TEACHERS’ PERCEPTION OF THE APPLICATION OF PHYSICAL ENVIRONMENTAL PLAN BY PROPRIETORS OF PRIVATE SECONDARY SCHOOLS IN AWKA EDUCATION ZONE OF ANAMBRA STATE

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Abstract
The study determined teachers’ perception of the application of physical environmental plan by proprietors of private secondary schools in Awka Education Zone of Anambra State. One research question guided the study and two hypotheses were tested at 0.05 level of significance. The study was a descriptive survey. The population of the study comprised 734 teachers in private secondary schools in Awka Education Zone of Anambra State. Through simple random sampling, the researcher sampled 30% of teachers in the Zone. This amounted to 220 teachers as sample for the study. The instrument of data collection was a structured questionnaire which was developed by the researcher and validated by three experts in education. Mean, standard deviation and t-test was used to analyze data for the study. Finding of the study revealed that proprietors of private secondary schools in Awka Education Zone apply environmental planning to a high extent. Finding of the study further showed that the proprietors planned for accessibility to the schools, fencing, availability of play grounds, spacious classrooms and provision of convenience spaces such as toilets and cafeteria. However, it was also revealed that proprietors of private secondary schools do not properly plan for staff rooms, school library, computer laboratory, science laboratory, providing safe parking space for visitors and staff and providing for appropriate security lighting system in and around the school premises. Teachers did not significantly differ in their opinion on the extent proprietors of private secondary
schools apply physical environmental plan in Awka Education Zone. Based on these findings, the following recommendations were made among others that the Post Primary School Service Commission (PPSSC) should scale up their school inspection and supervisory practices to ascertain the provision of standard offices or staff room blocks for teachers so as to motivate them for higher productivity and better education service delivery. It was also recommended that proprietors of private schools should seek financial and technical support from local or international and governmental or non-governmental organizations for the provision of science laboratory materials and information and communication technology facilities in their schools.

**Keywords:** Teachers, Application, Physical, Environmental, Plan, Proprietors, Perception

**Introduction**

Secondary education is a very important level of education in Nigeria. This is because it is the stage of education where students' ability and competencies are developed for work and for higher education. The Federal Republic of Nigeria (2013) national policy on education stated that secondary education is that level of education that is aimed at preparing students for useful living and for higher education. This statement emphasizes the importance of secondary education as an important aspect of education that serves as a conduit between the primary level and the tertiary level of education. The importance of this level of education is enunciated in its objectives which are to provide trained manpower in the applied sciences, technology and commerce at sub professional grades and to provide entrepreneurial, technical and vocational job-specific skills for self-reliance, and for agricultural, industrial, commercial and economic development. Based on these objectives it is therefore pertinent that every secondary school is physically planned in such a way that students’ cognitive, emotional, physical and social abilities are developed.

The physical environment is very important to the efficiency and effectiveness of the school. Torupere (2016) stated that the physical environment of the school plays a very important role in the wellbeing of
the students and their learning abilities. In agreement, Ekpoh (2018) averred that the availability of proper physical conditions in school could facilitate the realization of the educational objectives of secondary education. This is because it enables the satisfaction of the physical and emotional needs of students and staff. Physical environment in the context of this study is defined as the physical structures present in the school. The physical environment of the school include the school site, office accommodation, instructional materials, lighting, temperature conditions, workshop equipment, library resources, classroom space, information and communication technology (ICT) facilities among others (Ekpoh, 2018). Torupere (2016) opined that the school physical environment include school site, the buildings, equipment, machinery, furniture, electrical and water supply infrastructure. Scholars like Ekpoh (2018) and Torupere (2016) agreed that the physical environment of the school have an important role to play in the all-round development of the students. The FRN (2013) stated that the physical environment of the school should adequately conducive to facilitate learning. FRN (2013) emphasized the need for a conducive physical environment where it recommended that the administrators or proprietors of secondary schools or any other formal school system should ensure the availability and provision of physical facilities such as instructional materials, library, laboratory, playing ground, toilets and staff rooms so as to enhance the teaching and learning process. It is therefore pertinent that proprietors of schools should plan for the physical environment of their schools if they are to meet the FRN (2013) stipulated objectives of secondary education in Nigeria. Planning is an essential tool for effective administration. It is defined as the effort to increase the value of decision-making by deliberately identifying and regularly changing possible policy tools to find the right way to meet the school objectives. (Manafa, 2015). Ndegwah (2014) defined planning as an administration tool used to identify an objective and then agree on the approaches, strategies, methods, procedures, time frame and resources needed to achieve the objective. It is clear that planning in education administration is integral to the achievement of goals and objectives. The need to ensure that the physical environment of secondary schools are
properly planned cannot be over emphasized. Given the impact of physical environment on students performs it beholds that adequate measures are put in place that the physical environment of a school is put into consideration before its establishment. School proprietors as owners of schools should put into consideration the location of the school from the host community, the availability of convenience areas like kitchen, canteens and toilets as well as ensuring that classrooms and staff rooms are well sited with adequate space. Kenneth and Benedict (2019) noted that spaces for convenience need to be adequately planned in order to ensure the effectiveness of the teaching and learning process.

