DOI: https://dx.doi.org/10.4314/gjpas.v31i2.22

GLOBAL JOURNAL OF PURE AND APPLIED SCIENCES SPECIAL ISSUE VOL. 31, 2025: 363-372
IN HONOUR OF PROFESSOR BARTH NWOYE EKWUEME ON HIS RETIREMENT
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IMPACT OF SECONDARY SCHOOL FACILITIES ON SECURITY MEASURES AND STUDENTS' LEARNING OUTCOME IN MATHEMATICS IN OGOJA EDUCATION ZONE, CROSS RIVER STATE, NIGERIA.

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(Received 7 November 2024; Revision Accepted 5 December 2024)

ABSTRACT

This study was carried out examine impact of secondary school facilities on security measures and students' learning outcome in mathematics in Ogoja Education Zone, Cross River State, Nigeria. The research design adopted for this study was an ex-post facto research. This design was considered most appropriate because the intended phenomena to be studied have already occurred. The population of this study included all the teachers and students of all the public secondary schools in Ogoja Education Zone, Cross River State. However, 5 public secondary schools were selected using simple random sampling technique from the study area. Out of these 5 schools, two (2) were single-gendered (1 boy and 1 girl school); 2 were urban schools while the other 1 was rurally based. Cluster and stratified random sampling techniques were adopted to select a sample of 30 students and 6 teachers from each school, implying that from each school; total of 150 students and 30 teachers resulting in a total of 180 participants constituted the study sample. The instrument used for data was a questionnaire titled: "Secondary School Facilities on Security Measures Questionnaire (SSFOSMQ)". The instrument was designed by the researchers, vetted by two experts in test and measurement unit of Department of Educational Foundations, University of Calabar. They were expected to assess the instrument in order to be sure that it measures all the variables of the research objectives. A test-retest reliability test was conducted on 20 respondents who did not form part of the main study but only used for the reliability test. The instrument was subjected to Cronbach Alpha reliability test. Analysis of variance (ANOVA) statistical tool was used to analyze the collected data, and to test the hypotheses at 0.05 level of significance. The results from analysis of data revealed that there was significant influence of availability of perimeter fencing, and Closed Circuit Television (CCTV) surveillance cameras in secondary school on students' learning experience in mathematics in the study area. There was also significant impact of security gadgets on students' learning outcome in mathematics in the study area. Based on the findings, it was recommended among others that the governments through the federal and state Ministries of Education should organize workshops and seminars that will expose school administrators on the latest technological tools for ensuring security in their schools; School administrators should take specific care related to "securing, perimeter fencing and limiting access to the school using CCTV surveillance.

KEYWORDS: School Facilities, Security Measures, Students' Learning experience, Mathematics

INTRODUCTION

School facilities constitute major determining factor toward ensuring quality education. It is one of the yardsticks for measuring the level of educational growth and development.

School facilities implies substantial cost of the school system for their establishment, if not properly managed and maintained, it will affect the academic achievement of students, motivation to learning and their attitude. Wunti, Hafsat and Igbaji (2017) established that school facility is the process that

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ensures buildings and other technical systems that support the operations of an organization are properly provided and maintained so as to guaranty quality delivery of teaching activities.

Safe learning environments can be threatened by internal threats, such as bullying, corporal punishment, and gang recruitment, external threats, such as attacks on schools, and environmental threats, such as natural disasters. All these threats have the potential to significantly decrease students' academic performance. While a growing body of research points to a connection between school environments and student outcomes, much remains unknown about the effect of perceived school safety on learning. Most evidence originates from middle and high-income countries and focuses on educational outputs, such as attendance and retention, rather than educational achievement. More quantitative analysis of the relationship between school safety and student performance in developing countries is needed.

