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Users' Perception of Compliance of Security Features with Defensible Space Principles in Selected Secondary Schools in Ota, Ogun State, Nigeria

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Abstract. The idea of preventing crime by strategically using the environment as tool has been explored for decades. Defensible space provides architectural strategies for effectively preventing crime by reorganizing the physical environment and giving inhabitants control over their surroundings. This study seeks to examine the security features allaying with defensible space in four selected secondary schools in Ota, Ogun state, Nigeria, with a view to making contributions on how to improve security in such environments for users. The study identifies areas for further improvements based on users' perception, towards enhancing security in the academic environments in Nigeria. Four selected secondary schools in Ota, publicly and privately owned was used for the study. The study used quantitative and qualitative research methods to obtain data from 149 students, in addition with 33 teachers from four secondary schools. The collected data were descriptively analysed with the use of SPSS (Statistical Package for Social Science) software. Results showed that there are evidences of elements of defensible space strategies, which are Territoriality and Natural surveillance that were adequately perceived and being implemented by the respondents. Deterioration of school buildings and poor road construction were seen. These were evidences of the elements of Milieu and Image, an indication of defensible space perception. Students dissatisfaction with overall school security was also revealed. The study further shows that appropriate maintenance strategies can help enhance the physical and security conditions of school environment in Nigeria.

Keywords: Secondary School, Security, Defensible space, Environment, Ogun State.

1. Introduction

Violent crime has become a major threat to many countries globally. Nigeria is not an exception and security challenges has become increasingly common as explained by Okoli (2019. The intensity of insecurity in Nigeria is shown by several authors such Omede and Omede (2015) and Obi (2015). Irrespective of the efforts made to alleviate the situation, it persisted and has worsened. There is security challenges of abductions and kidnappings, clashes and massacres by the Fulani herders, religious insurgency by the ISWAP (Islamic State in West Africa Province) and the Boko Haram terrorist organization, armed robbery, ritual killings and banditry are all on the rise. These are being witnessed even in the regions where there was once an acceptable degree of calm as described by Adebiyi, Adewale and Damilola (2019). Nigeria has been classified by the Global Peace Index as one of the eight least peaceful countries in Africa. This is based on its three domains of assessment of peacefulness, which are security and safety, continuing conflict and militarization (Olaiya, 2021). With the records of

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insecurities experienced in schools and other educational institution, it appears to be the main targets of attacks and insecurity, which has made the system of schooling, effective teaching and learning become a difficult task to come through (Anikoh & Ayuba, 2019). Pupils, students and Educators find it difficult in successfully fulfill educational goals, the rise in the number of cases of attacks in educational institutions across the country has led to the number of recorded cases of insecurity across board. However, there is need for a safe and stable, learning environment, which is crucial to the overall learning experience and a decreases of fearfulness to the success of students. Several studies such as Ojukwu (2017) concluded that the performance of each student, academically, physically and socially is being affected by the way safety and security are instated and the condition of the educational (school) facilities provided.

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Security as defined by Kpee and Comfort (2014) is the absence of insecurity as a result of law enforcement agency operations. In the study of Babalola, Sulaiman and Hauwa (2014) security is also defined as the state of an individual to be free from danger or threat. This is also the ability to tolerate or defend oneself from harm. Security, exists solely to provide a safe environment by taking steps to protect an environment from intentional risk and damage (Anikoh & Ayuba, 2019). Defensible space as a concept/strategy was introduced by Oscar Newman in 1972, the concept is based on the assumption that any particular design decisions in the environment could be used to reduce or prevent the probability of any successful criminal occurrences and victimisation in an environment or space. This strategy provides guidelines in architectural designs and also socially, which can be used in the design of urban buildings complexes and an in the environments, to facilitate the territorial claims of the inhabitants to their environments, including their ability of having natural surveillance of their environment explained by Fennelly (2016). Defensible space as a concept, adopts elements of natural surveillance, territoriality, image and milieu, which operate as individually elements or together creating a safer and secured environment.