In Awka Education Zone, it appears that some private secondary schools seem not to be properly sited and in some cases do not make proper physical environmental plans. Private schools are those schools that are not administered by local, state or national government, which retain the right to select their student body and are founded in whole or part by charging their students tuition rather than with public funds (Eze, 2010). This means that the school established by the missionaries, individuals and voluntary organizations belong to this group. Some private schools appear to have minimal physical space that enables the siting of cafeterias, playgrounds, toilets and spacious classroom blocks. Field observation by the researcher revealed that some private secondary schools are situated in rented apartment and leads to packed classrooms and no conducive office spaces for the teachers. These conditions could lower the morale of the teaching staff, thus resulting in poor teaching performance. The inability of the teacher to perform its teaching duty effectively will thus affect the quality of students' performance. However, certain factors relating to teachers years of experience and their gender could influence their views on the importance of physical environment in the discharge of their duties. It is based on these observations that the study is conducted to determine teachers' perception of the application of physical environmental planning by proprietors of private secondary schools in Awka Education Zone of Anambra State.

**Statement of the Problem**

The physical environment of a school is a very important element to consider in the establishment of a school. The physical environment have been identified as an important factor in the teaching and learning process as well as the development of the students. This is why it is very important
to engage in planning for school physical environment. However, it is sad to note that despite the important of physical environment to teaching and learning process, many schools especially the private schools are faced with absence or shortages in physical facilities in their school premises. Field observation by the researcher revealed that some schools lack necessary physical facilities like play fields, cafeteria, toilet and classrooms. There are cases were some secondary schools go out to lend field for activities inter-house sports which is normally done once in a session. This implies the students in the schools are not engaged in regular exercises that will keep them fit and healthy.

This situation is disheartening given the fact that most proprietors seem to engage in “school business” without consideration for the general development of the students in their schools. Sadly, the lack of playground, good library, functional computer laboratory, standard science laboratories and other facilities for physical exercise seem to increase students’ addiction to social media and other vices which some researchers have found to negatively affect students’ academic performance. The researchers are worried that if proprietors of secondary schools continue to pay little attention to the physical environment of their school, it will jeopardize the achievement of the goals of secondary education in Nigeria in general and Awka Education Zone in particular.

**Purpose of the Study**

The main purpose of the study is to determine teachers’ perception of the application of physical environmental planning by proprietors of private secondary schools in Awka education zone of Anambra State.

**Research Question**

What is the extent of proprietors’ application of physical environmental planning in private secondary schools in Awka education zone of Anambra State?

**Hypotheses**

The following hypotheses were tested at 0.05 level of significance.

1. There is no significant difference in the mean ratings of teachers’ on the extent of proprietors application of physical environmental
planning in private secondary schools in Awka Education zone based on years of teaching experience (0-10 years, Above 10 years).

2. Male and female teachers did not significantly differ in their mean ratings on the extent proprietors apply physical environmental planning in private secondary schools in Awka Education zone.

Method
Research Design
The descriptive research design was adopted for the study. The research design was used because it enabled the researcher elicit information from the respondents through the use of a questionnaire.

Area of the Study
The study was carried out in Awka Education zone. The zone is one of the six education zones in the state. There are 43 private secondary schools in the zone.