School security is the establishment and maintenance of protective measures that ensure a state of inviolability from hostile act or influences (Trump, 2010). This is to say that security measures are to be reinforced to keep the school, and the environment free from harm and danger. The security of schools has become a growing concern due to recent changes in our society including terrorist attacks, gun crime, vandalism, arson, child exploitation and other issues prevalent in our society that put the safety of children, teachers, staff and parents at risk. In some schools, colleges or other educational institutions intruders can wander in and out of the premises as they please, as the access to buildings is not considered seriously enough within risk assessments. Students and teachers have the right to feel safe and secure with the peace of mind that should a situation arise they have the right security measures and procedures in place to keep themselves and those around them safe. Parents too should feel reassured with the knowledge that when their child attends school, they will be safe in the care of the teachers and the security of the building.

There is a wide range of physical security measures that can be put in practice to supervise security activities in schools. They can be divided into categories, consisting of the outside perimeter measure, inner middle perimeter measure and internal measures (Lamboard & Kole, 2008). The outside perimeter measures are those measures that can be found outside the school building normally the perimeter of the premises such as signs, fences and other barriers, lighting, alarms and patrols. The inner middle perimeter measures are the security measures used within the boundaries of the facility and can include fence and other barriers, alarms, light, CCTV external cameras, warning signs, doors, lock, and burglar proofing on windows, security staff and access control system.

Similarly, there are the internal physical security measures which are the ones that can be found within building such as alarms, CCTV cameras, turnstiles, windows and door bars, locks, safes, vaults protective lighting and other barriers (Ike, 2015).

Perimeter fencing is an important security and aesthetic feature of any school; it blocks intruders and other unwanted visitors from entering the site, helps keep staff and students safe on site and is one of the first things prospective students and parents see when visiting. When specifying fencing for schools, it is worth considering not only how secure a school's fencing is, but also the impression it makes. Today's schools contain valuable and portable property that is attractive to thieves (Jacksons fencing, 2020). Fencing and gates are the first line of defense and have a vital role to play. Nevertheless, schools have to remain an attractive learning environment, and schools are encouraged to open their facilities to the wider community at other times. Adequate security, therefore, has to be achieved without schools looking like prisons. Every school has its own needs and challenges, so the solution to the problem is different in each case. School fences, if installed well and maintained, can be beneficial to a school for a number of reasons; Not only for boosting surveillance and improving security, but, perhaps (unexpectedly) for the morale and well-being of the students.

Closed-circuit television (CCTV) is the technology that uses video cameras to record and transmit a signal to a specific place, on a limited set of monitors. CCTV is a system of surveillance cameras that capture the images of individuals or information related to individuals in public places for crime prevention and/or crime prosecution (Vivien, 2009). Philip (2015) views closed-circuit television as a television broadcasting that receives only by a selected set and is being connected to the source by cable or by over the air signals. According to Taylor (2013), CCTV represents the most common surveillance technology currently utilized 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.

Brooks and 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.

Also, in an attempt to reduce crimes like theft or vandalism in public areas, CCTV has often been implemented for these purposes (Harwood, 2008). 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. 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.

Numerous studies have been carried out of influence of perimeter fencing on teachers' teaching effectiveness. Using an Ex-Post Facto research design, Ezeji, Ohalete and Elezuo (2022) assess the perimeter fencing and school security as an empirical survey of the experience of the secondary school administrators and teachers. The study area was Imo state. The population of the study comprised school administrators and teachers in Imo state. A stratified sampling technique was used to select 20 principals, 40 vice principal and 240 teachers from the study area and these gave a sample size of 300 respondents which constituted the sample size for the study. The Main Instrument used in this study was a questionnaire titled "Perimeter Fencing and School Security Questionnaire (PFSSQ)". Face and content validation of the instrument was carried out to ensure that the instrument had the accuracy for study under consideration. Cronbach Alpha technique was used to determine the level of reliability of the instrument. The reliability coefficient obtained was 0.88 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 descriptive statistics and simple regression. The test for significance was done at 0.05 alpha levels. The study concluded that schools indicated different levels of security via perimeter fencing with very low extent of availability of perimeter fencing. The result also proved that the level of the extent of school security is low. Finally, it was observed that there is significant influence of perimeter fencing on school security in secondary school in Imo State.