This study, seeks to investigate security features that allays with the concept of defensible space in some selected secondary schools within Ota town in Ogun State, Nigeria. This research objectives are to:

1. Identify the presence of Defensible Space elements, which were applied in designing and construction of buildings of selected secondary schools in Ota town, Ogun state, Nigeria.
2. Investigate respondent's (students and staffs) level of satisfaction experienced with the level of security in the selected secondary schools' building and environment in Ota town, Ogun state, Nigeria.

2. Review of Literature

2.1 Theory of Defensible space as Security Strategy

Newman in 1972 defined defensible space theory as a residential spaces or environment, where the physical features, the layouts of the building and the site layout plan are all functioning to allow the residents or users themselves become the key agents responsible for security in their residences described in the study by Sirdevi Rao (2016). Also, Newman (1896) asserted that a well-designed environment may inspire inhabitants to take ownership of and responsibility for the area around them, as well as to take required actions to maintain and defend it. There are four concepts in his theory and design principle which can help in achieving this. Natural surveillance, Territoriality, Image and Milieu as defined by Newman were the four elements that can be used in the built environment or space, which have the ability to create a perceived zones of territorial influences against security of such space. In this case, the strategy allows the residents to acknowledge having a particular space being "owned" by them or that the space is privately owned. Having a space clearly demarcated, having boundaries and it sponsors a form of proprietorship (Morton, 2020). Territoriality in the context of a school environment can be included in design by using the landscape, signage and demarcations to drive to show a form of ownership of a property, as described by Nandita and LEED (2018). Features such as sidewalk, barricades, decorative light fixtures, pavements and any form of external design features that can divide or set aside space can help to form territorial features and feeling of place ownership, surrounding building's site, environment and the perimeter.

Also, the study by Newsman is of the opinion that designs of buildings or environment facilitating natural surveillance gives residents the opportunity to observe public areas and spaces in their environment and can give an intruder the feeling of being observed, since the space is very open to all, this can create a greater feelings of security for the residents. Also, the use of straight unobstructed sight lines such as roads and streets can reduce a potential hiding spaces that can be easily surveyed against any form of intruding as described in the study by Hall (2016). Natural surveillance as element of defensible space can also foster territoriality element by having an increase in surveillance by the legitimate users' having a level of informal social power over the space as described by Love (2015). Also, the natural surveillance element of defensible space concept can be addressed by placing and designing windows, views and opening areas to have a clear vision line or easy sighting line, which can thereby increase visibility of the space and the environment (Nandita & LEED, 2018).

Newman's study of elements of milieu and image focuses on densely populated and high-rise building developments, suggesting that the aesthetics of the development significantly contribute to the building project's and its occupants' stigmatization. Newman had argued that the location of public housing projects within the larger community environment also has a significant influence on the project's safety and perceived security, which affects inhabitants and the community at large (Carr, 2020). Likewise, the element of Image in a school environment can be improved through regular maintenance. Maintaining the school environment encourages territoriality, as an untidy area can give the message to a stranger that no one is especially concerned with or in possession of that section of the school area (Schneider, 2010).

Building design is a complex process and procedure comprising many phases, stages and agents. This are interactions between the designers (Architect), consultants, clients, contractors, facility managers, administrators and the people affected by design solutions(development) form the basis of the process. The design and planning of a school or educational facility should be done, having the capability to guide the environment against man-made and natural dangers and obeying all forms of regulations that can keep a space/ place safe. Also, for crime prevention or antisocial behaviours, excellent architecture designs that yielded to the norms of defensible space concept and the principles of Crime Prevention Through Environmental Design (CPTED) should have the potential to provide security and to save money against having mechanised forms of security cameras and others forms of technological security gargets.

