funding for the installation and maintenance of technological systems in schools.

**Keywords:** CCTV systems, Discipline management, Deter misbehavior, Adequate funding

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## **1. Introduction**

Technology has become integral to various aspects of education, including student discipline management. According to the Webster's Third New International Dictionary (2015), discipline means control gained by enforcing obedience or behaviour in accordance with

rules, prompt and willing obedience to the orders of superiors thus resulting to a systematic, willing and orderly conduct. Nilofar (2022) study on the role of Technology in the development of education defines indiscipline as the deliberate, or lack of, action to regulate behaviour. It is the practice of frank and strict adherence to legislation and guidelines, and cultural

standards and values, the ability to control oneself or other people, even in challenging circumstances. Management of discipline thus entails teaching acceptable behaviours and unlearning maladaptive behaviours, setting limits, clarifying roles, responsibilities, and mutual expectations.

A study done by Yahaya (2019) on discipline problems among secondary school students in Malaysia confirmed that students' indiscipline is a prevailing problem affecting schools not only in Malaysia but also across the many nations around the world. The study indicated that serious breaches of school discipline policy may have profound negative effects on teachers who may report experiencing fears for their safety, lack of sense of dignity at work, intense feelings of anger, humiliation or shame, isolation and depression. The study found that Students' misconduct in the classroom interferes with teaching and learning and is thought to be precursor to later school dropout and similar negative social outcomes. In view of this, school principals and their deputies, bear the greatest responsibility in achieving desirable student's discipline. According to a study by Cho and Clauton (2020) in America on managing discipline in learning institutions, the management of discipline is an essential element in educational practice, and at a time when teachers and managers are anxious about reported increases in violence and other forms of anti-social behaviour there's a need for practical guidance and a review of current thinking.

A case study done by Taylor (2021) on school CCTV in school surveillance security and discipline in London observed that CCTV represents the most common technology currently utilised in schools for crime control and focusing on a multitude of behaviours and activities such as truancy, smoking, bullying, teacher performance, and minor classroom naughtiness. Furthermore, according to Johnson (2020), CCTV has become a common technology that can be found in a wide range of applications, such as public, private, social, or work environments. The study which was done in the USA presents CCTV and its features as a tool for deterrence, monitoring, reducing crimes, providing safety and evidence, or supporting situational awareness. CCTV, as a tool for security, meets the objectives of theft reduction, asset protection, security investigations, providing evidence and deterrence.

A study done by Valeriana et al (2021) which sought to assess the adoption of CCTV in school administration and the security of students in Imo State of Nigeria concluded that CCTV has become popular, and with its wide range of applications, it serves as a tool for security, meeting the objectives of theft reduction, asset protection, security investigations, and providing evidence. Therefore, it is evident that adoption of CCTV in schools would result in containing learners in schools escalating participation in learning activities for improved performance. However, in instances of

inadequate use of CCTV, learners may exercise truancy, bullying which inflict level of academic achievement.

## 1.1 Statement of the Problem

Effective management of student discipline is a critical aspect of maintaining a conducive learning environment in schools. However, many educational institutions face ongoing challenges related to student behavior, absenteeism, tardiness, and overall compliance with school rules. Traditional methods of discipline management, which rely heavily on manual record-keeping, verbal warnings, and inconsistent enforcement of rules, are often insufficient in addressing these challenges. Therefore, the integration of technology, such as CCTV cameras has been proposed as a potential solution to improve the management of student discipline by enhancing monitoring, accountability, and data-driven decision-making.

However, there is limited empirical evidence on the actual impact or the effectiveness of technology-aided discipline strategies across public and private institutions. Furthermore, there is a need to explore how CCTV systems interact with existing school rules, policies, and the broader school culture to create a more effective disciplinary system. Therefore, this study sought to investigate the impact of CCTV systems on the management of student discipline in public secondary schools in Imenti north Sub County in Meru County.