Arop and Owan (2018) carried out a study to examine institutional variables and the supervision of security in secondary schools in Cross River State. Three null hypotheses were formulated accordingly to guide the study. 360 students and 120 teachers resulting in a total of 480 respondents, constituted the sample for the study. The instrument used for data collection was a questionnaire while Independent t-test was used to analyze data and test the hypotheses at .05 level of significance using Microsoft Excel version 2013. The results of the findings revealed that school population, school type, perimeter fencing, and school location, all have an influence in the supervision of security in public secondary schools of Cross River State.

What is more, several researches have been conducted on influence of CCTV surveillance cameras on learning experiences in schools. Amaechi, Orih, and Ohalete (2022) carried out a study to assess 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. 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)". 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 used simple percentages and simple regression to analyze the data. 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. 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.

Utilizing descriptive-correlational research design, Aballe, Bandala, Mercado, Rejes, Teopisto and Jose (2022) examine security measures as an effectiveness of the installation of CCTV cameras in relation to crime prevention as perceived by the community in selected barangays of Ozamiz City. The study used mean and standard deviation to analyze the gathered data. Results revealed that the installation of CCTV cameras are very effective in crime prevention as it monitors and records the scenes 24/7 that can help in solving any reported crimes such as theft or robbery incident. The researchers opine that, the installation of CCTV cameras is very useful in crimes against person and crimes against properties as well as in preventing traffic violations.

Moyo (2019) conducted a study to evaluate crime prevention effects/impact of open-street closed circuit television (CCTV) surveillance systems as installed in the selected areas (research sites) of the cities of Johannesburg and Tshwane in the Gauteng Province of South Africa.

The results show that, despite a lack of empirical evidence as to the value of CCTV surveillance systems in preventing or reducing crime, there is strong public support for these systems and that the foundation for much of this support lies in the perceptions/feelings of members of the public of greater safety generated in areas with CCTV coverage. The method of sampling used was a purposive non-probability sampling approach. Participants were selected for interviews based on their knowledge and experience of CCTV systems. The results show that, despite this lack of empirical evidence, CCTV appears to be a viable option for crime prevention and control when integrated with evidence-based strategies rather than as a stand-alone tactic in order to achieve crime control benefits. Furthermore, concerning security gadgets impact on students' learning experience, Rumagit, Rorimlpandey and Katuuk (2024) carried out a study to determine the impact of using gadgets in learning for Grade 3 students at SDN Inpres 6/84 Walehunian Sagerat. The research method uses a qualitative research method which is research with an inductive mindset, namely a theory based on data and does not use statistics such as tables, graphs, diagrams and so on and is able to interact directly with the objects being researched. The place where the research was carried out was SDN Inpres 6/84 Walehunian Sagerat. The data collection techniques used in the research was Observation, Interviews and Documentation. From the results of research conducted by researchers, it was found that the average age of children who have used these gadgets is from 2 years, 5 years, 7 years and so on, and it has been found that currently several students are addicted to using gadgets. Thus, it can be concluded that learning outcomes do not decrease due to the use of gadgets by reducing the duration of gadget use in a day.

Evaluating the impact of gadgets on the student's learning experience at Paly National High School in Taytay, Palawan, Madarcos, Baldonado De Vera and Manlavi (2024) carried out a survey among 145 students from grade 7 to grade 10 who were chosen to participate in the study through stratified random sampling. The data was analyzed using SPSS software, and inferential statistics, correlation, and independent t-tests were used to identify relationships between academic performance and gadget use. Descriptive statistics were used to interpret the quantitative data on students' perceptions of gadget use and its impact on academic performance. The study revealed no significant difference in the mean scores among respondents with different gadgets, including desktops, laptops, mobile phones, and iPads. Similarly, findings also implied that specific purposes for which respondents used gadgets did not influence their learning experience. However, most of the respondents overwhelmingly disagree that gadget use has detrimental effects, indicating that the beneficial influence of gadgets on learning outcome outweighs potential drawbacks.