2.2 Insecurity in Schools Environment
Security of lives and property is increasingly becoming one of the major challenge to governing and decision makers of countries, communities, cities around the globe. The issue of security remains a complex phenomenon to governments and it's unarguably requires not just counter-measure solutions, but requires a concrete resilient and preventive decisions to solve and manage the situation in order to guild against all forms of loss to lives and properties as described by Ani and Onyebukwa (2016). With the incessant occurrences of insecurity in Nigeria and the world in general, educational institutions such as schools and colleges have become one of the targeted spots for terrorism and crime perpetration and the fundamental purpose and business of schools, which is learning and teaching have become difficult and stressful to achieve. There is increasingly rise in incidences of violence and insecurity in schools' environment, making the primary goal of schooling impossible. Therefore, it is paramount to safe-guard academic environment for educational activities. As a result, Okebukola, mentioned in Ekpoh,Edet and Ukpong (2020) assert that "no safe school, no future for the world". The following are three (3) arguments posted by the author to support this assertion; (i) Having the aspiration of harnessing/ increasing the power of education for reaching milestones in energy, food, health, enrollment, employment and security, which should be attained. (ii)The future of education rests on the safety of the educational environment (iii) Educational advancement and the quality of education proposed by all countries of the world will not be achieved. The study by Xaba (2014) in discussing safe school environment stated that, it is one which excludes all forms of threats/danger to the physical state, the emotional state, psychological and psychosocial well-being and stability of all school occupants. Thus,

the school should be a secured environment free from threats and danger. The study by Alimba (2018) categorized security challenges and threats in school into the categories of internal security threat and external security threat. According to the author, internal security threat is induced within the system, examples include bullying, physical assault. While external security treats are essentially treats which are present outside the school and the external (outside the school) security threats mentioned, can reduce both the students learning and staffs (employee) productivity capability.

Furthermore, challenges of insecurity experienced in Nigeria is seemly seen as complex. However, it requires the attention, which can to be addressed through proper designs of buildings and the environment. Architects and architectural practices have a form of important role to play in Nigeria in forms of design types, to prevent crime and terrorism in the environment, as revealed from the study by Ebong, Zubairu and Olagunju (2017). This architectural role comes from these professionals realization of the environment being influenced by the design nature and forms that is produced, to be able to reduce or totally prevent all forms of criminal or terrorist activities being experienced and to reduce/ remove the effects of such assaults on the environment.

2.3 The Study Area
This study was conducted in Ota town, Ogun state in Nigeria. The town 'Ota' has its location at 641' 00" N 341' 00" E. Population of the town is given to be around 163,783 inhabitants by the census (2006). The Ota town is the local government headquarters of the Ado-odo/Ota LGA (local government area). Having a mass area of approximately 878 kilometers square. Mostly Awori people, a dialect group of Yoruba descents are the indigenes of Ota. Developmental history of state owned schools in Ota, started around late 1970s, as at today, the town now has various schools both public and privately owned. This research was carried out in some secondary school buildings selected within Ota town. Shown in Figure 1 is the study areas, Ota Town, shown in the map of Ogun State.
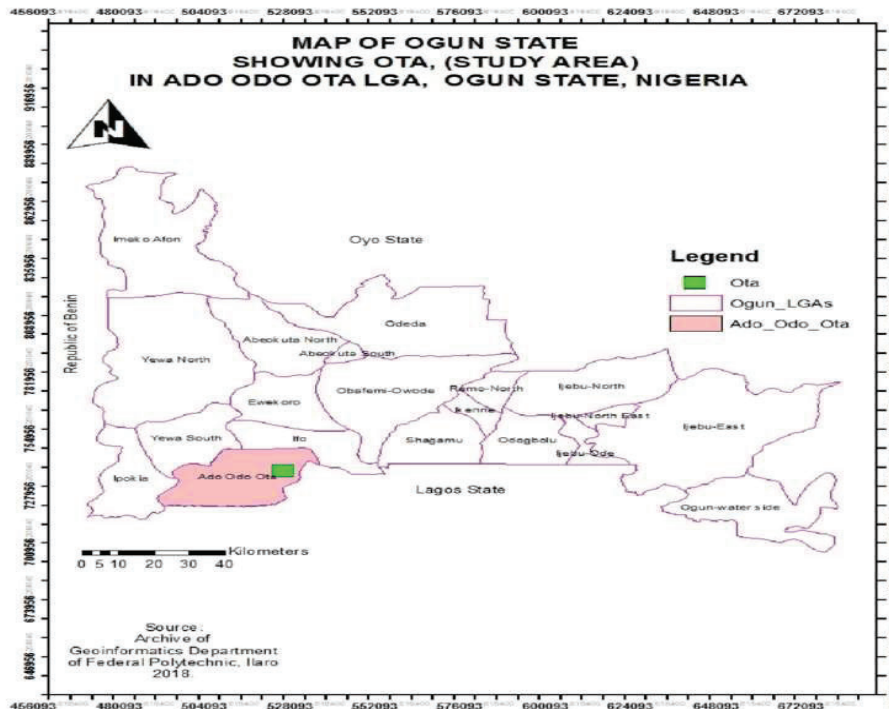

Figure 1. Study area, Ota town, shown in the Map of Ogun State.