## 1.2 Objective of the Study

The objective of the study was to establish the impact of CCTV cameras on management of students' discipline within the school environment in selected public secondary schools in Imenti North Sub County in Meru County, Kenya

## 1.3 Research Question

The study was guided by the following research question: What is the impact of closed circuit television cameras on the management of students' discipline in selected public secondary schools in Imenti North Sub County in Meru County, Kenya?

## 2. Literature Review

A study done in the United Kingdom by Taylor (2018) on surveillance, security technologies and their impact on society, including educational settings, examined the impact of CCTV in secondary schools across the UK. The study found that CCTV contributed to a reduction in bullying incidents and improved overall safety perceptions among students and staff. However, the study did not address the impact of CCTV on the

management of students' absenteeism and sneaking. A research done by Ralf (2021) in Germany on the ethical considerations of CCTV use in German secondary schools which used descriptive research design and a sample size of 246 respondents, also found that CCTV cameras were very effective in deterring misconduct among students in secondary schools in Germany. The current study however, focused on secondary schools in Kenya.

A research done by Brooks and Corkill (2019) in China explored the integration of CCTV with facial recognition technology in Chinese secondary schools. The study examined both the implementation process and its implications. Employing a mixed-methods approach, the research combined qualitative interviews with 17 school administrators, 28 teachers, and 33 parents, alongside quantitative surveys to gather comprehensive insights. The study found that CCTV cameras have played a great role in enhancing school security, managing student behavior, and ensuring campus safety. The study concluded with recommendations for policymakers, emphasizing the need for balanced approaches that prioritize safety while respecting individual rights within educational settings. However, the study focused on stakeholders' perception with regard to privacy and ethics and therefore didn't link the use of CCTV cameras and management of learners' discipline which my study explored.

Gitonga (2016) also carried out research on CCTV and discipline in schools in Kenya, demonstrating how different types of CCTV technologies used in school affect discipline in public schools. The study applied both experimental and descriptive research designs and a sample size of 125 respondents where the frequency of indiscipline cases were captured on CCTV and how students' behavior patterns change before and after installation of CCTV was checked and addressed. The study confirmed that CCTV had a positive impact on learners' behavior which resulted to desirable discipline. Additionally, a case study done by Omollo (2019) in Kenya on the impact of CCTV surveillance in secondary schools concluded that the use of CCTV in schools is increasing and asserted that if the current trajectory is maintained, the number of Kenyan schools adopting CCTV surveillance is bound to continue increasing. The study also found that the CCTV cameras helped in improving teaching, monitoring and controlling social interactions in the institutions.

## **3. Methodology**

### **3.1 Research Design**

In this study, descriptive survey research design was applied since the descriptive survey research design was the most appropriate when describing the characteristics of the population being investigated (Sharma, 2019). The study examined the impact of integration of technology on management of students' discipline in public secondary schools in Imenti north sub county. Descriptive survey research method ensured that data was objectively collected, interpreted and analyzed without interfering with the normal operations of the respondents

### **3.2 Target Population**

The target population of this study therefore consisted of thirty-eight public secondary schools in Imenti North Sub County. This study targeted a total population of 448 participants, including 38 school principals, 38 deputy principals 186 class teachers and 186 class secretaries. The principals and deputy principals participated in the study since they were the school administrators charged with the responsibility of creating a positive climate within the school setup, coordinating and supervising curriculum and maintaining discipline in the school.

### **3.3 Sampling Procedure**

The study used Purposive sampling to select 1 National school and 2 extra county schools, 2 county schools and 3 sub county schools from thirty-eight (38) public secondary schools comprising of 1 national school, 3 Extra county schools, 8 county schools and 26 sub county schools which were identified for the study. All principals, and deputy principals for the selected schools participated in the study. Class teachers and class secretaries from each selected school were selected through purposive sampling.

### **3.4 Sample Size**

A sample size of 90 participants comprising of 37 class secretaries, 37 class teachers, 8 deputy principals and 8 principals was obtained through Purposive sampling method representing 20 % of the target population.