Population and Sample of the Study
The population of the study comprised 734 teachers in private secondary schools in Awka Education Zone of Anambra State. Through simple random sampling, the researcher sampled 30% of teachers in the Zone. This amounted to 220 teachers as sample for the study.

Instrument of Data Collection
Data was collected through the use of a structured questionnaire which was developed by the researcher. The instrument was titled “Questionnaire on Proprietors Application of Environmental Planning in Secondary Schools”. The questionnaire has two sections; A and B. Section A elicit information on the respondents gender and years of working experience. Section B contains 15 items on proprietors application physical environmental planning. The questionnaire was based on a four-point rating scale of Very High Extent (VHE), High Extent (HE), Low Extent (LE) and Very Low Extent (VLE).

Validation of the Instrument
The instrument was validated by three experts in the Department of Educational Management and Policy, Faculty of Education, Nnamdi
Azikiwe University. The instrument was validated to ensure clarity and suitability of items for answering the research questions.

**Reliability of the Instrument**

To determine the reliability of the instrument, the instrument on 10 teachers in privately owned public secondary schools in Enugu Metropolis of Enugu State who were not included in the area/population of the study. The data collected were analyzed using Cronbach Alpha and coefficient value of 0.87 was obtained for internal consistency of the instrument. These coefficient values indicated that the instrument was reliable because they are all above 0.70. This is in line with Nworgu (2015) who stated that research instruments with reliability coefficient of 0.70 and above are deemed reliable.

**Method of Data Collection**

The researcher administered the instrument with the help of three research assistants who are teachers. The instrument was administered on the spot and the respondent were given some minutes to study and indicate their responses. However, in some cases where a respondent wasn’t disposed to fill the questionnaire, appointment was made on when the researcher or her assistant will retrieve the questionnaire. This was to ensure a high return rate.

Out of 220 copies of questionnaire administered, 176 copies were returned in good condition and were used for data analysis.

**Method of Data Analysis**

The data were analyzed using mean and the t-test. The mean value was used to answer the research questions while the t-test was used to test the hypotheses at the 0.05 level of significance. For the research questions, the decision rule was based on the real limits of numbers:

<table>
<thead>
<tr>
<th>Values</th>
<th>Real Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High Extent</td>
<td>4, 3.50-4.49</td>
</tr>
<tr>
<td>High Extent</td>
<td>3, 2.50-3.49</td>
</tr>
<tr>
<td>Low Extent</td>
<td>2, 1.50-2.49</td>
</tr>
<tr>
<td>Very Low Extent</td>
<td>1, 1.00-1.49</td>
</tr>
</tbody>
</table>
For the hypotheses, where the calculated t-value was less than the critical value of t, it means that the variable did not significantly influence respondents’ mean ratings and the hypothesis was not rejected. Conversely, where the calculated t-value was equal to or greater than the critical t-value, it means that the variable had a significant influence on the respondents’ mean ratings and the hypothesis was rejected.

Research Question
What is the extent of proprietors’ application of physical environmental planning in private secondary schools in Awka education zone of Anambra State?

Table 1: Respondents Mean Ratings on Proprietors’ Application of Physical Environmental Planning in Secondary Schools (N=176)