Source: Ajala (2019)

3. Methodology

This study adopted quantitative research method to gather data, analyze data and present results. Data was collected from four secondary schools selected within Ota Town, Ogun state in Nigeria. This research employed purposive sampling technique in selecting its sample frame. To select the sample frame of secondary schools used for the research, the study population of secondary schools in the study area were first grouped into their respective strata of public and private, from which two schools were randomly picked from each group. The sample frame of the secondary school and students used for the study are shown in Table 1.

Table 1: Selected Secondary Schools and its population.

SN	Selected secondary schools	Students population
1	Iganmode grammar school, Ota	2520
2	Ansar-ud-deen , Ota	2170
3	Ambassadors school, Ota	378
4	Faith academy, Ota	960
	Total	**6028**

Source: The Authors field work (2021)

Study sample frame of the student is six thousand and twenty-eight (6028) as shown in Table 1. The sample size for the respondents, which were the students was calculated using this statistical formula, which had been use previous   authors, such as Sholanke, Opoko, Akpan and Adigun (2019). The formular is given as $n = N/[1+N(b)^2]$

Having: n, which = the required sample size

N, which = the Population size

B, which = the Maximum acceptable error margin of (10%)

Adopted for the research is a margin error of 8%, this is to allow for an accurate research result.

Therefore, $n = N/[1+N(b)^2] = 152$

In order to determine the sample size of student for each school, proportional sampling strategy was used as shown in Table 2.

Table 2: Proportional sampling strategy for the sample size used for the study

SN	Selected secondary schools	Population of students	Proportional used sampling strategy	Student sample
1	Iganmode grammar school, Ota	2520	2520/6028 x 100%= 42%	42% of 152= 64
2	Ansar-ud-deen school, Ota	2170	2170/6028 x 1000%= 36%	36% of 152=55
3	Ambassadors school,Ota	378	378/6028 x 100%= 6%	6% of 152= 9
4	Faith academy, Cannanland, Ota	960	960/6028 x 100%= 16%	16% of 152= 24
	Total	6028	100%	152

Source: Authors study work (2021)

Copies of questionnaires were used as research tool and administered to both the staffs and students of each selected secondary school. Questionnaires were administered to willing teachers available to participate in the study. Analyzing and processing of the data were done using SPSS (Statistical Package for the Social Science) software and findings are presented descriptively with tables.

3.1. Ethical Consideration

1. The place of confidentiality and Anonymity: The responses were kept confidential to guard against the privacy of respondents, findings are utilized exclusively for academic purposes.
2. Informed consent and Voluntary participant: All the respondents used for the research gave their consent voluntarily and were informed in a suitable manner, the purpose of the study and the methodology. Also, prior to event of the field study, the right authorization to carry out the survey was obtained from the different secondary school administrations to give permission for the student's participation in the research.
3. Plagiarism: All writing and thoughts that do not belong to the authors are well credited and referenced.

4. Results and Discussion

One hundred and fifty-two (152) questionnaires were distributed to the students across the four (4) selected schools. Out of the one hundred and fifty-two questionnaires distributed, a total of one hundred and forty-nine were retrieved. While forty questionnaires were distributed to the teachers across the selected secondary school. Thirty-three were retrieved.