**Table 1: Sampling Frame**

Schools/Respondents	Target Population	National	SAMPLE SIZE			Sub County	Total sample Size	Sampling procedure
			Extra county	County				
Principals	38	1	1	2	4	8	Purposive	
D/Principals	38	1	1	2	4	8	Purposive	
C/Teachers	186	24	36	48	78	37	Purposive	
C/Secretaries	186	24	36	48	78	37	Purposive	
Total	448					90		

Source: *Researcher*

### 3.5 Research Instruments

The questionnaire comprising of both structured and semi-structured questions were used to collect data from deputy principals, class teachers and class secretaries. The questionnaire collected demographic data of the respondents on the impact of CCTV on management of students' discipline. Interview guides were used to collect data from the school principals.

### 3.6 Piloting

Piloting was done in a neighboring Meru Central sub county. Before the actual study, four schools were randomly selected from Meru Sub County to participate in the pilot study representing 10% of the selected schools for the study. Therefore, from the selected schools in Meru Central sub county, 1 principal, 1 deputy principal, 3 class teachers and 3 class secretaries were involved in pilot test to determine the reliability of the instruments. A Cronbach alpha Reliability Coefficient of 0.76 was obtained which was deemed appropriate for the study. Content validity was determined by supervisors and experts

### 3.7 Data Collection Procedures

The researcher sought assistance of three research assistants to collect data through questionnaires and the interviews. Approval to undertake the research was sought by applying for a research permit from National Commission for Science, Technology and Innovation (NACOSTI) through Tharaka University. Then, permission was sought from the Director of Education, Meru County and the principals in all the schools identified for the study. Pilot testing was done using a test-retest method in three schools to validate the data collection instruments

### 3.8 Data Analysis

In this study, Descriptive statistics was used to analyze demographic information of the respondents. Quantitative data was examined through descriptive analysis using percentages and frequencies and analysed

with the aid of statistical Package for Social Science (SPSS) Version 29. Qualitative data was presented narratively while quantitative data was presented in tables and charts.

### 3.9 Ethical Considerations

The researcher first got approval from Tharaka University. This enabled the researcher to apply for NACOSTI research permit. The filling in of the questionnaire and participation in the interview was voluntary. Therefore, the respondent was expected to consent to participate in the study by signing a consent form. The individual respondents were assured of their anonymity and confidentiality of any information they gave. In addition, high code of ethics was maintained when analyzing data. While preparing this document, all sources consulted were acknowledged through proper index citation and referenced according to APA 7th edition format.

A descriptive survey research design was employed in the study. Thirty-eight (38) public secondary schools were identified for the study obtained through Purposive sampling. A sample size of 90 participants comprising of 37 class secretaries, 37 class teachers, 8 deputy principals and 8 principals was obtained through Purposive sampling method. Questionnaires were used to gather data from deputy principals, teachers and class secretary while interviews were for principals. Content validity was determined by supervisors and experts while reliability of instruments was confirmed through a pilot study conducted in Meru Central Sub County. A Cronbach alpha Coefficient of 0.76 was obtained which was deemed appropriate for the study. Data was analyzed with the aid of Statistical Package for Social Science (SPSS) Version 29 for inferential statistics.

## 4. Results and Discussion

The following are the findings of the study.

### 4.1 Gender Distribution of the Respondents

The study sought to determine the target population's gender distribution and whether there was bias in the gender distribution of the respondents or whether there

was gender parity. Gender of the respondents is indicated in Table 2.

**Table 2: Distribution of Respondents by Gender**

Gender	Deputy principal		Class teacher		Class secretary		TOTAL	
	F	%	F	%	F	%	F	%
Male	6	75	22	59.5	21	56.8	49	60
Female	2	25	15	40.5	16	43.2	33	40
Total	8	100	37	100	37	100	82	100

