



**Assessment of Health Status, Safety and Child-Friendly Environment of Pre-Primary Schools in Lagos State**

<sup>1</sup> Olufemi Abiodun Ajayi, Ph.D & <sup>2</sup> Oluwaseun Ruth Aderinto

<sup>1</sup>Department of Counselling Psychology & Educational Foundations

<sup>2</sup>Department of Childhood Education

Tai Solarin University of Education, Ijagun, Nigeria

E-mail: [ajayioa@tasued.edu.ng](mailto:ajayioa@tasued.edu.ng); [saderinto2015@gmail.com](mailto:saderinto2015@gmail.com)

**Submitted: 18 July 2021    Revised: 15 October 2021    Accepted: 29 November 2021**

**Abstract**

*Parents at different times have expressed worries at health hazards safety and child-friendly environment and other dangerous experiences of their children at various schools and centres. Thus, this study aimed at assessing compliance with national minimum benchmark for health, safety and child friendliness of pre-primary schools and child care centres. The study was conducted using descriptive survey design with direct observation of prevailing situations. Sixty (60) pre-primary schools were purposively selected across three contiguous local government areas in Lagos west senatorial district. School Observation Checklist ( $r= 0.91$ ) was used for data collection. Data gathered were analyzed using frequency, percentages, median, standard deviation and t-test at 0.05 level of significance. The results obtained revealed that the health status, safety and child-friendliness of pre-primary schools in Lagos state were unsatisfactory (Grand median = 2) in terms of compliance with prescribed minimum benchmarks. There was a significant difference in health status ( $t=4.564$ ), safety ( $t = 5.347$ ) and child friendliness ( $t= 4.310$ ) between private and public pre-primary schools and it was in favour of private schools. In conclusion, the pre-primary schools in Lagos state did not satisfy the minimum benchmark of standard required to implement preschool curriculum in terms of safety measures, healthy environment and child friendliness. Strong socio-economic will on the part of the proprietors towards compliance with minimum benchmark required of pre-primary education is anticipated amongst others.*

**Key words:** Health status, Safety in schools, Child-friendly environment, Pre-primary School

**Introduction**

A stimulating, healthy and safe environment supports children's learning and development. It gives them the confidence to explore discover and learn objectively. Environments that are stimulating for young children should be enriched with safe objects for children to explore, freedom of movement, healthy practices and a variety of

experiences. Early Childhood Education (ECE) is considered by the stakeholders to be the most critical level of education for social (relationship to others), emotional (self-image and security), cognitive (thinking and reasoning) and physical development of children. Therefore, the care givers during the early years have a significant role to play in the teaching and learning process. This is because from conception through early childhood period, all infants and young children need a safe and healthy upbringing in a friendly and stimulating environment.

Early Childhood Development Project/UNICEF (2009) states that the early childhood period is characterized by rapid physical growth. In early years of development, children are most vulnerable as they explore the world around them and learn. It is also a period characterized by rapid development of brain-cell connectivity the process that enables children's development of cognitive abilities and skills (Adenipekun, 2004). In addition to basic needs for good health and nutrition, early childhood is found to be a critical period where infants and young children are in significant need of protection, love, interactive care and stimulation. The more the love and interaction children receive in a safe and friendly environment, the more brain-cell connectivity, and the better they are equipped to interact socially, to learn and acquire new skills and ultimately develop to their full potential throughout life. Most importantly, it is believed that learning starts at birth or even conception (UNICEF, 2009).

Despite the immense importance of the environment to the overall development of the child, some child-care centres in Nigeria have been found wanting in the provision of an adequate environment for the child. Adesanya (2005) reported that an aggrieved mother once removed her child from a daycare center stating that the child developed running nose (catarrh) three (3) weeks after he was enrolled in the center even after several visits to the hospital. Literature (Igbinedion, Abraham & Nwogu, 2016) has revealed indictment of several early child care centers as being unsafe with unhealthy environmental practices. Parents and guardians have lodged complains such as physical injury on wards, drinking of hazardous substances, rashes, abuse, neglect, bullying, cholera, diarrhoea, catarrh, cold, cough, lack of ventilation and illumination, among others. These events have raised a question on how safe, healthy and child friendly the environment of pre-primary schools is.