4.1. The Students Perception of the Defensible Space concepts in the School Environment.

4.1.1. The Student Respondents Profile in the selected secondary Schools
Table 3 presents the data of student respondents profiles collected and were analysed descriptively. Finding showed that 45% of the students studied were females and 55% were male respondents. This indicated that many of the respondents were male students. Also, 51.7% of the respondents were between the ages of 12yearss-16 years, while 48% of the respondent were between the ages of 16 years-21 years. This indicated that majority of respondents in this research were between the age of 12 years – 16 years. For the educational level status of the respondents, it showed that 53% of results indicated that the student respondents are in the class of SSS 3 (Senior Secondary School 3), this groups of students made up the majority of the student respondents in the study. The second largest student respondent groups in the study were those in the class of SSS 1(Senior Secondary School 1), this makes up 29.5% of the respondent and SSS 2 (Senior Secondary School 2) making up about 17.4% of the total respondents.

Table 3: The Profile of respondents in studied selected schools.

Variables	Categories	Frequency	Percentage %
Gender	Male Student	82	55.0
	Female Student	67	45
Age group of respondents	12-16	77	51.7
	16-21	72	48.3
	22-27		
Class Status	SSS 1 class	44	29.5
	SSS 2 class	26	17.4
	SSS 3 class	79	53.0

Source: Authors study compilation (2021)

4.1.2. Students Response on Territoriality Element of Defensible space.
To responses on territoriality related questions asked: results are presented in Table 4 shown. To questions on the students respondent's on territoriality element perception of defensible space: the result showed that 47.7% of the respondent agreed/strongly in agreement to being able to recognize or identify an intruder or strangers within the premises of the school, while 57% agreed/strongly in agreement that the private and public spaces in the school areas and buildings were clearly demarcated. Also 61.8% of the student respondents agreed/strongly in agreement that the school spaces were well labelled adequately and well signed. Also, 57.1% of the respondents agreed/strongly agreed that the access to spaces surrounding buildings in the school are regulated. Furthermore, of the total number of sampled

respondents 27.5% of the respondents indicated by agreeing to feeling a form of ownership of the school spaces when using them. Respondents that agreed/strongly agreed to have security officers or personnel presence around within the school environment and spaces were 55% as shown in the Table 4.

Table 4. Students Responses on Territoriality.

S/N	Variables	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	Ability to recognise strangers within the school environment	13(8.7%)	42(28.2%)	23(15.4%)	56(37.6%)	15(10.1%)
2	Clearly demarcated in the building and environment of both the Private and Public spaces.	11(7.4%)	33(22.1%)	20(13.4%)	78(52.3%)	7(4.7%)
3	Adequately labelled/signed of school spaces.	8(5.4%)	33(22.1%)	15(10.1%)	81(54.4%)	11(7.4%)
4	Access to spaces around the buildings is well regulated/monitored	9(6.0%)	32(21.5%)	21(14.1%)	71(47.7%)	14(9.4%)
5	Feeling of ownership of the school spaces during use	23(15.4%)	51(34.2%)	33(22.1%)	35(23.5%)	6(4.0%)
6	The presence of security personnel is tangible within the school environment	10(6.7%)	33(22.1%)	24(16.1%)	69(46.3%)	13(8.7%)

4.1.3. Students' Response on Natural Surveillance

Table 5 presents the respondent's experiences of the natural surveillance perception within the secondary school environment.   Results showed that 49.8% of the respondents are in agreement/Strongly agreed to be able to see outside the external areas of the school compounds even when they are still inside the buildings in the school, an indication that they experienced a form of natural surveillance of the environment, made possible from inside the buildings. 49.7% of the respondents surveyed indicated to immediately inspect and check the surrounding areas and environments any time they notice a suspicious activities or is suspected.

Table 5: Student Responses to Natural Surveillance.

S/N	Variables	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	Being able to clearly see outside and the external surrounding from inside of the building.	21 (14.1%)	40 (26.8%)	13 (8.7%)	60 (40.3%)	14 (9.5%)
2	Being able to immediately inspect or check the surrounding areas after hearing any loud or suspicious noise/sound	16 (10. 7%)	39 (26.2%)	20 (13.4%)	64 (43.0%)	10 (6.7%)

Source: Authors field study compilation (2021)

4.1.4 Student Assessment on Image element

Presented in Table 6 is the results of responses on the image element of defensible space surveyed in the studied schools. Results revealed, 50.3% of the respondents are in agreement to/strongly agreed that the school buildings had a form of physical deteriorations appearances, an indication that the schools buildings and environments were not properly maintained. 41.6% of the respondents agreed/strongly agreed to being satisfied with the general environmental cleanliness within the school premises, it is seen that in as much as the buildings were not well maintained physically, there where efforts to keep a clean environment with the high responses of satisfaction with the cleanliness of the schools and this

is also seen with the responses of 47.6% respondents that agreed/strongly agreed being in satisfaction with the both the school buildings physical appearance and the school environment appearance.