According to the findings in table 2, 60% of the total respondents were males while 40% of the respondents were females. Out of the 37 class teachers who responded, 59.5% were males compared to 40.5% females. Similarly, majority of the deputy principals who responded were 75% males while 25% were females. Further, majority (56.8%) of the class secretaries were males while 43.2% were females. The data indicates that males constitute a majority across all roles, with particularly high representation in leadership positions such as Deputy Principal. Class Teacher and Class Secretary roles also show male dominance, although with a smaller margin. The substantial male representation (75%) in the deputy principal role suggests a concentration of decision-making authority in the hands of men. This finding reflects broader patterns of gender disparity in educational leadership in Imenti

North Sub County, in Meru County, which, according to Bush (2008), can influence the adoption and implementation of technology in school management. However, the study has shown that gender can influence confidence and engagement with technology. This is supported by Volman and van Eck (2001) who observed that male-dominated leadership often demonstrate greater confidence in using ICT tools, particularly in administrative and disciplinary contexts leading to greater integration of technology.

## 4.2 Respondents' Level of Education

The survey also aimed to determine the educational backgrounds of the teachers and deputy principals. The results are shown in Table 3.

**Table 3: Respondents' Academic Qualification**

Highest Education	Doctorate Degree		Masters Degree		Bachelors Degree		Diploma in Education		TOTAL	
	F	%	F	%	F	%	F	%	F	%
Deputy principal	0	0	3	37.5	4	50	1	12.5	8	100
Class teacher	0	0	6	16.2	20	54.1	11	29.7	37	100
TOTAL	0	0	9	53.7	24	104	12	42.2	45	

Table 3 shows that a small percentage (16.2%) of class teachers and 37.5 % of deputy principals who responded had masters while only and 29.7% of the class teachers and 12.5% of the deputy principals had diploma certificates. However, none of the respondents had PhD, which may indicate limited exposure to research-intensive or innovation-driven training. The study also established that 50% of deputy principals and 54.1% of the class teachers had bachelor's degrees, respectively. In addition, 37.5% of deputy principals hold a master's degree, compared to only 16.2% of class teachers, suggesting that higher educational attainment may be a prerequisite or advantage for leadership roles. According to Tondeur et al. (2012), educators with higher academic qualifications are more likely to adopt technology in teaching and administration, as they are often exposed to research, innovation, and ICT training in postgraduate programs. This suggests that deputy principals with master's degrees may be better positioned to lead or support the implementation of digital discipline systems.

## 4.3 Closed-Circuit Television System and the Management of Students' Discipline

The researcher's intention was to investigate whether CCTV cameras had an impact on management of learners' discipline in Imenti North Sub County in Meru County, Kenya. The research instrument focused on several aspects that could measure the effectiveness of CCTV cameras on the management of learners' discipline. To achieve this objective, Likert scale was used to measure the research variables. The scale variables were: Strongly agree (5); Agree (4); Neutral (3); Disagree (2) and strongly disagree (1). The responses from the deputy principals are presented in Table 4.

**Table 4: Deputy Principal's Responses on Closed Circuit Television systems**

Statement	SD		D		N		A		SA		Total %
	F	%	F	%	F	%	F	%	F	%	
CCTV											
The installation of CCTV cameras in the institution has positively affected security	0	0	1	12.5	0	0	1	12.5	6	75.0	100
Knowing that CCTV cameras are present in the school makes you as a school administrator feel safer.	0	0	0	0	1	12.5	4	50.0	3	37.5	100
CCTV cameras have prevented misconduct or disciplinary violations.	0	0	0	0	0	0	4	50.0	4	50.0	100
CCTV cameras have been effective in helping the administration in managing student discipline	0	0	0	0	0	0	4	50.0	4	50.0	100
CCTV cameras have reduced stealing among students.	0	0	0	0	2	25.0	5	62.5	1	12.5	100
CCTV cameras have effectively eliminated sneaking	0	0	1	12.5	1	12.5	6	75.0	0	0	100
CCTV cameras have contributed to a positive learning or working environment.	0	0	0	0	0	0	5	62.5	3	37.5	100
CCTV cameras have helped in protecting school infrastructure from being damaged by the learners	0	0	0	0	0	0	7	87.5	1	12.5	100
Monitoring of teachers attendance through CCTV cameras has promoted class discipline management.	0	0	0	0	1	12.5	6	75.0	1	12.5	100
Immediate feedback of behavior pattern provided by CCTV cameras enhanced discipline deterrent measures.	0	0	0	0	0	0	6	75.0	2	25.0	100

