

AVAILABILITY AND ACCESSIBILITY OF TOYS AS DETERMINANTS OF TEACHING EFFECTIVENESS AMONG PRE-PRIMARY SCHOOL TEACHERS IN UYO SENATORIAL DISTRICT OF AKWA IBOM STATE

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Abstract

This paper studied the availability and assessibility of toys as determinants of teaching effectiveness of teachers among pre-primary school teachers in Uyo senatorial district. Two research questions and two hypotheses were formulated as a guide to this study. Expost facto research design was used in carrying out the study. A sample size of 240 pre-primary school pupils was selected using random sampling technique for the study. The researcher developed questionnaire titled "availability and accessibility of toys and teaching effectiveness questionnaire(AATTEQ)" was used to collect data. Data generated were analysed using t-test and pearson product moment correlation coefficient (PPMC). Findings of the study revealed that toys are available and accessed by teachers for use in schools. Teachers who accessed available toys were found to be more effective in teaching than teachers who do not.

Keywords: Availability, Accessibility, Toys, Teaching effectiveness, Expost facto.

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1 Introduction

It is interesting to note that almost everything the growing child needs to learn is developed and practiced in play either with or without toys. This play develops skills in children which include concrete skills, such as counting, motor co-ordination, speech and abstract skills which could be imagination, problem-

solving, planning, and 'learning how to learn'. As Wadmany (2006) puts it, 'Play is of fundamental importance to children, but this is not always appreciated by adults'. Adults see children as whiling away their precious time when playing. Many times, toys used by children when playing look very useless to most

adults. The reason being that to adults the toys are meaningless, but this has not been the perception of experts in early child education. Early child education experts see play especially with toys in a different way. That is why it is strongly recommended that teachers should use toys in teaching their pupils and also encourage their learners in this direction. With this, teachers are said to be effective in their stewardship as teachers.

Driscoll (2009), observed that in addition to being purpose-built for children's play, toys invite play and prolong play. Therefore Children will play longer when suitable play objects are available, and stand to gain the greatest benefits that play has to offer. When toys are made available for children to learn with, teachers efforts in the impartation of the needed knowledge cannot be in vain as good results are always guaranteed. The two most powerful factors related to cognitive development during infancy and the preschool years are the availability of play materials and the quality of the mother's involvement with the child. The availability of toys in infancy is related to the child's Intelligent Quotient at three years of age. Children with access to a variety of toys are assumed to reach higher levels of intellectual achievement, regardless of the children's sex, race, or social class (Sampson, 2005). The availability of toys intended for social play increased social interaction by disabled children in an inclusive preschool (Driscoll, 2009). All types of play, from fantasy to rough-and-tumble, have a crucial role in children's development. And all toys for both indoors and outdoors learning

activities are of great necessity to every child. It is a fact that toys encourage play which is the lens through which children experience their world, and the world of others. If deprived of toys and play, children will suffer both in the present and in the long-term, but with adequate toys and play, children stand the best chance of learning with happiness and in good health and therefore being productive members of society. It is on this notion that this study is carried out to find out the availability and accessibility of toys as determinants of teaching effectiveness among pre-primary school teachers in Uyo Senatorial District.

Statement of the Problem

Over the years, children's interest in learning has been roused through the use of toys. The need for toys in learning has made it very indispensable to every child and teacher if good result must be expected from the learners. Unfortunately, personal observations have revealed that toys are not available in schools for teachers and pupils to use. Equally so, is the fact that the toys may be available but kept under lock and keys, thereby making it impossible for teachers to use them for teaching. In some cases, many teachers either feel reluctant of using the available toys in teaching the pupils or refuse to encourage them in the use of toys for learning. This has made teaching and learning ineffective overtime. It is on this ground that this study is conducted in order to ascertain whether availability and accessibility of toys actually affect teaching effectiveness of pre-primary school teachers (male and female) in Uyo Senatorial District.

Objectives of the Study

The main objective of the study is to assess the effect of availability and accessibility of toys on teaching effectiveness of pre-primary school teachers in Uyo Senatorial District, while specific objectives are as follows:

1. To find out the relationship between availability of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District.
2. To examine the relationship between accessibility of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District.

