

A Survey of Age Appropriate Play Utilization among Caregivers in Lagos State Preschools

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Abstract: The research/study shall do a survey of utilization of Age Appropriate play equipment available and used by caregivers in preschools of Lagos State with the aim of developing contemporary checklist of required play equipment for preschools in Lagos State. Descriptive survey research design type was used for this work. As population for this study was all the 1014 preschool operators in the state. Stratified random sampling was employed to select 30 preschools from each of the twenty (20) Local Government Education Authority (LGEA) of Lagos State making a sample size of six hundred (600) caregivers. Two instruments, self-structured Questionnaire and Checklist were used as data generation tool for the study. Content and construct validity were assured from three evaluators from Institute of Education, University of Ibadan. Through cronbach alpha, a reliability from an index value of 0.889 was obtained meaning that the items in the instrument are suitable for the study. Simple percentage, Pearson Product Moment Correlation and Analysis of Variance were used to analyse the data tested at 0.05 significant level. The study reveals that *there is a significant relationship in the utilization of Age Appropriate Play Equipment by Teachers' Specialization, Qualification and Experience among Caregivers in Lagos State. Among others, it concluded that modern play equipment should be a prerequisite for siting a pre-school structure in the state.*

Keywords: Caregivers, Play, Pupils, Age appropriate equipment, Education

Introduction

Everyone knows play when they see it been displayed on streets, in villages, on play grounds, in classrooms. People from every culture, economic background and community engage in play from their earliest years. Yet play can be hard to define. Researchers and theorists however, agree on the key characteristics of playful experiences (Smith & Anthony, 2008). An important aspect of play is children's agency and control over the experience. Agency refers to children's initiative, decision making and self-choice in play (Zosh, et al. 2017). Ultimately play should involve some degree of agency, enabling children to take on an active role and ownership in their experiences, as well as recognizing and trusting children to be capable, autonomous and agents of their own playful learning journeys.

Play, no doubt, is central in a child's life because, it is the major source of learning, growth and development in children. There is no denying that children benefit from play since it gives them the chance to learn about their surroundings, express their power in manipulating, controlling, interacting, discovering and communicating their thoughts freely. Play serves to sustain the authenticity of culture as play therefore incorporate folk tales, celebration of special festivals and other traditions festivity.

"In any educational setting, stakeholders have always advocated that play remains an important instrument that cuts across every age segment of the pupils as an avenue to provide a fertile and arousal environment for effective learning to take place" (Anderson and Bailey, 2010). With all these in mind, it becomes clear and imperative that we need to effectively integrate play as a component of school activities. It is envisaged that the appropriate age equipment, if well utilized in educational settings, are there to enhance the socio-emotional, mental/cognitive and physical development of the child (Fowowe, 2019). According to UNICEF (2018), in the course of undergoing developmental stages and processes, the nature of play a child engages in is informed by the age of the child. Children learn mostly through play due to the chronological condition of age, their attachment, interest, high level of concentration among others. "Through play, children can also learn how to make a plan and follow through, learn from trial and error using imagination and problem solving skills, apply concepts of quantity, science, and movement to real life, reason in a logical, analytical manner by acting on objects, communicate with classmates and negotiate differences in points of view, derive satisfaction from their own accomplishments, develop creativity and explore aesthetics and artistry among others" (UNICEF, 2018).

Globally, there are challenges as to the nature of age appropriate play suitable for pupils considering their age, disposition to learning, availability and relevance of the play equipment. Oduolowu (2011) maintained that age appropriate play is sometimes dependent on the availability of the play equipment that would naturally drive pupils to engage in such play. Caregivers in the developing and underdeveloped economies in which Nigeria is a prime destination have gone further to restate that age appropriate play is a function of play equipment made available in such schools. In an economy where provision of relevant and appropriate learning facilities is a challenge, lack of provision of conducive teaching learning environment, over-crowding in public schools, recruitment of non-professionals, that is, non-specialists in Nursery and Primary education, irregular or non provision of in-service activities among

others (Fowowe, et al. 2020). For quality learning to take place in any given educational setting the learners must be mentally and physically fit to withstand the rigours often associated with academic tasks. It is worthy of note that the availability of a good play equipment and enriched environment in a school provide pleasurable and exciting activities which encourage improve classroom attendance and stimulate effective learning condition for pupils. How much of age appropriate play equipment available and their utilization in Lagos State preschools as an indicator of quality and standard school is the major concern of this study.