SA=Strongly agree; A=Agree; N=Neutral; D=Disagree; SD=Strongly disagree; F=Frequency and %=Percentage

Table 4 summarizes deputies' responses on the impact of CCTV on management of students' discipline. According to perceived security impact, a significant majority (75%) of respondents strongly agreed that the installation of CCTV cameras has positively affected school security, while 12.5% agreed and another 12.5% disagreed. This finding strongly indicates that CCTV enhances institutional security, which concurs with Osunyikanmi and Oladele (2020) observation that the presence of surveillance systems in schools is linked to improved physical safety and reduced unauthorized access. Additionally, 50% of the respondents agreed and 37.5% strongly agreed that the presence of CCTV cameras made them feel safer as administrators, while only 12.5% remained neutral. This observation that CCTV psychological benefit goes beyond physical security is in line with Mutembei (2021) with findings that Feeling safe enables staff to focus on academic and managerial responsibilities

Regarding CCTV as a Deterrent to Misconduct all respondents either agreed (50%) or strongly agreed (50%) that CCTV cameras have helped prevent student misconduct. This aligns with findings by Wanyonyi and Wekesa (2022) who note that visible surveillance acts as a behavioral deterrent, reducing the chance of breaking school rules. Similarly, 100% of participants agreed or strongly agreed that CCTV has been effective in assisting school administration in

managing discipline. The same is supported by Kiprono & Cheruiyot (2020) observation that CCTV systems allow for accurate, real-time monitoring and evidence gathering, supporting objective disciplinary decisions

Most of the respondents (62.5%) agreed and 12.5% strongly agreed that CCTV has helped reduce theft, while 25% were neutral. This suggests that CCTV surveillance reduces opportunity and motivation for theft among students, consistent with the routine activity theory by Felson & Cohen (1980), which states that the presence of a capable guardian reduces crime. Further, on elimination of Sneaking, 75% agreed, 12.5% were neutral, and 12.5% disagreed that CCTV has eliminated sneaking behavior. The majority perception supports the idea that monitored spaces discourage unauthorized movement. The finding is in harmony with studies by Mboya and Nyongesa (2019) who found similar outcomes in urban secondary schools where CCTV was implemented.

Regarding responses on influence on learning and institutional culture, majority of the respondents (62.5%) agreed and 37.5% strongly agreed that CCTV has contributed to a positive learning or working environment. This indicates that a secure environment boosts student focus and teacher confidence. This finding is consistent with Odongo and Njeri (2018), who noted improved classroom engagement following CCTV installations. Additionally, a large proportion (87.5%) of

the respondents agreed and 12.5% strongly agreed that CCTV has helped protect school property. This result highlights the secondary benefit of surveillance in reducing vandalism and property misuse which is consistent with Onyango & Rono (2021).

Concerning monitoring teacher attendance, most of the respondents (75%) agreed and 12.5% strongly agreed that CCTV monitoring of teacher attendance has improved classroom discipline, with only 12.5% neutral. This supports Kiage (2020), who found that teacher presence directly correlates with student behavior in class. Regarding enhancing immediate disciplinary interventions, a majority (75%) of respondents agreed

and 25% strongly agreed that immediate feedback provided by CCTV has helped in implementing timely disciplinary deterrents. This study results affirms that prompt feedback enables proactive rather than reactive discipline management which is in line with best practices recommended by the Ministry of Education (2020).

The study further sought to establish teachers' views on the impact of Closed-Circuit Television Cameras on management of learners' discipline. The findings are presented in frequencies and percentages as shown in Table 5.

