
**Adoption of CCTV in School Administration and Security of Students: An Empirical
Study of Secondary School Administration in Imo State**

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ABSTRACT

The study sought to access the adoption of CCTV in school administration and the security of students: an empirical study of secondary school administration in Imo State. An Ex-post Facto research design was adopted for the study. The study was conducted in Imo State. The population of the study comprised school principals, teachers, and students in secondary schools in Imo State. A stratified random sampling technique was used to select 40 principals, 40 vice principal academics, 80 teachers, and 160 students that constituted the sample size of 320 used for the study. The main instrument used in this study was a questionnaire titled "CCTV, School Administration and Student Security Questionnaire (CCTVSASSQ)". Face and content validation of the instrument was carried out by an expert in test, measurement, and evaluation from Imo State University to ensure the validity of the instrument. Cronbach Alpha technique was used to determine the level of reliability of the instrument. The reliability coefficient obtained was 0.81, and this was high enough to justify the use of the instrument. The researcher subjected the data generated for this study to appropriate statistical techniques such as percentage analysis and simple regression. The test for significance was done at 0.05 alpha levels. The study reveals 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. Unfortunately, despite the usefulness of the CCTV, the level of availability of the facilities in secondary schools in Imo State is very low. The results also proved that the extents of utilization of CCTV in secondary schools in Imo State are very low due to its low level of availability. Finally, the results proved that there is significant influence of CCTV on school administration and the security of students in secondary schools in Imo State. One of the recommendations was that the government should develop policies governing the use of CCTV in schools through a consultative process involving key stakeholders in education, but not limited to: teachers, parents, students, and the community. Also, consideration should be given to the development of these policies concerning access to recorded evidence and regulations regarding the purpose for which CCTV is used.

KEYWORDS: CCTV, School Administration, Students Security and Imo State

INTRODUCTION

Closed Circuit Television (CCTV) has become a common technology that can be found in a wide range of applications, such as public, private, social, or work environments (Brooks & Corkill, 2012). According to Norris and Armstrong (1999), with its wide range of applications, people in their daily lives can be captured by over three hundred cameras in thirty different systems. CCTV surveillance is applied within a multitude of environments where its features are perceived to have a proven application. Brooks & Corkill (2012) present 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 (Fay, 2007) and deterrence. The quality of every society is largely predicated on the quality of its educational system (Usman, 2016). School administration is regarded as the process of integrating the appropriate human and material resources that are made available and made effective for achieving the purposes of a programme of an educational institution. Adebayo (2001) posits that there has to be administration in any organization as long as an organization consists of people brought together in a hierarchical set-up making use of tools, equipment, and human and material resources, all in the quest to attain the goals for which the organization was established. The administration of a school institution has the responsibility of bringing together various resources and allocating them effectively to accomplish the general goals of the institution (National Teachers Institute (NTI), 2004).

Statement of the Problem

In recent years, many educational institutions have adopted the mindset of how schools develop, deploy, evaluate, and integrate policies related to the ethical use of CCTV in their school environment. Seeing that installing CCTV surveillance in the school environment helps in reducing crime rates and providing safety, students do see it as an influential tool that interrupts their privacy and use it as a pretext to study ineffectively. Hence, each educational organization must develop their own policies for the ethical monitoring and use of CCTV technology and make them pleasant for the entire school board. This is on the ground that CCTV does not only promote security in schools, it also helps in encouraging principals to implement effective secondary school administration. Therefore, this study was carried out to assess the adoption of CCTV in school administration and the security of students.

Objective of the Study

Specifically, the study sought to:

1. Find out the extent of availability of CCTV in secondary schools in Imo State
2. Determine the extent of utilization of CCTV in secondary schools in Imo State
3. Find out the influence of CCTV on school administration and security of students in secondary schools in Imo State

Research Question

1. What is the extent of availability of CCTV in secondary schools in Imo State
2. What is the extent of utilization of CCTV in secondary schools in Imo State

3. What is the influence of CCTV on school administration and security of students in secondary schools in Imo State.

Research Hypotheses

H0₁: There is no significant influence of CCTV on school administration and security of students in secondary schools in Imo State.