Table 6. The Student's responses with the element of image from defensible space elements.

S/N	Variables	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	School building has physical deterioration	12(8.1%)	29(19.5%)	32(21.5%)	54(36.2%)	21(14.1%)
2	Satisfaction with the general cleanliness within the school environment	23(15.4%)	42(28.2%)	20(13.4%)	55(36.9%)	7(4.7%)
3	Satisfaction with the physical appearance of the school environment.	26(17.4%)	32(21.5%)	20(13.4%)	65(43.6%)	6(4.0%)

Authors field study compilation (2021)

4.1.5. Students responses on Milieu element.
Questions were asked regarding the element of milieu and the results revealed a half the number of respondents 53%, disagreed/strongly disagreed that the school buildings and environments are located in a crime prone areas of the town and 52.4% agreed/strongly in agreement that the studied school buildings layout and plan are easily understood, a suggestion that there is good layout of the schools, which is an advantage for crime prevention implementation. However, half of the respondents 55.7 % strongly disagreed/disagreed with the state of roads around the schools to be well constructed, as shown in Table 7.

Table 7: Student responses on the survey of milieu element.

S/N	Variables	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	Studied school buildings and premises are located in areas prone to crime.	30(20.1%)	49(32.9%)	25(16.8%)	35(23.5%)	10(6.7%)
2	Studied school buildings layouts and plan are easily understood.	8(5.4%)	27(18.1%)	36(24.2%)	66(44.3%)	12(8.1%)
3	Roads around the premises of the studied school are well constructed and in good shape.	47(31.5%)	36(24.2%)	17(11.4%)	37(24.8%)	12(8.1%)

Authors field study compilation (2021)

4.2. The Staffs Perception of level of Security in the Studied School areas.

4.2.1 Staffs Profile in the studied Secondary Schools studied.
Shown in Table 8 is the profile of staffs in the selected schools studied. 33.3% where female respondents and 63% of the respondents were male, an indication that majority of the respondents were male staffs. Also, 36.4% were between the ages 20 years -30 years, 51.5% were between the ages of 31 years – 40 years, and 9.1% were between that age of 41-50 and 3% where between the ages of 51 years – 60 years. The results of the age indicated that majority of staff respondents were aged between 31 years – 40 years, a suggestion that middle age individual where mostly the staffs of the schools. 63.6% of the respondents had education qualification at B.Sc level. A suggestion that most of the staffs of the school are well educated and qualified. Also, the results showed that many of the respondents 48.5% had been

in employment in the schools for a duration of 6 years -10 years, which can be an advantage to their familiarity with the school environment.

Table 8: Staffs Profile in the Secondary Schools surveyed.

Variables	Categories	Frequency	Percentage
Respondents gender	Male Staff	21	63.6
	Female Staff	11	33.3
Age bracket of respondents	20-30	12	36.4
	31-40	17	51.5
	41-50	3	9.1
	51-60	1	3.0
	Above 60	0	0
Level of Education	OND/NCE/A Levels	5	15.2
	B.Sc Level of education	21	63.6
	M.Sc Level	7	21.2
Duration of employment in the school	1-5 years	5	15.2
	6-10 years	16	48.5
	11-15 years	11	33.3

4.2.2. Staff responses on Territoriality
The result of territoriality is shown in Table 9 with 57.6% respondents agreeing/strongly agreeing to be able to recognise strangers within the school environment, this makes it very difficult for an intruder within the premises. 54.5% respondents agreed/strongly agreed that the are demarcation between spaces indicated as public and private in the buildings and a large number of respondents 72.7% agreed/strongly agreed that the spaces in the school were well labelled and have directional signs. The directional signs could enhance and enable free movement and navigation around the school environment. Also more than half of the respondents 69.7% agreed/strongly agreed that access and movements to spaces around the buildings are being regulated, Notwithstanding a number of respondents 33.3% indicated not being sure if they felt any form of ownership of spaces within the school and environment during use, a suggestion that the respondents still feel less responsible to the security of their environment and also some of the respondents 54.6% still agree/strongly in agreement with the presence of security officer and personnel within the school environment, a suggestion that the knowledge of territoriality norms enhancement to prevent crime and for security is not being recognized.