**Table 5: Class Teachers' Views on Closed Circuit Television Cameras**

Statement	SD		D		N		A		SA		Total %
	F	%	F	%	F	%	F	%	F	%	
Class teachers are all aware of the presence of CCTV cameras in classrooms and common areas?	1	2.7	7	18.9	6	16.2	14	37.8	9	24.3	100
CCTV cameras have improved student behavior and discipline during classes	2	5.4	5	13.5	6	16.2	13	35.1	11	29.7	100
CCTV cameras have been effective in helping the administration in managing student discipline	0	0	8	21.6	7	18.9	12	32.4	10	27.0	100
There has been a notable reduction in classroom misconduct (e.g., talking out of turn, cheating) since the installation of CCTV cameras	2	5.4	4	10.8	5	13.5	16	43.2	10	27.0	100
CCTV cameras have positively influenced students' attitudes towards classroom rules and regulations	1	2.7	9	24.3	7	18.9	11	29.7	9	24.3	100
Incidences of stealing among students have reduced significantly after the installation of CCTV cameras.	3	8.1	9	24.3	7	18.9	11	29.7	7	18.9	100
CCTV cameras have enhanced close monitoring of students behavior hence effectively eliminating sneaking.	4	10.8	7	18.9	6	16.2	12	32.4	8	21.6	100
CCTV cameras have helped in protecting school infrastructure from being damaged by the learners	0	0	7	18.9	7	18.9	12	32.4	11	29.7	100
Monitoring of teachers attendance through CCTV cameras has promoted class discipline management.	3	8.1	8	21.6	7	18.9	11	29.7	8	21.6	100
Immediate feedback of behavior pattern provided by CCTV cameras enhanced discipline deterrent measures.	2	5.4	7	18.9	5	13.5	13	35.1	10	27.0	100
CCTV cameras have encouraged attendance of class meetings thus promoting management of class discipline in the school.	0	0	5	13.5	5	13.5	15	40.5	12	32.4	100

SA=Strongly agree; A=Agree; N=Neutral; D=Disagree; SD=Strongly disagree; F=Frequency and %=Percentage

The teachers' responses represented in table 5 shows that 37.8% of respondents agreed and 24.3% strongly agreed that class teachers are aware of the presence of CCTV cameras in classrooms and common areas. Only 2.7% strongly disagreed, indicating a high level of staff awareness. This high awareness is critical as it forms the foundation for effective surveillance-based discipline strategies. As noted by Hope (2009), surveillance effectiveness is enhanced when both staff and students are cognizant of being monitored, which promotes self-regulation and deters misbehavior. Regarding, Influence of CCTV on Student Behavior, a majority (35.1%) of the respondents agreed as 29.7% strongly agreed believing that CCTV has improved student behavior during lessons. Only a small proportion (5.4%) strongly disagreed and expressed opposing views. These findings are consistent with findings by Fussey (2013), who

observed that the presence of surveillance cameras in educational settings correlates with reduced disruptive behavior and improved classroom engagement.

Majority of the respondents (51.3%) agreed or strongly agreed that monitoring teacher attendance using CCTV has promoted discipline management, while 29.7% disagreed. This suggests a more cautious acceptance of surveillance on staff. The dual role of surveillance in monitoring both students and staff raise ethical and operational considerations. As noted by Ball (2010), the perceived trustworthiness of surveillance depends heavily on transparency and clear policy guidelines. Additionally, 59.4% of respondents agreed or strongly agreed that CCTV has helped the administration manage student discipline, while only 21.6% disagreed. This affirms that CCTV's assists school administration in

providing video evidence for behavioral assessment and decision-making. This finding is supported by Taylor (2010) who emphasizes that administrative efficiency in behavior management increases when schools leverage real-time monitoring tools such as CCTV.

Further, on Reduction in Classroom Misconduct, more than 70% of respondents agreed or strongly agreed that there has been a reduction in classroom misconduct since CCTV installation. Specifically, 43.2% agreed, and 27.0% strongly agreed, while only 5.4% strongly disagreed. This supports findings by Boda & Szabó (2011), who argue that visible surveillance deters minor infractions like cheating or talking out of turn due to the perceived risk of being caught. Although 54% of respondents agreed or strongly agreed that CCTV cameras positively influence students' attitudes toward classroom rules, a notable 24.3% disagreed, suggesting mixed perceptions. According to Hope (2009), student attitudes toward surveillance often depend on how fairly and consistently the system is used. If students view CCTV as part of a broader fairness-based discipline system, compliance increases.