CONCEPTUAL REVIEW

Concept of CCTV

Today, CCTV has come to mean more broadly the observation or monitoring of anyone or anything, usually by a range of electronic means (Sarre & Prenzler, 2011), and may include satellite tracking, and dataveillance along with biometrics and DNA profiling. Within a security context, CCTV focuses on either a general problem such as public surveillance or a specific purpose, such as detecting and identifying (Standards Australia, 2008). Nevertheless, CCTV has become a staple in the criminal justice system in the pursuit of a safer society (Zedner 2009). CCTV systems in security can have a multitude of different roles and functions with limited consensus. CCTV surveillance can be found in both public and private environments. It has been used as a tool to identify potential accidents, deter crimes, and, in the event of criminal activities, provide support with evidence (Norris & Armstrong, 1999). On public transport, CCTV is used as a safety measure to prevent accidents (Keval & Sasse, 2006). Also, in an attempt to reduce crimes like theft or vandalism in public areas, CCTV has often been implemented for these purposes (Harwood, 2008). In the private workplace, CCTV may be implemented to support specific security functions such as access control, situational awareness, or general surveillance. For example, Kreugle (2006) suggests using CCTV in a lobby environment to determine that order prevails, support the building's access control by monitoring personnel entering and exiting, and provide the ability to control and monitor materials in and out of the building. In addition to being used as a security measure, CCTV may also support site management by providing situational awareness (Harwood, 2008; Kruegle, 2006).

Concept of School Administration

Administration is the process of systematically arranging and co-ordinating the human and material resources available to any organization for the main purpose of achieving the stipulated goals of that organization (Amadi, 2008). When applied to the school system, the process is referred to as "educational administration" or "school administration." School administration is the process of bringing men and materials together for effective and functional teaching and learning in the school. The focus of school administration is the enhancement of teaching and learning. Therefore, school administration is a process through which school administrators arrange and coordinate the resources available to education for the purpose of achieving the goals of the educational system (Amadi, 2008). School administration involves the management of all school operations, from creating a safe learning environment to managing the school budget. School administrators are the professionals who, as a whole, carry out these different administrative tasks that keep a school running smoothly. Okendu (2012), in his own view, defines school administration as a concept involving all the processes through which resources are mobilized in educational institutions to accomplish the goals of education. It is the process of mobilizing school resources towards the achievement of desirable educational goals. School administration is an

activity that requires expertise and training in educational principles and practices to ensure proper management of schools' general activities for achieving results in education.

Concept of Student Security

Safety and security also encompass social and emotional well-being. Students deserve to feel comfortable and secure at school so they can focus on learning and contribute to the learning environment (Dellenbach, 2016). Student security, according to Marginson, Nyland, Sawir, and Forbes-Mewett (2010), is the social and economic security of cross-border students, which includes personal safety, financial issues, work experiences, housing, health and welfare services, language problems, and students' personal and social networks, including family, community, and affinity groups, and experiences with government and university authorities. A foundational aspect of learning is providing a safe and secure learning environment for students. Students and their support groups need to believe that school is a safe and secure place as well. If students perceive they are in a place of violence or bullying, they spend more time worrying than learning. The levels of crime and substance abuse that a school experiences are strongly correlated with student security, school-wide test scores, graduation rates, and attendance rates (American Institutes for Research (AIR, 2018). Student reading achievement suffers in schools with higher levels of collective hostility—as measured by student reports of feeling unsafe, the presence of gangs, and fighting between different groups of students.

CCTV and School Administration

According to Taylor (2013), CCTV represents the most common surveillance technology currently utilised in schools. Introduced for crime control purposes, it has undergone immense function creep and is now focused on a multitude of behaviours and activities such as truancy, smoking, bullying, teacher performance, and minor classroom naughtiness. The initial justification for CCTV surveillance in schools was directed towards the need to protect students, staff and property from external threats such as vandalism and intruders. Norris and Armstrong (1999) discuss the original intentions of the implementation of CCTV surveillance in schools as being for purposes of protection and security. Surveillance equipment was focused on school perimeter areas, with the aim of preventing unwanted intruders. Research conducted by Hope (2009a) has revealed a range of additional explanations for the change from external to internal observation practices. The use of CCTV surveillance and the aims of implementation include: to deter inappropriate social behaviour (bullying, loitering); to reduce theft and property damage attributed to students; to increase the areas of observation without increasing demands on staff; and to produce evidence of inappropriate behaviour for the purpose of disciplinary action (Yorke, 2010). Hope (2009a) suggests that "such examples illustrate that whilst school CCTV use might have been initially concerned with protecting against 'dangerous outsiders,' it has subsequently developed to facilitate the social control of students." CCTV surveillance in schools offers opportunities for remote observation and the production of recorded evidence (Hope, 2009a). Hankin, Hertz, and Simon (2011) reviewed that employing security monitoring facilities helps to minimize institutional misconduct and also reveals adequate efficiency of the school system.