According to NERDC (2004) early childhood education (ECE) is for care and education of children from birth to primary school age usually 5 or 6 years. It covers children's survival, growth, learning, health, nutrition, hygiene, and development (cognitive, social, physical and emotional development) from birth to entry into primary school. It is organised in formal, informal and semi-formal settings. ECE covers very diverse arrangements, from parenting programmes to community-based child care, center-based provision and formal pre-primary education, often in schools (Ojameruaye, 2010). Therefore, the early childhood establishments should provide the type of stimulating environment, which no home, however wealthy can provide (Akinbote, 2006).

FRN (2014) refers to early childhood care and education (ECCE) and pre-primary education as an education given in an educational institution to children prior to their entering into the primary school. It includes the crèche, the nursery and the kindergarten.

According to the national minimum standards for early child care centres in Nigeria (NERDC, 2004) an effective centre should have:

playground and appropriate equipment, fence, classroom(s) with enough space (well ventilated adequate for about 20-25 (0-3years), 30-35 (3-5years) children with flexible sitting arrangement and well decorated with functional pictures), records such as admission register, log book, child folder containing bio-data, age-appropriate furniture, cupboards, shelves, mats, mattresses, assessment instruments for growth and overall development of the child, instructional materials (curriculum, charts and colourful posters, lesson note etc), human resource/personnel requirement, other requirements such as water, hygienic environment, psycho-social, health (first aid box, fire extinguisher or bucket of sand), age-appropriate toilet, safety measures and so on and ultimately applied for and obtained an operational license from the relevant department (Education/Women-Affairs/Health). According to Skinner (2007) it is important that the child care centres present a secure world in which children are encouraged to take risks knowing that they will be supported if necessary.

However, this research work is aimed at assessing adequacy of three factors as they relate to the environment. They are health status, safety and child friendliness of the school environment. The requirement for child care centres to foster an environment with sustainable health status cannot be wished away. Child care centres are expected to keep and maintain an environment with a high level of hygiene more so for children who relate with the environment indiscriminately. Safety in schools and child care centres in terms of being free from probable physical injuries is another condition that should not be compromised. There is no parent or guardian that will willingly enroll their children or wards in schools or centres with high risk of safety. Children by nature are playful and inquisitive and to that extent are always willing to explore their immediate environment. As such, it is expected that the environment where the child learns will be child friendly appealing to their senses. Objects, facilities and other resources that can easily appeal to the senses of little ones must be made available in child care centres and preschools.

There have been reported cases of indictment levied against child care centres in various forms. A few of such instances were those involving caregivers who were accused of giving children sedating cough syrups to induce sleep, negligence of the child care centres resulting in wards developing boils, rashes, cold, cough, catarrh, ear infections, fever, sore throats and diarrhoea, children who carelessly drank poisonous substances, exposure to naked electric outlets, poor ventilation and illumination of centres among others. With the minimum standards for Early Child Care Centers (ECCC) in place this study sought to assess the level of compliance of pre-primary

schools in Lagos State with minimum standard as regards safety, health status and child friendliness of the environment.

The specific objectives were to:

1. determine compliance of the health status of pre-primary schools in Lagos State
2. determine the safety status of pre-primary schools in Lagos State
3. assess the child-friendliness of pre-primary schools in Lagos State
4. ascertain if there is any significant difference in the health status, safety and child-friendliness between private and public pre-primary schools in Lagos State

### **Research Questions**

1. How adequate is the health status of pre-primary schools in Lagos State?
2. How safe are pre-primary schools in Lagos State?
3. How child-friendly is the environment of pre-primary schools in Lagos State?
4. Is there any significant difference in the health status, safety and child-friendliness between private and public pre-primary schools in Lagos State?

### **Methodology**

Descriptive survey research design involving direct observation of prevailing situations was adopted for this study. It involves the researcher observing sampled pre-primary schools for the purpose of assessing the environment using pre-determined indicators. The population of this study consists of all nursery schools in the Lagos-west senatorial district of Nigeria. The Lagos-west senatorial district is made up of ten (10) local government areas, out of which three (3) local government areas (LGAs) namely Ikeja, Agege and Alimosho were purposively selected based on contiguity of location. The sample comprised sixty (60) pre-primary schools purposively selected at twenty schools per LGA based on the availability of nursery section.