Regarding responses on reduction in Theft, only 48.6% of respondents agreed or strongly agreed that incidences of stealing have reduced, while 32.4% disagreed. This split suggests that while theft deterrence is partially achieved, other factors such as peer culture or camera blind spots may still play a role. The current study findings are backed by Gill and Spriggs (2005) who caution that while CCTV reduces crimes of opportunity, it may be less effective for premeditated behaviors

without complementary security policies. Further, majority of the respondent (54%) agreed or strongly agreed that CCTV has helped eliminate sneaking, while 29.7% disagreed. This indicates moderate effectiveness in addressing unauthorized student movement. In addition, a combined 62.1% of respondents agreed or strongly agreed that CCTV has protected school property from vandalism. None strongly disagreed. This is consistent with Norris & Armstrong (1999), who noted that surveillance systems are particularly effective at deterring vandalism and property damage, especially in unsupervised school areas.

According to 62.1% of the respondents, immediate behavioral feedback from CCTV has enhanced discipline deterrence. This supports the idea that real-time data allows for prompt corrective actions. The findings are in harmony with Welsh & Farrington (2009) argument that the deterrent effect of CCTV is strongest when there is a clear and immediate consequence for negative behavior, reinforcing accountability. Further, an overwhelming 72.9% agreed or strongly agreed that CCTV has encouraged attendance in class meetings, thereby promoting discipline. This suggests that CCTV may indirectly improve not just monitoring, but also student engagement in communal and educational discussions, contributing to a more disciplined school culture. The study sought to establish class secretaries' views on the impact of Closed Circuit Television Cameras on management of learners' discipline. The findings are presented in frequencies and percentages as shown in Table 6.

**Table 6: Class Secretaries' Views on Closed Circuit Television Camera**

Statement	SD		D		N		A		SA		Total %
	F	%	F	%	F	%	F	%	F	%	
CCTV has been effective in helping the administration in managing student discipline	0	0	5	13.5	4	10.8	17	45.9	11	29.7	100
CCTV has reduced stealing among students.	1	2.7	2	5.4	5	13.5	20	54.1	9	24.3	100
CCTV has reduced bullying in the school.	4	10.8	4	10.8	3	8.1	17	45.9	9	24.3	100
CCTV have effectively eliminated sneaking	1	2.7	4	10.8	5	13.5	18	48.6	9	24.3	100
CCTV has enhanced close monitoring of students behavior hence improved discipline in students	1	2.7	4	10.8	7	18.9	19	51.4	6	16.2	100
CCTV has helped in protecting school infrastructure from being damaged by the learners	2	5.4	7	18.9	6	16.2	13	35.1	9	24.3	100
The CCTV makes you more conscious of your behavior while in the school	3	8.1	4	10.8	6	16.2	14	37.8	10	27.0	100
The use of CCTV has reduced misconduct or violations (e.g., cheating, fights, vandalism) in the school	1	2.7	9	24.3	4	10.8	15	40.5	8	21.6	100
Monitoring of teachers attendance through CCTV has promoted class discipline management.	1	2.7	6	16.2	5	13.5	15	40.5	10	27.0	100
Immediate feedback of behavior pattern provided by CCTV enhanced discipline deterrent measures.	2	5.4	7	18.9	5	13.5	16	43.2	7	18.9	100

CCTV has encouraged attendance of class meetings thus promoting management of class discipline.	1	2.7	2	5.4	4	10.8	19	51.4	11	29.7	100
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SA=Strongly agree; A=Agree; N=Neutral; D=Disagree; SD=Strongly disagree; F=Frequency and %=Percentage