Statement of the Problem

It has been documented in various literatures that children love play and that active play of indoor and outdoor space is suitable for children and central to child's development and therefore should be included in the preschool curriculum. Many preschool teachers have said that there is a disconnect between what they were taught while in Teachers' Training Institutes and what they found while practicing in terms of play equipment. Others reported that they were taught most times, theoretically because of lack of play equipment and where there is equipment, the lecturers do not use them. To cite a few examples UBEC (2013) in a study on utilization of play equipment in preschools in Nigeria, reported only about 10.5% of required play equipment are available and efficiently utilized in teaching the preschoolers. Anderson and Bailey (2010), in similar report revealed that, many play equipment prescribed by the regulatory and accreditation agencies for the teaching of preschool children are not available and where available, caregivers are not using it except during break. Thus, the values inherent in play activities will not manifest. It is against this background that, the need to do a survey of age appropriate play equipment in Lagos State preschools with a view to establishing the availability of such play equipment using a check list of the required play equipment in quality and quantity.

On gender, Henniger (2009) revealed that female caregivers are more patient, accommodating and have soft spot for children especially in situations that relates to classroom activities, unlike their male counterparts who are direct and have zero tolerance for child misdemeanor. Female caregivers are patient in monitoring children with respect to maximum utilization of play equipment in schools than their male counterparts, who most times do not derive pleasure in seeing the children engage in play. In practice too, it can be noted that most caregivers are female perhaps due to their disposition in understanding the nature of children and their developmental phases, while the male caregivers do not perform exceptionally well in this regard. Male teachers perform better in numeracy and arithmetic related tasks and not caregiving services which the female counterparts excel the most.

Research Hypotheses

The following research hypotheses were formulated and tested at 0.05 level of significance

HO₁: There is no significant relationship in the availability of Age Appropriate Play Equipment in Playground among Caregivers in Lagos State Preschools.

HO₂: There is no significant relationship in the utilization of Age Appropriate Play Equipment by Teachers' Specialization, Qualification and Experience among Caregivers in Lagos State Preschools.

Research Methodology

The current research explored a survey of utilization of age appropriate play equipment used by caregivers in Lagos State preschools to improve increased classroom participation and quality learning among pupils. To better understand what the research seeks to address, the study shall adopt a descriptive survey research design type for this work. This research design type is suitable because it helps to gather, organize, analyze and present data for the purpose of describing the occurrence of an event within a specified group of people. The population for this study was all the 1014 preschool in Lagos State cut across the six Educational Districts in the State. Lagos state officially has 20 LGAs which is further broken into 6 educational districts for easy accessibility, efficiency, penetration and accountability. The target population was all caregivers working in preschools in the state. Across the 6 educational districts, a minimum of 32 registered preschool was established in each of the 6 educational districts.

Due to uniqueness by way of population size, nearness to government authorities that is, (Ikeja), scope of development (Alimosho), paucity of resources and data (Badagry) among others. Stratified random sampling was employed to select 30 preschools from each of the 20 Local Government Education Authority of Lagos State making a sample size of six hundred (600) caregivers. The study adopted a sequential explanatory method data collection approach as Quantitative method of data collection was employed in data generation. For the quantitative data generation, Two (2) instruments were designed for the study:

- a. Questionnaire for caregivers (Comprising of 25 close-ended and 2 open-ended items).
- b. Check list for caregivers (49 items).

The Questionnaire comprising of 27 items in which 25 are close ended item and the remaining 2 are open-ended items on a 4-Likert scale type of Strongly Agree, (SA), Agree, (A) Disagree (D) and Strongly Disagree (SD) respectively; For the checklist a total of 49 items was available for identification on a 3 Scale Response Format of Available in Sufficient Quantity (ASQ), Available but Not Sufficient (ANS) and Not Available (NA) respectively.

The validity of the instruments was determined by three educational evaluators in the Institute of Education, University of Ibadan. Moreso, irrelevant items were modified and irrelevant items deleted as content and construct validity were ensured. The reliability of the instrument was determined through the use of Cronbach alpha a reliability type and an index co-efficient value of 0.889 was obtained meaning that the items in the instrument are suitable for the study. For the quantitative data analysis, they were subjected to Simple Percentage (SP), Pearson Product Moment Correlation (PPMC) and Analysis of Variance (AV) respectively. The hypothesis was tested at 0.05 level of significant.

Results

Demographic information of respondents

Table 1: Descriptive analysis based on Experience

Variable	Frequency	Percent (%)
Valid 1-5	45	7.5
6-10	420	70.0
11-15	114	19.0
16-20	15	2.5
21-Above	6	1.0
Total	600	100.0

Source: Fieldwork, 2022

From table 1 above analyzing experience level, it reveals that 45 participants representing 7.5% claimed to have an experience that ranges between 1-5years, 420 participants representing 70% claimed to have 6-10 years of experience, 114 participants representing 19% claimed to have 11-15 years of experience, 15 participants representing 2.5% claimed to have 16-20years of experience while only a marginal fraction of 6 participants representing 1% each from the 20 schools were captured for this study. From the analysis, it showed that most of the caregivers have an experience between 6-10 years followed by those with 11-15 years of experience.