Table 9: Staff responses on Territoriality element.

S/N	Variables	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	I easily recognize strangers within the school	4(12.1%)	6(18.2%)	4(12.1%)	12(36.4%)	7(21.2%)
2	There is a clearly demarcation of Public and private spaces in the buildings	3(9.1%)	6(18.2%)	6(18.2%)	14(42.4%)	4(12.1%)
3	The school spaces are adequately labelled	3(9.1%)	4(12.1%)	1(3.0%)	16(48.5%)	8(24.2%)
4	There is regulation of access to spaces around the building.	3(9.1%)	5(15.2%)	2(6.1%)	19(57.6%)	4(12.1%)
5	Feeling of ownership of the school environment and spaces when using them.	4(12.1%)	7(21.2%)	11(33.3%)	8(24.2%)	3(9.1%)
6	There is the presence of human security officer and personnel within the school environment.	1(3.0%)	11(33.3%)	3(9.1%)	13(39.4%)	5(15.2%)

4.2.3 Staffs Responses on the element of Natural Surveillance

From the result in Table 10. It indicated that 48.5% of the respondents agreed that the external surrounding can easy be seen by them even when still inside the school buildings or class rooms and 51.5% of the respondents claimed that they immediately can inspect or check the surrounding environments and areas any time they overhear any suspicious loud, suspicious or disturbing noise.

Table 10: Staffs Responses on Natural Surveillance.

S/N	Variables	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	The external surroundings can easily be seen clearly even when inside the school building/class rooms.	5(15.5%)	7(21.2%)	5(15.2%)	12(36.4%)	4(12.1%)
2	Can immediately inspect/check the environment/surroundings areas whenever I hear any loud or suspicious disturbing noise.	5(15.2%)	8(24.2%)	3(9.1%)	13(39.4%)	4(12.1%)

4.2.4. Staffs Responses on Image elements

Questions in Table 11 were used to describe Image element strategy. From the result 42.5% of the respondents were in agreement that the school buildings had physical deteriorations and were not well maintained and 51.5% also not in agreement, being dissatisfied with school environment general cleanliness. However, 48.5% of the respondent indicated satisfaction with the school's present physical environment appearance and buildings physical appearances. A suggestion that even as the building are not in good share physically (deterioration), there schools still maintained a form of cleanliness of the environment, this could help in security within the school environment.

Table 11: Staffs responses on image

S/N	Variables	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	The school building are shown to have physical deterioration	7 (21.2)	7 (21.2)	5 (15.2)	9 (27.3)	5 (15.2)
2	Overall general satisfaction with general school cleanliness of buildings and environment.	3 (9.1)	14 (42.4)	4 (12.1)	8 (24.2)	4 (12.1)
3	The respondents Satisfaction with physical appearance of school's environment and buildings.	5 (15.2)	7 (21.2)	5 (15.2)	11 (33.3)	5 (15.2)

4.2.5. The Staffs responses on Milieu Element

The staff's perception on milieu is shown in Table 12. The result presented indicated that a large number, 63.7% of the respondents disagreed/strongly disagreed with school building being located in a crime prone area and 72.7% agreed/strongly agreed to easily understand the school building layouts (comprehendible). while 63.7% disagreed that the road around the school are in good shape and is well constructed. This also suggest that the low maintenances experienced with the buildings is extended to the roads, which can make the environments a soft crime targeted areas even with the large number (63.7%) that says that the location of the school is not in areas prone to crime..