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Items on Application of Physical Environmental Planning</th>
<th>Mean</th>
<th>SD</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Accessibility of the school by road</td>
<td>3.12</td>
<td>0.82</td>
<td>High Extent</td>
</tr>
<tr>
<td>2.</td>
<td>Presence of a school field for games and other extracurricular activities</td>
<td>2.87</td>
<td>0.75</td>
<td>High Extent</td>
</tr>
<tr>
<td>3.</td>
<td>Availability of conducive staff room/offices</td>
<td>2.34</td>
<td>0.78</td>
<td>Low Extent</td>
</tr>
<tr>
<td>4.</td>
<td>Availability of a standard school library</td>
<td>2.11</td>
<td>0.81</td>
<td>Low Extent</td>
</tr>
<tr>
<td>5.</td>
<td>Presence of a staff toilet</td>
<td>2.85</td>
<td>0.77</td>
<td>High Extent</td>
</tr>
<tr>
<td>6.</td>
<td>Presence of toilets for students</td>
<td>3.32</td>
<td>0.74</td>
<td>High Extent</td>
</tr>
<tr>
<td>7.</td>
<td>Availability of well-equipped computer laboratory</td>
<td>2.22</td>
<td>0.65</td>
<td>Low Extent</td>
</tr>
<tr>
<td>8.</td>
<td>Availability of an equipped science laboratory</td>
<td>2.05</td>
<td>0.63</td>
<td>Low Extent</td>
</tr>
<tr>
<td>9.</td>
<td>Provision of spacious classrooms</td>
<td>2.97</td>
<td>0.75</td>
<td>High Extent</td>
</tr>
<tr>
<td>10.</td>
<td>Availability of electric power supply</td>
<td>2.11</td>
<td>0.71</td>
<td>Low Extent</td>
</tr>
<tr>
<td>11.</td>
<td>Provision of water supply</td>
<td>2.84</td>
<td>0.76</td>
<td>High Extent</td>
</tr>
<tr>
<td>12.</td>
<td>Presence of school cafeteria</td>
<td>2.58</td>
<td>0.70</td>
<td>High Extent</td>
</tr>
<tr>
<td>13.</td>
<td>Building fences round the school premises</td>
<td>2.55</td>
<td>0.65</td>
<td>High Extent</td>
</tr>
<tr>
<td>14.</td>
<td>Providing a secure parking spot for visitors and staff</td>
<td>2.17</td>
<td>0.72</td>
<td>Low Extent</td>
</tr>
<tr>
<td>15.</td>
<td>Providing for appropriate security lighting system in and around the school premises</td>
<td>2.08</td>
<td>0.70</td>
<td>Low Extent</td>
</tr>
</tbody>
</table>

Cluster Mean 2.54 High Extent

Data in Table reveals that teachers opined that proprietors apply items 1, 2, 5, 6, 9, 11, 12 and 13 with mean ratings of 3.12, 2.87, 2.85, 3.32, 2.97, 2.84, 2.58 and
2.55 respectively to a high extent. However, they apply items 3, 4, 7, 8, 10, 14 and 15 with mean ratings of 2.34, 2.11, 2.22, 2.05, 2.11, 2.23, 2.17 and 2.08 respectively to a low extent. The standard deviation scores indicate that the respondents' opinion are close. The cluster mean of 2.54 indicate that proprietors of private secondary schools in Anambra State apply physical environmental planning in Awka education zone of Anambra State.

Hypothesis 1
There is no significant difference in the mean ratings of teachers' on the extent of proprietors application of physical environmental planning in private secondary schools in Awka Education zone based on years of teaching experience (0-10 years, Above 10 years).

Table 2: Summary of t-test Analysis of Respondents Mean Ratings of Experienced and Less experienced Teachers on the Extent Proprietors Apply Physical Environmental Planning in Private Secondary Schools

<table>
<thead>
<tr>
<th>Status of Respondents</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>Cal. T</th>
<th>Crit. t</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experienced Teachers</td>
<td>92</td>
<td>2.51</td>
<td>0.73</td>
<td>174</td>
<td>0.87</td>
<td>1.96</td>
<td>NS</td>
</tr>
<tr>
<td>Less Experienced</td>
<td>84</td>
<td>2.56</td>
<td>0.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data in Table 2 show that the calculated t-value of 0.87 at 174 degrees of freedom and 0.05 level of significance was less than the critical value of 1.96. Hence, the null hypothesis is accepted. Thus, there is no significant difference in the mean ratings of experienced and less experienced teachers’ on the extent of proprietors application of physical environmental planning in private secondary schools in Awka Education zone.

Hypothesis 2
Male and female teachers did not significantly differ in their mean ratings on the extent proprietors apply physical environmental planning in private secondary schools in Awka Education zone.