Table 2: Descriptive analysis based on School

Variable	Frequency	Percent
Valid* Sch. 1	30	5.0
Sch. 2	30	5.0
Sch. 3	30	5.0
Sch. 4	30	5.0
Sch. 5	30	5.0
Sch. 6	30	5.0
Sch. 7	30	5.0
Sch. 8	30	5.0
Sch. 9	30	5.0
Sch. 10	30	5.0
Sch. 11	30	5.0
Sch. 12	30	5.0
Sch. 13	30	5.0
Sch. 14	30	5.0
Sch. 15	30	5.0
Sch. 16	30	5.0

Sch. 17	30	5.0
Sch. 18	30	5.0
Sch. 19	30	5.0
Sch. 20	30	5.0
Total	600	100.0

Source: Fieldwork, 2022

From table 2 above, it reveals that 30 participants representing 5% each from the 20 schools were captured for this study. From the analysis, an equal number of participants were captured across the schools.

Table 3: Descriptive analysis based on Qualifications

Variable	Frequency	Percent	Valid Percent	Cumulative Percent
Valid SSCE	54	9.0	9.0	9.0
NCE	300	50.0	50.0	59.0
B.Sc/B.A	228	38.0	38.0	97.0
M.Ed	18	3.0	3.0	100.0
Total	600	100.0	100.0	

Source: Fieldwork, 2022

From table 3 above analyzing qualification, it reveals that 54 participants representing 9% claimed to have SSCE, 300 participants representing 50% claimed to have NCE, 228 participants representing 38% claimed to have B.Sc/B.A certificates while only a marginal fraction of 18 participants representing 3% are Second degree holders respectively. From the analysis, it can be deduced that most of the caregivers are holders of NCE and first degree respectively.

Table 4: Descriptive analysis based on Status

Status	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Single	81	13.5	13.5	13.5
Married	483	80.5	80.5	94.0
Widow	27	4.5	4.5	98.5
Widower	9	1.5	1.5	100.0
Total	600	100.0	100.0	

Source: Fieldwork, 2022

From table 4 above analyzing qualification, it reveals that 81 participants representing 13.5% claimed to be single, 483 participants representing 80.5% claimed to be married, 27 participants representing 4.5% claimed to be widowed while the remaining 9 participants representing 1.5% claimed to be widower respectively. From the analysis, it can be affirmed that most of the respondents are married people.

Table 5: Descriptive analysis based on Specialization

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid PED	390	65.0	65.0	65.0

ECCE	141	23.5	23.5	88.5
Eng	51	8.5	8.5	97.0
Maths	18	3.0	3.0	100.0
Total	600	100.0	100.0	

Source: Fieldwork, 2022

From table 5 above analyzing area of specialization, it reveals that 390 participants representing 65% claimed to be specialists in Primary Education Studies, 141 participants representing 23.5% claimed to be Early Childhood Education practitioners, 51 participants representing 8.5% claimed to be specialist in English Language while the remaining 18 participants representing 3% are claimed to be specialists in Mathematics respectively. From the analysis, it can be deduced that most of the caregivers are specialists in Primary Education Studies, followed by specialists in Early Childhood Care and Education respectively.

Test of Research Hypothesis

H0₁: There is no significant relationship in the availability of Age Appropriate Play Equipment in Playground among Caregivers in Lagos State Preschools.

Table 6: Pearson Product Moment Correlation analysis showing relationship between old and new age play equipment

Descriptive Statistics

Variable	Mean	Std. Deviation	N
Old age play equipment	53.9500	4.07177	600
New age play equipment	66.4500	7.57015	600

Correlations^a

		Old age play equipment	New age play equipment
Old age play equipment	Pearson Correlation	1	.874
	Sig. (2-tailed)		.0277
	Sum of Squares and Cross-products	1101.600	7.400
	Covariance	1.149	.008
New age play equipment	Pearson Correlation	.874	1
	Sig. (2-tailed)	.0277	
	Sum of Squares and Cross-products	7.400	54957.600
	Covariance	.008	57.307

Source: Fieldwork, 2022

a. Listwise N=600

From table 6 above, it shows that 600 students were captured in this study; old age play equipment recorded a lower mean and standard deviation value of 53.9500 and 4.071 while new age play equipment recorded a significant higher mean and standard deviation value of 66.450 and 7.570 respectively. Meanwhile the correlation value between old age play equipment and new age play equipment was 0.874 which depict a positively strong correlation. Since P-value < 0.05, the null hypothesis is considered to be statistically significant, hence we reject the H_0 and accept the alternative which states that there exists a significant relationship in the availability of old and new age play equipment in playground among preschoolers.