Further still, Wanyama, Muweesi, Tomusange, Disan, Tendo and Isabirye (2022) carried out a study to examine the effect of school security and safety on learners' learning experience in selected primary schools in Majanji Sub County, Busia District. With intent to find out the factors influencing learners' academic performance as well as identifying the strategies in place to cater for school security and also determine the effect of school security strategies on learners' academic performance. Findings showed cases of early pregnancies or early marriages, failure to consider children's rights and presence of learners with emotional problems. Conclusively, an unsafe school is more likely to result in students who have emotional problems, particularly direct victims of violence or bullying. Consider setting up a hotline to allow victims and witnesses to report occurrences in confidence. Some public schools are increasingly enforcing uniforms for all pupils, just like private institutions.

Mwoma, Nyakwara and Murungi (2018) present findings of a study conducted in preschools in informal settlements in Nairobi County, Kenya, focusing on safety and security for children in preschools. A mixed methods approach involving concurrent qualitative and quantitative data collection procedures was utilized for the study, conducted in 54 preschools involving 54 head teachers/managers, 78 pre-school teachers and four officers in education in Nairobi City County. Findings revealed that government has endeavoured to come up with guidelines and minimum standards through various policies, but preschools in informal settlements are experiencing a myriad of challenges impacting negatively on children's learning. Among these are poor infrastructures, lack of play space and play equipment, congested classrooms and school compounds not fenced.

Sholekah, Suad, Madjdi and Pratama (2022) conducted a study to determine how much influence gadgets have on the learning outcomes of grade 4 elementary school students. This research is quantitative research with an ex-post facto research design. In this study, the sampling technique used random cluster sampling with a population of 859 students and a sample of 141 students. The research instruments were questionnaires and tests. Instrument test using validity test and reliability test. The data analysis of the normality test, linearity test, and hypothesis test with the regression test, f-test, t-test and the coefficient of determination. The study's results showed a significant effect of the use of gadgets on student learning outcomes by 23.5%, with a correlation value of 0.491. This indicates that the relationship influence of the role of parents, students' learning motivation and the use of gadgets on student learning outcomes is powerful and significant.

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. From the above background, this study sought to examine the impact of secondary school facilities on security measures and students' learning outcome in mathematics in Ogoja Education Zone, Cross River State, Nigeria.

Statement of the Problem

Over the years, there have been problems of insecurity not only in our society but also in the school environment. This security has created several challenges to the general society including government, the school management, parents and many more. It is interesting to note here that every challenge has a solution to it. There are numerous strategies that can minimize this problem of insecurity and one of them is construction of availability of perimeter fencing and installation of CCTV surveillance.

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.

If something drastic is not done, the existing security threats such as invasion, terrorism, bombing, armed insurgency robbery and lack of proper physical security facilities like fences, CCTV surveillance, and good security personnel could spiral out of control, leaving large number of students fearful, injured and deceased. There is a problem because most schools do not run as expected. It is against this backdrop that this study sought to examine impact of secondary school facilities on security measures and students' learning outcome in mathematics in Ogoja Education Zone, Cross River State, Nigeria.

Purpose of the Study

The specific purposes of the study are:

1. To examine the extent of availability of perimeter fencing in secondary school and students' learning outcome in mathematics.
2. To examine the extent of availability of Closed Circuit Television (CCTV) surveillance cameras in secondary school and students' learning outcome in mathematics.
3. Impact of security gadgets on students' learning outcome in mathematics.

Statement of Hypothesis

The following null hypotheses were formulated to guide the study:

I. There is no significant influence of availability of perimeter fencing in secondary school on students'

II. learning outcome in mathematics in Ogoja Education Zone.

III. There is no significant influence of availability of Closed Circuit Television (CCTV) surveillance cameras in secondary school on students' learning outcome in mathematics in Ogoja Education Zone.