Table 3: Summary of t-test Analysis of Respondents Mean Ratings on the Extent Proprietors Apply Physical Environmental Planning in Private Secondary Schools based on Gender

<table>
<thead>
<tr>
<th>Status of Respondents</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>Cal. t</th>
<th>Crit. t</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Teachers</td>
<td>111</td>
<td>2.54</td>
<td>0.76</td>
<td>174</td>
<td>0.22</td>
<td>1.96</td>
<td>NS</td>
</tr>
</tbody>
</table>
Data in Table 3 show that the calculated t-value of 0.22 at 174 degrees of freedom and 0.05 level of significance was less than the critical value of 1.96. Hence, the null hypothesis is accepted. Thus, male and female teachers did not significantly differ in their mean ratings on the extent proprietors apply physical environmental planning in private secondary schools in Awka Education zone.

**Discussion**
Finding on the first research question indicated that teachers opined that proprietors of private secondary schools in Awka Education Zone apply environmental planning to a high extent. This findings may have resulted because most of the private secondary schools in the zone are well supervised by the Post Primary School Service Commission (PPSSC). It may have also resulted because the schools are sited in Awka metropolis which is the state Capital and the presence of other secondary schools increases the competitiveness among private school proprietors in the provision of necessary physical facilities. Findings of the study showed that the proprietors planned for accessibility to the schools, fencing, availability of play grounds, spacious classrooms and provision of convenience spaces such as toilets and cafeteria to a high extent. The finding of the study is in agreement with Kenneth and Benedict (2019) who noted that convenience spaces like toilets, cafeteria and other areas of relaxation were high provided in public and private secondary schools. This indicate that school sites, classroom blocks, toilets and cafeteria are very integral to school administration. In consonance, Yakubu (2017) found that physical spaces are highly planed in public and private secondary schools because it forms the bases for successful school administration. However, the finding of the study revealed that proprietors of private secondary schools do not properly plan for staff rooms, school library, computer laboratory, science laboratory, providing safe parking space for visitors and staff and providing for appropriate security lighting system in and around the school premises. This is in agreement with Ekpo (2018) who found that teachers were not satisfied with the physical working condition in their schools. Ekpo (2018) revealed that teachers were dissatisfied with the physical facilities like library books, office accommodation, office chairs and tables, teaching aids, shelves for book storage, office space, toilet facilities, electrical facilities, classroom space, science laboratories and computer facilities. In the same vein, Bukola and Alonge (2011) posited that the physical working environment constitutes a challenge in the administration of secondary education in Nigeria in that the physical conditions of some schools are below standard and ultimately affects the quality of teaching and learning.

Furthermore, finding on the first and second hypotheses revealed that there was no significant difference in the mean ratings of teachers on the extent proprietors
apply physical environment planning in secondary schools in Awka Education zone based on years of working experience and gender. This indicated that teachers are in agreement that proprietors of private secondary schools apply physical environmental planning in their schools. From the findings it is clear that physical environment is integral to school effectiveness, this is why efforts are made by school proprietors to put the necessary physical facilities in place in their schools. This is in agreement with Uchendu, Nnaji and Nwafor (2016) who found that the physical environment of a school could improve teachers’ effectiveness and school performance.

Conclusion
Based on the findings of the study, the researchers conclude that proprietors of private secondary schools apply physical environmental planning in Awka Education Zone. However, there is need for improvement in the provision of certain physical facilities in their schools. This is because a comprehensive physical environmental planning should not be selective, it should rather encompass all physical components of the school environment. It is therefore imperative that private secondary school proprietors improve their planning practices as it relate to the physical environment of secondary schools.

Recommendations
The researchers made the following recommendations based on the findings of the study:

1. The Post Primary School Service Commission (PPSSC) should scale up their school inspection and supervisory practices to ascertain the provision of standard offices or staff room blocks for teachers so as to motivate them for higher productivity and better education service delivery.
2. Proprietors of private secondary school should as a matter of urgency invest in the provision of more books for their libraries. This can be done by adapting innovative funding strategies like using the Parent Teachers Association (P.T.A.) and endowment funds, collaboration with publishing houses for the procurements and provision of books for the school libraries.
3. Proprietors of private secondary schools should also give priority attention to the provision of safe parking lots for visitors and staff as well as ensuring that proper lightening system are in and around the schools to ensure the safety of students and staff.
4. Proprietors of private schools should seek financial and technical support from local and international governmental and non-governmental organizations for the provision of science laboratory materials and information and communication technology facilities in their schools.
References