Table 7a: Classification of Responses generated from Open ended Questionnaire

S/N	Items	Percentage of respondents	Responses (Summation based on similarity of respondents)
	Why do some children run away from using play equipment?	562 (93.7%)	Most of them claim that they have never seen them before; They are not taught on its usage; Some see it as dangerous; Others claim it makes the children to engage more in play activities instead of learning.
		38 (6.3%)	NILL
	Total	100	

From table 7a, it seeks to present the response of caregivers with respect to, why do some children run away from using play equipment? 562 respondents representing 93.7% of the caregivers gave their submission that majority of the pupils most times choose to avoid such equipment since they are not familiar with its usage; other claim they have not been taught on it use; others see it as dangerous among others. Only a minor percentage of 38 respondents representing 6.3% choose to refrain from answering the items.

Table 7b: Classification of Responses generated from Open ended Questionnaire

S/N	Items	Percentage of respondents	Responses (Summation based on similarity of respondents)
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2	What can be done to encourage children having interest in interacting play equipment?	498 (83%) 102 (17%)	Compiled from the responses of the participants include: <ul style="list-style-type: none"> • Give the children more time to interact with the play equipment; • Offer the children a break from time to time; • Teacher should present himself/herself as role models; • The age play equipment should be rotated from time to time; • Eliminate every form of distractions; • Manage expectations effectively; • Retire some equipment at intervals; • Make provision of those age play equipment in those schools. <p>NILL</p>
Total		100	

Source: Fieldwork, 2022

From table 7b, it seeks to present the response of caregivers with respect to, what can be done to encourage children having interest in interacting play equipment? 498 respondents representing 83% what can be done to encouraging children have interest in interacting play equipment includes:

- Give the children more time to interact with the play equipment;
- Offer the children a break from time to time;
- Teacher should present himself/herself as role models;
- The age play equipment should be rotated from time to time;
- Eliminate every form of distractions;
- Manage expectations effectively;
- Retire some equipment at intervals;
- Make provision of those age play equipment in those schools among others.

HO₂: There is no significant relationship in the utilization of Age Appropriate Play Equipment by Teachers' Specialization, Qualification and Experience among Caregivers in Lagos State Preschools.

Table 8: ANOVA showing relationship between utilization of age appropriate play equipment by teachers specialization, qualification and experience

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	50.527 ^a	3	16.842	1.398	.242
Intercept	109096.320	1	109096.320	9058.463	.000
Specialization	32.870	1	32.870	2.729	.009

Qualifications	.001	1	.001	.000	.002
Experience	10.396	1	10.396	.863	.000
Error	7177.973	596	12.044		
Total	3027570.000	600			
Corrected Total	7228.500	599			

a. R Squared = .007 (Adjusted R Squared = .002)

From table 8 above, it reveals that at $F(1,600)=32.870$, $P<0.05$, hence $H_{O_2}(a)$ was not accepted; at $F(1,600)=0.001$, $P<0.05$, hence $H_{O_2}(b)$ was not accepted; at $F(1,600)=10.396$, $P<0.05$, hence $H_{O_2}(c)$ was not accepted. From the a fore mentioned interpretations, it means that there is a significant relationship in the utilization of age appropriate play equipment by teachers' specialization, qualification and experience respectively.

Discussion of Findings

According to hypothesis 1, the study found a strong correlation between the availability of older and newer play equipment in playgrounds among preschoolers. This finding corroborates that of Fowowe (2020) who alluded that new age play equipment unlike the relatively old ones goes a long way to promote motor coordination, interaction, provide space to exercise their new physical freedom while avoiding territorial conflict with peers, build strength and balance, promote social skills, develop the gaming side of pupils among others.

According to Fowowe, et al (2019), new age play equipment though quite expensive yet affordable goes a long way to develop psychological and physical wellbeing of pupils. Age-appropriate play equipment is crucial for a kid's safety, as well as for the physical and cognitive development of the child, as well as for the improvement of the child's sensory reactions to stimuli.