### **Instrument**

The instrument for data collection is the School Observation Checklist (SOC). The instrument was developed by the researcher. The checklist has four sections consisting 46 items. Section A has five items measuring the bio-data of the schools. The items include name of school, type of the school and total number of pupils. Section B has nine items designed to measure health status. A few examples of the items are availability of clean water, hand towel, washing hand basin, and toilets for both caregivers and pupils. Section C contains nineteen items designed to measure safety. Examples include well ventilated and illuminated classrooms, availability of day/night security, and close supervision of the children. Section D contains thirteen items of

child-friendly measures. Examples of the items are clean environment, age-appropriate toys and furniture, and use of play-way method for teaching). A three-point likert scale of Poor Compliance (PC), Average Compliance (AC) and High Compliance (HC) was employed in the measurement of variables across Sections B to D.

The instrument was subjected to scrutiny by the experts in Educational Evaluation and Childhood Education who reviewed the items in content, grammar and format. Corrections raised were done to obtain the final version of the instrument. In order to ensure the reliability of the instrument, copies were administered to a parallel sample of respondents that were not part of the main study and a composite reliability co-efficient of 0.91 was obtained using Cronbach's Alpha. Disaggregating the coefficient 0.76, 0.85, 0.71 were obtained respectively for health, safety and child-friendly measures.

Consent of the care centre authority for each school that was selected to participate in the study was sought for and obtained. The instrument was administered with the support of two research assistants. The instrument was retrieved on the spot once it has been filled to foster high rate of return. The whole exercise was performed in three weeks. Data gathered were analyzed using frequency counts, percentages, bar charts, median, standard deviation and t-test. The benchmark for decision making was set at a median score of 2 or less indicating average level of compliance with healthy environment protocols for pre-primary schools, while a median of 3 is considered a high level of compliance.

## Results

**Research Question 1:** How compliant is the health status of pre-primary schools in Lagos state?

**Table 1: Descriptive statistics on benchmark compliance level of health status of pre -primary schools in Lagos state.**

S/N	Items	PC	AC	HC	S.D	Median
1	Standard and fully equipped First Aid Box	5(8.3)	47(78.3)	8 (13.3)	0.47	2.00
2	Availability of clean water	5(8.3)	45(75)	10(16.7)	0.50	2.00
3	Availability of soap for hand washing	5(8.3)	51(85)	4(6.7)	0.39	2.00
4	Availability of wash hand basin	5(8.3)	49(81.7)	6(10)	0.43	2.00
5	Availability of hand towel	7(11.7)	48(80)	5(8.3)	0.45	2.00
6	Linkage with a nearby health facility	14(23.3)	31(51.7)	15(25)	0.70	2.00
7	Availability of proper refuse disposal baskets	1(1.7)	37(61.7)	22(36.7)	0.52	3.00
8	Availability of toilet for both care givers and children	2(3.3)	53(88.3)	5(8.3)	0.34	2.00
9	Regular Hand washing	4(6.7)	54(90)	2(3.3)	0.32	2.00

*\*Figures in parenthesis indicate percentages.*

*\* PC= Poor compliance, AC= Average compliance, HC= High compliance Grand Median = 2.00*

Descriptive statistics presented on the Table1 show that compliance with healthy environment protocols for pre-primary schools in Lagos state was average (Grand Mean = 2.00). Disintegrating the results item by item, only 36.7% of the school demonstrated high level of compliance (Median = 3) on availability of proper refuse disposal baskets. The compliance level of the pre-schools was average (Median = 2.00) for linkage to nearby health facility was average, availability of clean water, and possession of standard and fully equipped first aid box. The other items with an average (Median = 2.00) level of compliance from the pre-schools were availability of wash hand basin, availability of hand towel, availability of toilet for both caregivers and children respectively, availability of soap for hand washing and routine on regular hand washing.