METHODS

An Ex-post Facto research design was adopted for the study. The study was conducted in Imo State. The population of the study comprised school principals, teachers, and students in secondary schools in Imo State. A stratified random sampling technique was used to select 40

principals, 40 vice principal academics, 80 teachers, and 160 students that constituted the sample size of 320 used for the study. The main instrument used in this study was a questionnaire titled "CCTV, School Administration and Student Security Questionnaire (CCTVSASSQ)". Face and content validation of the instrument was carried out by an expert in test, measurement, and evaluation from Imo State University to ensure the validity of the instrument. Cronbach Alpha Technique was used to determine the level of reliability of the instrument. The reliability coefficient obtained was 0.81, and this was high enough to justify the use of the instrument. The researcher subjected the data generated for this study to appropriate statistical techniques such as percentage analysis and simple regression. The test for significance was done at 0.05 alpha levels.

RESULTS

Research Questions One

The research question sought to find out the extent of availability of CCTV in secondary school in Imo State. To answer the research percentage analysis was performed on the data, (see table 1).

Table 1: Percentage analysis of the extent of availability of CCTV in secondary school in Imo State

EXTENTS	FREQUENCY	PERCENTAGE
VERY HIGH EXTENT	13	4.06*
HIGH EXTENT	17	5.31
LOW EXTENT	137	42.81
VERY LOW EXTENT	153	47.81**
TOTAL	320	100%

** The highest percentage frequency

* The least percentage frequency

SOURCE: Field survey

The above table 1 presents the percentage analysis of the extent of availability of CCTV in secondary school in Imo State. From the result of the data analysis, it was observed that the highest percentage (47.81%) of the respondents affirmed that the availability of CCTV in secondary school in Imo State is very low, while the least percentage (4.06%) of the respondents stated that the level of availability of CCTV in secondary school in Imo State is very high, meaning that there is very low level of availability of CCTV in secondary school in Imo State.

Research Questions Two

The research question sought to find out the extent of utilization of CCTV in secondary school in Imo State. To answer the research question percentage analysis was performed on the data, (see table 2).

Table 2: Percentage analysis of the extent of utilization of CCTV in secondary school in Imo State

EXTENTS	FREQUENCY	PERCENTAGE
VERY HIGH EXTENT	5	1.56*
HIGH EXTENT	12	3.75
LOW EXTENT	142	44.38
VERY LOW EXTENT	161	50.31**
TOTAL	320	100%

** The highest percentage frequency

* The least percentage frequency

SOURCE: Field survey

The above table 2 presents the percentage analysis of the extent of utilization of CCTV in secondary school in Imo State. From the result of the data analysis, it was observed that the highest percentage (50.31%) of the respondents affirmed that the utilization of CCTV in secondary school is very low, while the least percentage (1.56%) of the respondents stated that the extent of utilization of CCTV in secondary school in Imo State is very high, meaning that the extent of utilization of CCTV in secondary schools in Imo State is very low.

Research Questions 3

The research question sought to find out the influence of CCTV on school administration and security of students in secondary schools in Imo State. To answer the research question, descriptive analysis was performed on the data, (see table 3).

Table 3: Descriptive statistics of the influence of CCTV on school administration and security of students in secondary schools in Imo State

Variable	N	Arithmetic Mean	Expected Mean	R	Remarks
School Administration	320	12.51	12.5	0.93*	*Strong to perfect Relationship
Students Security		13.77	12.5	0.79*	
CCTV		8.86	12.5		

Source: Field Survey

Table 3 presents the results of the descriptive analysis of the influence of CCTV on school administration and security of students in secondary schools in Imo State. The two variables were observed to have strong to perfect relationship at 93% and 79% respectively. With respect to CCTV against School Administration the arithmetic mean for school administration (12.51) was observed to be greater than the expected mean score of 12.5. While the arithmetic mean as regards CCTV (8.86) was observed to be lower than the expected mean score of 12.5. In similar manner, with respect to the influence of CCTV on Students Security, the arithmetic mean for students' security (13.77) was observed to be greater than the expected mean score of 12.5. The result therefore means that there is CCTVs are not adequately provided in schools in Imo State and as such there is remarkable perceived influence of CCTV on school administration and security of students in secondary schools in Imo State.