A 21st century school must identify itself with a collection of a few new age play equipment because these equipment have been designed to facilitate and promote life-long learning especially among pupils. Although, Oduolowu, (2011) had previously noted that the conventional play equipment is very visible in virtually all pre-school settings due to its affordability and accessibility, meanwhile, the new play equipment are designed alongside the chronological consideration of children. No doubt it has been affirmed that Play is central towards the development of a child's life because it serves as a major source of learning, growth and development in children. Children have natural curiosity that motivates them to play. Play is an important part of a child's development.

From hypothesis two, it reveals that there exists a significant relationship in the utilization of age appropriate play equipment by teachers' specialization, qualification and experience. The finding of this study corroborates with that of Akinbote, Oduolowu, Lawal (2001) and Henniger (2009) who observed that children will maximally utilize these play equipment in schools when they are been manned by professionally trained caregivers who are specialist in caregiving and have academic qualifications to show for too.

Their disposition on how children function especially the psychological attachment and satisfaction they derive when manipulating these play equipment is unquantifiable. Specialized caregivers in the field of Early Childhood Care Education, ECCE and Primary Education Studies, PES are actually trained to manage children on the various methods and technique to adopt and adapt in motivating them towards achievement in classrooms. More so, on academic qualification and experience, Henniger (2009) disclosed that holders of NCE and First degree certificates in Early Childhood Care Education, ECCE and Primary Education Studies, PES are better managers of children at the lower levels of education. They are better trained on the introduction of various developmental theories to classroom situation; introduction, relevance and management of play equipment in schools among others. Meanwhile, UBEC (2013) further stressed that the place of experience especially in the teaching and mentoring of pupils goes a long way to show in the utilization of age appropriate play equipment. Caregivers who spend relative periods and years grooming and teaching at the pre-school level would certainly have gained seasoned experience in the utilization of age appropriate play equipment.

Conclusion

In general, playing on a playground in the open air may be exciting and interesting, especially if there are other kids around and playthings to use. Playgrounds frequently feature recreational items, many of which aid in children's physical development of balance, flexibility, coordination, and strength. Play structures that connect a variety of playground equipment frequently provide entertainment and delight. The study can conclude among others that:

- Modern play equipment should be a prerequisite for siting a pre-school structure for learning.
- Play equipment should be made available in schools because they motivate pupils towards participatory academic involvement.

- c. Play equipment contribute towards the development of motor skills and social interactive skills of children.
- d. Effective and efficient utilization of age appropriate play equipment is dependent on teacher specialization, qualification and experience.

Recommendation

Play as an activity cannot be exonerated from child learning especially among pre-schools. This study among others recommends the following:

- a. An average of 10-12m² per pupil should be required as an average space when calculating required space or capacity for pre-school site.
- b. At this level, only experienced caregivers who love the profession should be recruited.
- c. The place of play should be very significant in their (pre-school) curriculum.

References

- Akinbote, O. Oduolowu, E., and Lawal, B. (2001). Pre-Primary and Primary Education, University of Ibadan, Ibadan.
- Anderson, M. A., and Bailey, S. J. (2010). The Importance of play in Early Childhood Development. A Self Learning Resource from Maintana State University Extension
- Evans, J. (2001). In Search of Peaceful Playgrounds” Education Research and Perspectives, Vol.28, No. 1. page 55, Deakin University.
- Fowowe, S.S. et al (2020). Play and the Child’s Learning. Lagos-Nigeria: Gbadura Prints.
- Fowowe, S.S (2019). Play: A veritable Tool for Teaching Children. Lagos: Lundeis Dook and Global Resource.
- Henniger (2009). Teaching Young Children: An Introduction 3rd Edition New Jessy: Pearson Education.
- Megaron, I. (2018). Designing Playground for All. Yıldız Teknik Üniversitesi Mimarlık Fakültesi, Yıldız Technical University, Faculty of Architecture. CİLT vol.13- SAYI No. 3.
- Montguide Returned 13/August 2019 from www.msueextension.org/store.
- Oduolowu, E. (2011). Contemporary Issues in Early Childhood Education. Ibadan: Franco-Ola Publisher.
- Play and Park Structures (2019). Play. Retrieved from <https://www.playandpark.com> 26th August, 2019.
- Smith, P, K. & Anthony P. (2008). Learning Through Play, Encyclopedia on Early Childhood Development, 1-6.
- UBEC (2013). Training Manual for Early Childhood Care Development Education (ECCDE), Abuja UBEC.
- UNICEF (2018). Learning through Play. <https://www.unicef.org.files>.
- Zimmermann, R. (2006). Universal Design Means Accessibility for One and All Facilities Net, Retrieved from: <http://www.facilitiesnet.com/ada/article/Accessibility-for-One-and-All-557>.
- Zosh, Jennifer, N., et al. (2017). Learning through play: a review of the evidence, LEGO Foundation.