IV. There is no significant impact of security gadgets on students' learning outcome in mathematics in Ogoja Education Zone

METHODOLOGY

The research design adopted for this study was an ex-post facto research. This design was considered most appropriate because the intended phenomena to be studied have already occurred. The population of this study included all the teachers and students of all the public secondary schools in Ogoja Education Zone, Cross River State. However, 5 public secondary schools were selected using simple random sampling technique from the study area. Out of these 5 schools, two (2) were single-gendered (1 boy and 1 girl school); 2 were urban schools while the other 1 was rurally based.

Cluster and stratified random sampling techniques were adopted to select a sample of 30 students and 6 teachers from each school, implying that from each school; total of 150 students and 30 teachers resulting in a total of 180 participants constituted the study sample. The instrument used for data was a questionnaire titled: "Secondary School Facilities on Security Measures Questionnaire (SSFOSMQ)". The instrument was designed by the researcher, vetted by two lecturers in test and measurement unit of Department of Educational Foundations, University of Calabar. They were expected to assess the instrument in order to be sure that it measures all the variables of the research objectives.

The instrument was organized in two sections – A and B. Section A, elicited respondents' demographic data, while section B contained 20 items organized on a 4 point Likert scale to obtain data on the instrument.

A letter of introduction was written by the researchers. This letter was to introduce the researcher to the mathematics teachers for understanding and compliance. The questionnaire were issued and retrieved one week later from each respondent. The exercise took about two weeks. A test-retest reliability test was conducted on 20 respondents who did not form part of the main study but only used for the reliability test.

The instrument was subjected to Cronbach Alpha reliability test and it produced a reliability coefficient of 0.80 which was considered high enough to be used in collecting data for the study.

Analysis of variance (ANOVA) statistical tool was used to analyze the collected data, and to test the hypotheses at 0.05 level of significance.

DATA ANALYSIS AND RESULTS

Hypothesis one

The first null hypothesis stated that there is no significant influence of availability of perimeter fencing in secondary school on students' learning outcome in mathematics in Ogoja Education Zone. This hypothesis was tested using One Way Analysis of Variance (ANOVA) research design. The result in Table 1 showed that 60 respondents in the study area out of 180 highly responded to perimeter fencing, 80 respondents moderately responded to perimeter fencing and 40 respondents responded low to issues on perimeter fencing. The Means and standard deviation of influence of availability of perimeter fencing in secondary school on students' learning outcome in mathematics were computed based on the influence of perimeter fencing and statistically compared using one way analysis of variance. The analysis shows that the calculated F-ratio of 9.107 was greater than the critical F-value of 2.67 at 0.05 level of significance at 3 and 177 degrees of freedom. This implied that the result was significant. This revealed that there was significant influence of availability of perimeter fencing in secondary school on students' learning outcome in mathematics in the study area.

TABLE 1: Mean, standard deviation and summary of One way analysis of variance of the influence of availability of perimeter fencing in secondary school on students' learning outcome in mathematics (N = 180)

Availability of Perimeter Fencing	N	$\bar{X}$	SD	Std. Error
Low	40	22.04	3.50	.662
Average	80	24.68	3.61	.207
High	60	25.91	5.77	.700
Total	180	24.71	4.31	.209

Source of variation	Sum of squares	Degree of freedom	Means squares	F-ratio	Sig.
Between group	298.706	3	149.35	9.107*	0.000
Within group	6510.484	177	16.40		
Total	6809.400	180			

*Significant at 0.05: df (3,177), critical F = 2.67

Hypothesis two

The null hypothesis states that there is no significant influence of availability of Closed Circuit Television (CCTV) surveillance cameras in secondary school on students' learning outcome in mathematics in Ogoja Education Zone. This hypothesis was tested using One Way Analysis of Variance (ANOVA).