The data in table 6 shows views of respondents on whether CCTV cameras were effective in helping the administration manage student discipline where 45.9% of respondents agreed, and 29.7% strongly agreed, accounting for a total of 75.6%. Only 13.5% disagreed, and none strongly disagreed. This indicates a high level of student recognition of CCTV as a valuable disciplinary tool. This supports findings by Kassah (2018), who noted that CCTV provides real-time monitoring and helps school authorities respond swiftly to violations, thereby strengthening school governance. On whether CCTV cameras have reduced stealing, a combined 78.4% of respondents agreed (54.1% agreed, 24.3% strongly agreed), indicating a strong deterrent effect. Similarly, 70.2% agreed or strongly agreed that bullying had reduced due to CCTV surveillance, while only 21.6% disagreed or strongly disagreed. This is consistent with Ahmed and Nasreen (2020), who emphasized that CCTV, acts as a psychological deterrent that discourages theft and peer-to-peer aggression in school environments.

Responses show that 72.9% of students agreed or strongly agreed that CCTV cameras have reduced sneaking in the school. Only 13.5% disagreed. This suggests that surveillance discourages students from engaging in unauthorized movements within school premises. This supports Mureithi (2019), who found that student behavior is influenced by the perceived risk of being caught on camera, leading to better adherence to school rules. Students also agreed that CCTV cameras enhance close monitoring of behavior: 67.6% either agreed or strongly agreed that this has led to improved discipline. Regarding cctv and consciousness, only 13.5% disagreed. Moreover, 64.8% indicated that CCTV makes them more conscious of their behavior. These findings align with Foucault's (1977) theory of the "panoptic on effect," where individuals internalize surveillance and self-regulate their actions even in the absence of direct oversight. While still positive, views on CCTV preventing damage to infrastructure were more mixed: only 59.4% agreed or strongly agreed, while 24.3% were neutral, and 24.3% disagreed. This could imply that while CCTV offers some protection, other complementary strategies may be required for full effectiveness. Further, majority of respondents (62.1%) indicated that CCTV had reduced incidents such as cheating, fights, and vandalism. However, 24.3% disagreed. This shows general support, though not without some reservations, possibly due to blind spots or limitations in camera coverage.

According to Owusu-Bempah & Amoah (2021), the effectiveness of CCTV in reducing school misconduct is often linked to both coverage and active monitoring,

reinforcing the importance of operational efficiency. Monitoring teacher attendance through CCTV also received favorable responses, with 67.5% of students agreeing or strongly agreeing that this promoted class discipline. Only 18.9% disagreed. The integration of surveillance appears to have an indirect yet important impact on teacher accountability, which in turn influences student behavior positively. This agrees with Kariuki and Mugo (2021), who argued that transparent teacher monitoring fosters a culture of mutual responsibility between staff and students. About 62.1% of students felt that CCTV cameras, by providing immediate feedback on behavior, supported deterrent measures. This reinforces the value of timely responses in managing discipline issues.

## 5. Conclusion and Recommendations

### 5.1 Conclusion

The study findings concluded that CCTV surveillance greatly enhanced school security, Prevention of misconduct and creating a safe and orderly environment for both learners and staff. A significant number of respondents agreed that immediate visual feedback from CCTV footage deterred inappropriate behavior, promoting discipline through real-time monitoring.

Further, the findings indicated CCTV cameras improved student behavior during classes and in common areas. Reduces classroom misconduct property damage and allows immediate feedback that informs appropriate and timely disciplinary actions.

### 5.2 Recommendations

Based on the findings and conclusions of the study, the following recommendations are proposed:

1. The government, through the Ministry of education science and technology, parents and guardians should provide funding for the installation and maintenance of CCTV systems in schools, especially in under-resourced areas.
2. Ministry of education, science and technology should undertake training programs for Teachers and school administrators on how to utilize education technology effectively in student behavior management.
3. Education policy makers and administrators should develop clear policies that govern the ethical and effective use of surveillance systems to protect students' rights and improve

accountability, trust and compliance among staff and students.

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