**Research Question 2:** How compliant are safety measures in pre-primary schools in Lagos state?

**Table 2: Descriptive statistics on benchmark compliance of safety measures of pre-primary schools in Lagos state.**

S/N	Items	PC	AC	HC	Median	S.D	Decision
1	Fenced Centre to reduce risk to children	9(15)	21(35)	30(50)	2.50	0.73	High
2	Clean environment, not bushy, free from waste	-	49(81.7)	11(18.3)	2.00	0.39	Poor
3	Dry, not water logged	-	43(71.7)	17(28.3)	2.00	0.45	Poor
4	Water; well Locked and secured	3(5)	42(70)	15(25)	2.00	0.51	Poor
5	Free from dangerous and hazardous object	3(5)	50(83.3)	7(11.7)	2.00	0.41	Poor
6	Well Ventilated classrooms	3(5)	44(73.3)	13(21.7)	2.00	0.40	Poor
7	Spacious Classroom designed to allow for free movement	2(3.3)	47(78.3)	11(18.3)	2.00	0.44	Poor
8	Classroom well illuminated	7(11.7)	40(66.7)	13(21.7)	2.00	0.57	Poor
9	Playground; enough space for children to play	3(5)	39(65)	18(30)	2.00	0.54	Poor
10	Doors that can be locked	11(18.3)	37(61.7)	12(20)	2.00	0.62	Poor
11	Availability of Fire extinguisher or a bucket of sand	9(15)	36(60)	15(25)	2.00	0.63	Poor
12	Day/Night security	4(6.7)	30(50)	26(43.3)	2.00	0.61	Poor
13	Smooth flooring of classroom	9(15)	29(48.3)	22(36.7)	2.00	0.69	Poor
14	No electric outlet within reach of the children	8(13.3)	46(76.7)	6(10)	2.00	0.49	Poor

---

15	Environment free from noise	10(16.7)	39(65)	11(18.3)	2.00	0.51	Poor
16	Daily cleaning of the centre	2(3.3)	48(80)	10(16.7)	2.00	0.43	Poor
17	Children practice personal hygiene	4(6.7)	53(88.3)	3(5)	2.00	0.34	Poor
18	Close supervision of the children	-	57(95)	3(5)	2.00	0.22	Poor
19	Daily inspection of the environment	5(8.3)	48(80)	7(11.7)	2.00	0.45	Poor

---

*\*Figures in parenthesis indicate percentages.*

*\* PC=Poor compliance, AC= Average compliance, HC= High compliance; Grand Median = 2.00*

Considering the descriptive statistical analysis on Table 2 safety level compliance with standard prescriptions of pre-primary schools in Lagos state was average (Grand Median = 2). Disaggregating the results item by item, apart from the pre-schools being characterized with perimeter fencing to reduce risk prone to children which was at a high level of compliance (Median = 2.50), characteristics such as day/night security, smooth and well plastered floor of classrooms, adequately spacious playground, dry and not waterlogged landscape respectively were at average level (Median = 2.00) of compliance. A few other characteristics where the pre-schools recorded average level (Median = 2.00) of compliance with safety measures were well secured water source, availability of fire extinguisher or bucket of sand, well illuminated classrooms, well ventilated classrooms and doors with secured lock.

Looking at other safety measures, the pre-schools could only attain average level (Median = 2.00) of compliance and the list include spacious classroom that allow for free movement, environment that is well kept and free from wastes and also free from noise, day-to-day cleaning of the environment, free from dangerous and hazardous objects and the practice of daily inspection of the school environment, absence of naked electric outlets within reach of children, high level of hygiene observed among children and the practice of close supervision of children.