The data in table 2 revealed that 48 respondents in the study area responded high to influence of CCTV, 74 respondents responded on average to influence of CCTV, and 68 respondents responded on low to influence of CCTV. The means and standard deviation of influence of availability of Closed Circuit Television (CCTV) surveillance cameras in secondary school on students' learning outcome in mathematics in response to the instrument were computed based on the influence of CCTV and statistically compared using one-way analysis of variance. The analysis showed that the calculated F-value of 2.220 was found to be greater than the p-value (p = 0.11) at 0.05 level of significance at 3 and 177 degrees of freedom. This means that the result was significant, indicating that there was significant influence of availability of Closed Circuit Television (CCTV) surveillance cameras in secondary school on students' learning outcome in mathematics in the study area. The data also showed that average availability of Closed Circuit Television (CCTV) surveillance cameras in secondary school on students' learning outcome in mathematics with the highest mean of ($\bar{X}$ = 24.83). This was followed by high influence of CCTV surveillance cameras with the mean of ($\bar{X}$= 24.18) and lastly by low influence of CCTV surveillance cameras ($\bar{X}$ = 21.67).

TABLE 2: Mean, standard deviation and summary of One way analysis of variance of the influence of availability of Closed Circuit Television (CCTV) surveillance cameras in secondary school on students' learning outcome in mathematics (N = 180)

Availability of CCTV Surveillance Cameras	N	$\bar{X}$	SD	Std. Error
Low	48	21.67	2.08	1.202
Average	74	24.83	3.45	.188
High	68	24.18	2.84	.363
Total	180	24.71	3.37	.168

Source of variation	Sum of squares	Degrees of freedom	Means square	F-ratio	Sig.
Between group	50.010	3	25.005	2.220	0.110
Within group	4472.350	177	11.265		
Total	4522.360	180			

*Significant at 0.05; df (3, 177), critical F = 2.67

Hypothesis three

The null hypothesis states that there is no significant impact of security gadgets on students' learning outcome in mathematics in Ogoja Education Zone. This hypothesis was tested using One Way Analysis of Variance (ANOVA). The data on this hypothesis (table 3) revealed that 80 respondents in the study area had high response to impact of security gadgets. 65 studied with average response, while 35 respondents' level of response was low. The means and standard deviation of the impact of security gadgets on students' learning outcome in mathematics were computed and statistically compared using one-way analysis of variance. The analysis showed that the calculated F-value of 15.650 was found to be greater than the critical F-value of 2.67 at 0.05 level of significance at 3 and 177 degrees of freedom. This showed that the result is significant, indicating that there was significant impact of security gadgets on students' learning outcome in mathematics in the study area.

TABLE 3: Mean, standard deviation and summary of One way analysis of variance of the impact of security gadgets on students' learning outcome in mathematics (N = 180)

Impact of Security Gadgets	N	$\bar{X}$	SD	Std. Error
Low	35	20.69	3.58	.701
Average	65	24.81	3.51	.200
High	80	25.77	5.84	.719
Total	180	24.71	4.13	.207

Source of variation	Sum of squares	Degrees of freedom	Means square	F-ratio	Sig.
Between group	497.609	3	248.805	15.650*	0.000
Within group	6311.581	177	15.898		
Total	6809.400	180			

*Significant at 0.05, df (3,177), critical F = 2.67

DISCUSSION OF FINDINGS

The first hypothesis stated that there is no significant influence of availability of perimeter fencing in secondary school on students' learning outcome in mathematics in Ogoja Education Zone. The result of this study found in Table 1 revealed that the calculated f- value was found to be greater than the critical f- ratio of 2.67. This means that there was significant influence of availability of perimeter fencing in secondary school on students' learning outcome in mathematics in the study area.

The findings of this result agree with the earlier position of Ezeji, Ohalete and Elezuo (2019) who conducted a study to assess the perimeter fencing and school security as an empirical survey of the experience of the secondary school administrators and teachers in Imo State. The study concluded that schools indicated different levels of security via perimeter fencing with very low extent of availability of perimeter fencing.