Table 12: Staff responses on milieu

S/N	Variables	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	The studied school buildings are sited in a crime prone area of the town	12 (36.4%)	9 (27.3%)	3 (9.1%)	7 (21.2%)	2 (6.1%)
2	Layout of buildings in the school can be easily understood. (comprehendible)	1 (3.0%)	3 (9.1%)	5 (15.2%)	16 (48.5%)	8 (24.2%)
3	The roads around the school are in good shape and are well constructed and in good shape.	9 (27.3%)	12 (36.4%)	2 (6.1%)	8 (24.2%)	2 (6.1%)

Source: The Author's field work (2021).

4.3 Satisfaction with level of Security around the School surroundings.

4.3.1 *Staffs Satisfaction with the level of Security.*
The staff's respondents were asked question of their feeling of safety within the school surroundings, findings presented in Table 13 showed 57.6% respondents agreeing /strongly agreed and indicated feeling safe around the school areas and 63.6% indicated satisfaction with the level of general level of security generally around the school areas. This respondents responses showed a form of satisfaction irrespective of the general physical conditions of the buildings and the surrounding areas.

Table 13: Staffs satisfaction with level of security within the school areas.

S/N	Variables	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	Feeling safe within the school surrounding.	3 (9.1%)	5 (15.2%)	6 (18.2%)	15 (45.5%)	4 (12.1%)
2	Respondent's being satisfied generally with the level of security shown within the Studied school area.	3 (9.1%)	5 (15.2%)	4 (12.1%)	17 (51.5%)	4 (12.1%)

4.3.2. The Students Satisfaction with the level of general Security within the studied schools.
Respondents responses on feeling of safety within the school surroundings is shown in the Table 14, which showed that 47.7% of the students agreed/strongly agreed that they have a feeling of being safe within the school surroundings. For satisfaction with the level of general security in the school, 52.4% of the respondents were not satisfied. The results of the finding showed that, although many of the students surveyed felt safe within the school surroundings, they were still unsatisfied with the level of security in the school areas. This is not in agreement with the results with the staff's result where 63.6% were satisfied and agreed with the level of security.

Table 14: Students satisfaction with level of security within the studied school areas.

S/N	Variables	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	feeling safe within the school area	16 (10.7%)	31 (20.8%)	31 (20.8%)	66 (44.3%)	5 (3.4%)
2	Respondent's satisfaction generally	22 (14.8%)	56 (37.6%)	14 (9.4%)	47 (31.5%)	10 (6.7%)

with level of security within the studied schools areas.

6. Conclusion and Recommendation

This study which seeks to investigate security features that allays with the concept of defensible space in some selected secondary schools within Ota town in Ogun State, Nigeria. Findings from the survey revealed the level of the usage of defensible space strategies used in controlling the level of security in secondary schools in the study area. Findings from the survey indicated that the results from the respondent students and staffs showed that various element of defensible space theory had been perceived by the respondents. Results from the surveyed students and staffs showed and indicated two elements of defensible space strategies, which are natural surveillance element and territoriality element to being observed and applied within the study area. However, both the students and staffs indicated that were physical deterioration appearances of the school buildings and environments, roads around the school were poorly constructed and maintained. This is an indication that the schools were not well maintained. This shows that image elements and milieus elements were perceived to be inadequate by the two categories of respondents. It was also observed that the teachers (staffs) were unsatisfied with the general cleanliness of the school. Also, both the staffs and students felt safe within the school environment. However, the students indicated that they were unsatisfied generally with the level of security shown within the school buildings and surroundings.

Also, findings from the study is, while some of the secondary schools studied make use of some of the norms of defensible space principles, they do not completely adhere to or implemented them to improve the level of security within the schools. Based on these results, more attention is recommended to be given to general maintenance of school buildings, environment and facilities. This is because unkempt and deteriorated buildings, environment and facilities can be an indication of acceptability to criminal behaviors and can be encourage crime in such areas or spaces. Also, a well maintained areas, suggest to an intruder that there is the likelihood of being arrested for unlawful activities as suggested by the norms of defensible space, where crime is minimal is areas where the concepts is implemented. An environment that is badly maintained can directly encourage criminal behaviors and persons.

This study was conducted in the context of a secondary school and for further studies, a replication of the study is required in other states in Nigeria, which can offer a more comprehensive understanding of defensible space as a strategy for security curtailment in academic buildings, environments and spaces.

7. Acknowledgements

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