**Research Question 3:** How child-friendly is the environment of pre-primary schools in Lagos state?

**Table 3: Descriptive statistics on child friendliness of pre-primary schools' environment in Lagos state**

S/N	Description	PC	AC	HC	Median	S.D	Decision
1	Beautiful and stimulating environment with flowers and ornamented plants	6(10)	36(60)	18(30)	2.00	0.61	Not Adequate
2	Age appropriate toys	14(23.3)	45(75)	1(1.7)	2.00	0.45	Not Adequate
3	Age appropriate furniture	9(15)	50(83.3)	1(1.7)	2.00	0.39	Not Adequate
4	Developmental appropriate materials for stimulating children	5(8.3)	53(88.3)	2(3.3)	2.00	0.34	Not Adequate
5	Use of Play-way method for teaching	2(3.3)	47(78.3)	11(18.3)	2.00	0.44	Not Adequate
6	Walls are colourfully painted	11(18.3)	43(71.7)	6(10)	2.00	0.53	Not Adequate
7	Age appropriate drawings and decorations	4(6.7)	49(81.7)	7(11.7)	2.00	0.43	Not Adequate
8	Clean environment	1(1.7)	36(60)	23(38.3)	2.00	0.52	Not Adequate
9	Sitting plan not rigid like formal classroom	7(11.7)	47(78.3)	6(10)	2.00	0.47	Not Adequate
10	Children actively involved in lessons	2(3.3)	53(88.3)	5(8.3)	2.00	0.34	Not Adequate
11	Use of charts, posters, pictures and other instructional Materials	1(1.7)	49(81.7)	10(16.7)	2.00	0.40	Not Adequate
12	Allowing children to explore the environment	4(6.7)	48(80)	8(13.3)	2.00	0.45	Not Adequate
13	Environment free from stigmatization and bullying	1(1.7)	45(75)	14(23.3)	2.00	0.45	Not Adequate

\*Figures in parenthesis indicate percentages.

\* PC= Poor compliance, AC= Average compliance, HC= High compliance **Grand Median** = 2.00

Descriptive statistics presented on Table 3 show that the level of compliance to the child-friendliness of pre-primary schools in Lagos state was average (Median = 2.00). Decomposition of the result item by item revealed that maintenance of clean environment, beautiful and stimulating environment with flowers and ornamental plants, keeping the environment free from stigmatization and bullying, the use of play way method for teaching, use of charts, posters, pictures and other instructional materials and offer of opportunity for children to explore the environment characterized the pre-schools at average level (Median = 2.00) of compliance to the minimum benchmark required.

The use of age-appropriate drawings and decoration, the presence of walls that are colourfully painted and a sitting plan that is not rigid as in formal classroom setting, children being actively involved in lessons and the practice of developing appropriate materials to stimulate the children towards learning and the use of age-appropriate furniture were the remaining characteristics where the pre-schools demonstrated average level (Median = 2.00) of compliance to the minimum benchmark.



**Research Question 4:** Is there any significant difference in the health status, safety and child-friendliness between private and public pre-primary schools in Lagos State?

**Table 4a T-test Analysis on Health Status between Private and Public Pre-Primary Schools**

Group	Number	Mean	S.D	df	T	Sig	Decision
Private	31	19.81	2.06	58	4.564	.000	Significant
Public	29	17.07	2.58				

Results of t-test ( $t=4.564$ ;  $p (.000) < .05$ ) on Table 4a show that a significant difference between private and public pre-primary schools exist on health status. The difference is in favour of private school ( $\bar{x}=19.81$ ).

**Table 4b T-test Analysis on Safety between Private and Public Pre-Primary Schools**

Group	Number	Mean	S.D	Df	T	Sig	Decision
Private	31	43.42	4.15	58	5.347	.000	Significant
Public	29	37.66	4.20				

The t-test results ( $t = 5.347$ ;  $p (.000) < .05$ ) on Table 4b shows that there exists a significant difference on safety between private and public pre-primary schools. The difference favours the private schools ( $\bar{x} = 43.42$ ).

**Table 4c T-test Analysis on Existence of Child-Friendly Environment between Private and Public Pre-Primary Schools**

Group	Number	Mean	S.D	Df	T	Sig	Decision
Private	31	28.26	2.14	58	4.310	.000	Significant
Public	29	25.14	3.37				

Considering the t-test results ( $t= 4.310$ ;  $P (.000) < .05$ ) on Table 4c, there is a significant difference on child-friendliness between private and public pre-primary schools. Meanwhile, the difference is in favour of private school ( $\bar{x} = 28.26$ )

## Discussion of Findings

The findings of this study revealed clearly that that pre-primary schools in Lagos State fell short heavily of prescribed minimum benchmark of standard in relation to health status, safety and child-friendliness of the environment. The findings of this study reflect that the health status of pre-primary schools in Lagos state was unsatisfactory in terms of compliance with pre-specified bench marks. Most schools

scored had average rating on the scale of compliance to prescribed minimum benchmarks. The findings reflect long years of neglect of pre-primary education by the government and poor economic status of individuals who were the proprietors of these schools respectively. In addition, these results may also likely reflect the poor knowledge of some parents on the health implications of living in environment that compromises the health, physical security and aesthetic environment desire of the little ones. Further explanation for this unsatisfactory observation could be traced to involvement and engagement of quacks in the enterprise of caring and educating the younger ones. Apart from this, lack of commitment to the ideal on the part of the proprietors could also be a reason.