The result also proved that the level of the extent of school security is low. Finally, it was observed that there is significant influence of perimeter fencing on school security in secondary school in Imo State.

The finding of hypothesis one also corroborates that of Arop and Owan (2018) who carried out a study to examine institutional variables and the supervision of security in secondary schools in Cross River State. The results of the findings revealed that school population, school type, perimeter fencing and school location, all have an influence in the supervision of security in public secondary schools of Cross River State.

The second hypothesis stated that there is no significant influence of availability of Closed Circuit Television (CCTV) surveillance cameras in secondary school on students' learning outcome in mathematics in Ogoja Education Zone. The result of this study found in Table 2 revealed that the calculated f – value was higher than the p-value (p=.11) at 0.05 level of significance. This means that there was significant influence of availability of Closed Circuit Television (CCTV) surveillance cameras in secondary school on students' learning outcome in mathematics in the study area. Findings of this work is consistent with the views of a study conducted by Aballe, Bandala, Mercado, Rejes, Teopisto and Jose (2022) who examine security measures as an effectiveness of the installation of CCTV cameras in relation to crime prevention as perceived by the community in selected barangays of Ozamiz City. Results revealed that the installation of CCTV cameras are very effective in crime prevention as it monitors and records the scenes 24/7 that can help in solving any reported crimes such as theft or robbery incident. The researchers opine that, the installation of CCTV cameras is very useful in crimes against person and crimes against properties as well as in preventing traffic violations.

The finding of hypothesis two also conform to that of Amaechi, Orih and Ohalete (2020) who conducted a study to access the adoption of CCTV in school administration and the security of students: an empirical study of secondary school administration in Imo State. 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. The third null hypothesis which stated that there was no significant impact of security gadgets on students' learning outcome in mathematics in Ogoja Education Zone was rejected in favour of the alternate hypothesis. This implies that there was significant impact of security gadgets on students' learning outcome in mathematics in the study area.

Hypothesis three result is in conformity with the findings of Rumagit, Rorimlpandey and Katuuk (2024) who carried out a study to determine the impact of using gadgets in learning for Grade 3 students at SDN Inpres 6/84 Walehunian Sagerat, found that the average age of children who have used these gadgets is from 2 years, 5 years, 7 years and so on, and it has been found that currently several students are addicted to using gadgets. Thus, it can be concluded that learning outcomes do not decrease due to the use of gadgets by reducing the duration of gadget use in a day.

The finding of hypothesis three disagree with the earlier view of Madarcos, Baldonado De Vera and Manlavi (2024) who conducted a study aimed to evaluate the impact of gadgets on the student's learning outcome at Paly National High School in Taytay, Palawan. The study revealed no significant difference in the mean scores among respondents with different gadgets, including desktops, laptops, mobile phones, and iPads. Similarly, findings also implied that specific purposes for which respondents used gadgets did not influence their academic performance. However, most of the respondents overwhelmingly disagree that gadget use has detrimental effects, indicating that the beneficial influence of gadgets on learning outcome outweighs potential drawbacks.

CONCLUSION

The study concluded that schools indicated different levels of safety, perimeter fencing, use of video surveillance cameras, and impact of security gadgets in the school environment. In terms of school-based activities, schools that were observed displayed inadequate maintenance and surveillance systems. The physical environments of schools need more attention in terms of ensuring that the basic features of safety, perimeter fencing, use of video surveillance cameras and the impact of the school security gadgets are put in place. In this way, schools would be in a position to engage in general safety measures, and security in terms of school environments as entities comprising both physical and social aspects in school security gadgets measures.

RECOMMENDATION

The study recommended that:

I. The governments through the federal and state Ministries of Education should organize workshops and seminars that will expose school administrators on the latest technological tools for ensuring security in their schools.

II. Schools should take care to priorities solutions appropriate to their site's specific risks and challenges

III. School administrators should take specific care related to "securing, perimeter fencing and limiting access to the school using CCTV surveillance.

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