Hypothesis One

The null hypothesis states that there is no significant influence of CCTV on school administration and security of students in secondary schools in Imo State. In order to test the hypothesis simple regression analysis was performed on the data, (see tables 4a and b).

TABLE 4a: Simple Regression Analysis of the influence of CCTV on school administration in Imo State

Model	R	R-Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.93a	0.87	0.87	1.36	0.87

***Significant at 0.05 level; df= 318; N= 320; critical R-value = 0.113**

TABLE 4b: Simple Regression Analysis of the influence of CCTV on students' security in Imo State

Model	R	R-Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.79a	0.63	0.63	2.29	0.63

***Significant at 0.05 level; df= 318; N= 320; critical R-value = 0.113**

With respect to the above table 4a discussing the influence of CCTV on school administration in Imo State, the calculated R-value (0.93) was greater than the critical R-value of 0.113 at 0.5 alpha levels with 318 degrees of freedom. The R-Square value of 0.87 predicts 87% of the influence of CCTV on school administration. This rate of percentage is highly positive and therefore means that CCTV is perceived to have significant influence on school administration in Imo State even though it is inadequately provided in secondary schools in Imo State.

In the similar manner, the above table 4b discussing the influence of CCTV on student's security in Imo State, the calculated R-value (0.79) was greater than the critical R-value of 0.113 at 0.5 alpha levels with 318 degrees of freedom. The R-Square value of 0.63 predicts 63% of the influence of CCTV on secondary school. This rate of percentage is moderately positive and therefore means that CCTV is perceived to significantly influence student security in Imo State as the facility is not provided enough for use. The results of the two tables proved that there is perceived significant influence of CCTV on school administration and security of students in secondary schools in Imo State. The result therefore is in agreement with the research findings of Norris and Armstrong (1999) asserted that the original intentions of the implementation of CCTV surveillance in schools as being for purposes of protection and security. Surveillance equipment was focused on school perimeter areas, with the aim of preventing unwelcome intruders. The use of CCTV surveillance and the aims of implementation include: to deter inappropriate social behaviour (bullying, loitering,); to reduce theft and property damage attributed to students; to increase the areas of observation without increasing demands on staff; and to produce evidence of inappropriate behaviour for the purpose of disciplinary action (Yorke, 2010). The significance of the result caused the null hypotheses to be rejected while the alternative was accepted.

CONCLUSION

Closed-circuit Television (CCTV) surveillance systems collect visual images that are transferred to a central recording device for the purposes of review and storage. CCTV

systems serve as situational methods of subjecting locations to remote surveillance. With its wide range of applications, CCTV has become popular, and it serves as a tool for security, meeting the objectives of theft reduction, asset protection, security investigations, and providing evidence. Installation of CCTV surveillance in schools offers opportunities for remote observation and for the production of recorded evidence. Safety and security also encompass the social and emotional well-being of students. Students deserve to feel comfortable and secure at school so they can focus on learning and contribute to the learning environment. School administration involves the management of all school operations, from creating a safe learning environment to managing the school budget. Therefore, the study revealed that there is a perceived significant influence of CCTV on school administration and the security of students in Imo State.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were considered necessary:

1. The government should develop policies governing the use of CCTV in schools through a consultative process involving key stakeholders in education, but not limited to: teachers, parents, students, and the community. Also, consideration should be given to the development of these policies concerning access to recorded evidence and regulations regarding the purpose for which CCTV is used.
2. The school administration should provide justification for the use and extent of a video surveillance program on the basis of addressing specific and significant concerns about safety and/or the theft or destruction of property.
3. CCTV should only be placed in less intrusive areas. It should be placed in a reasonable area, such as increased monitoring by teachers, which has been shown to be ineffective or unworkable. Consult the people inside the campus before implementing a CCTV program. The school should be able to demonstrate and explain the possible location of CCTV to make it more effective.

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