These findings support an earlier study by Olatunya, Oseni, Ogundele, Oyelami (2014), where it was reported that various forms of health hazards were encountered in 81.3% of the schools. The results corroborate *Olaleye (2012) on the aspect of health measures* in which it was reported that the learning environment of the pre-schools observed lack portable water and adequate playgrounds for the children. These results corroborate the earlier findings of Odiagbe (2015) on the aspect of child-friendliness that none of the schools observed in his study met the national minimum standard on Early Child Care Centers (ECCC).

The results revealed that there was a significant difference in the health status, safety and child-friendliness between the private and public pre-primary schools and differences were in favour of the private schools. This is quite understandable as government appeared to have been overwhelmed by the heavy financial burden of running education in Nigeria. The poor state of facilities in public schools is an indication of many years of neglect by the government. This finding agrees with the result of Okwilagwe (2007) that private schools were better funded than public schools. Odiagbe (2015) revealed that the play facilities available in the private schools were grossly absent in the public schools.

## **Conclusion**

Based on the results of this study, pre-primary schools in Lagos state are did not satisfy the minimum benchmark of standard required to implement preschool curriculum in terms of safety measures, healthy environment and child friendliness. However, private schools had a better rating compared to the public schools.

## **Recommendations**

1. The proprietors of the pre-primary schools should be prepared to demonstrate strong socio-economic will and determination towards provision of educational resources, facilities and other prescriptions contained in the document that specifies the minimum benchmark requirements for pre-primary education.

2. The unit of the ministry of education saddled with quality assurance mandate should be more alive to its responsibility by making sure the minimum benchmarks of standard are enforced and sustained.
3. There is need for inter-ministerial collaboration between ministries of health, education, lands and housing and environment for the actualisation of a healthful, safe and child friendly school environment.
4. There is need for government to clamp down heavily on non-registered schools and day-care centres in order to discourage the tendency to expose the innocent children to health hazards and avoidable risks.

### References

- Adenipekun, O. (2004). Government falters in early childhood education. *Vanguard Newspapers*, Apapa, 20:56565
- Adesanya, R. (2005). Your choice of daycare affects your child's health, Lagos: The Punch Newspaper. [www.doctoradesanyablogspot.com](http://www.doctoradesanyablogspot.com)
- Akinbote, O. (2006). *Origin and development of early childhood education: A basic text*. Lagos: National Open University Express Image.
- Igbinedion, D. A., Abraham, N. M. and Nwogu, U. J. (2016). Government's involvement in safety management in public early childhood education centres (ECEs) in Rivers state, Nigeria. *World Journal of Education*, 6 (1), 40- 49
- Nigerian Educational Research and Development Council (2004). *National minimum standards for early child care centres in Nigeria*. Lagos: NERDC Press.
- Odiagbe, S. I. (2015). The national minimum standard on early child care centers (ECCC) in Nigeria and the Status of pre-primary education in Uhumwode local government area of Edo State. *American Journal of Educational Research*, 3(4), 399-405. <http://pubs.sciepub.com/education/3/4/3>
- Ojameruaye, E. (2010). *Promoting Early Childhood Care and Education in Urhoboland, Nigeria: The role of private voluntary organizations*. A keynote presentation made during the launch of the ECE program of Urhobo League at St Louis Missouri
- Okwilagwe, E. A. (2007). Evaluating private and public Schools. *Nigeria Tribune*, p. 35.
- Olaleye, F. O. (2012). Creating a friendly school learning environment for Nigerian children. *Euro Sci Journal*; 8:138-147

- Olatunya O. S, Oseni, S. B, Ogundele, O & Oyelami, O. A (2014). A study of the primary school environment in a local government area, South West Nigeria. *J Community Med Health Educ* 4: doi:10.4172/2161-0711.1000321
- Skinner, S. (2007). *Creative activities for the early years*. Los Angeles: Paul Chapman Publishing.
- UNICEF (2009). *Manual for child friendly schools*. New York: Division of Communication.