Research Questions

The following research questions will be answered:

1. What is the relationship between availability of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District?
2. To what extent does accessibility of toys relate with teaching effectiveness of pre-primary school teachers in Uyo Senatorial District?

Hypotheses

The following null hypotheses will be tested:

1. There is no significant relationship between the availability of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District.
2. There is no significant relationship between the accessibility of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District.

Significance of the Study

- The findings of this study will be very useful to pupils, teachers, parents, school heads and government. Pupils will be exposed to the type of toys they need for effective learning and so that will keep them busy for a long period of time since learning without toy is boring. With this their academic performance will be enhanced. Government will see the need to make toys adequately available to all schools. School heads will ensure that toys are accessible enough to all teachers of early childhood for them to use in teaching the pupils.
- The findings of this study will also help teachers of the primary school in knowing the power and usefulness of toys as well as the impact it has not only on their teaching effectiveness but also on student's academic performance and so will appreciate the availability, accessibility and use of toys.
- The findings of the study will also help parents know the right toys for their children and so make sure that they compliment the effort of the school with respect to provision of toys for their children/ward.

Theoretical framework

This work is based on Albert Bandura's Social Learning Theory of 1997 emphasizes the importance of observing and modeling the behaviors, attitudes, and emotional reactions of others. Bandura (1997) states that 'learning would be

exceedingly laborious not to mention hazardous, if people had to rely solely on the effect of their own actions to inform them what to do'.

So social learning theory, explains human behaviour in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influence. The components underlying social learning theory are:

(1) Attention, including modeled events (distinctiveness affective, valence, complexity, prevalence, functional values) and observer characteristics (sensory capacity, arousal level, perceptual set, past reinforcement);

(2) Retention, including symbolic, coding, cognitive organization, symbolic rehearsal, motor rehearsal;

(3) Motor Reproduction; including physical capabilities, self-observation of reproduction, accuracy of feedback; and;

(4) Motivation, including external, vicarious and self - reinforcement (Bandura, 1997).

This is because social learning theory encompasses attention, memory and motivation, it spans both cognitive and behavioral framework (Effiong, Ekpo and Udoh, 2016). It depends largely on the individual attitudes and behaviors (Udosen and Ekpo, 2016).

Therefore, social learning involves a combination of watching, thinking and trying. The implication here is that this teachers will be more effective if and when they involve continuous reciprocal interaction with toys even in the process of teaching

primary school pupils with toys in Uyo Senatorial District and beyond.

Availability of Toys and Teaching Effectiveness of Teachers

Levin and Wadmany (2006) highlighted that teachers "educational beliefs filter their attitude and decisions as well as determining quest to make toys available for teaching. From this perspective, teachers' role is really critical as they are the ones who have to decide whether to use or not the available toys for teaching.

The activation of pupils understanding, the fixing of the acquired knowledge of learner and tend to influence the form of presentation of learned concepts by the learners. However, the truly toys based learning is a form of education that occurs in some cases through the multimedia in class environment. It also consists of physical learning materials issued to pupils or actual face-to-face contact. This type of learning environment has been claimed to promote opportunities to collaborative learning, explorative learning or engage learning. Therefore, teachers are likely to have a significant influence on the introduction of toys in teaching and learning and this is dependent on the adequacy of the needed toys.

Although efforts have been made to ensure that toys are available and used in Nigerian primary schools, the level of uptake is still low. It has been observed by Goshit (2006) that most schools, both private and government, do not pay adequate attention to provision of toys for use by the teachers and pupils. It has become very common these days that pupils are surrounded with computers made in form of toys

to make children appreciate the process for effective learning.

Writing on why toys are important, Bangbade (2004) states that play contributes directly to children's education and development and that it is toys that stimulate and prolong play. According to him, if children are to discover what they are good at, what they like, and what they are like, then they will need variety in their play, and a broad assortment of toys to make it possible. In agreement to the above, Rena (2000) observed that the availability of those toys make teachers perform their duties better than without.

Accessibility of Toys and Teaching Effectiveness of Teachers

Osunade (2003) believes that access to toys is very important as toys are one of the valuable learning resources for pupils looking for sound knowledge. Agommnoh and Nzewi (2003) believed that primary school pupils who are exposed to toy or video-based instructions have significantly better results than those who were taught using the conventional method.

According to Liverpool (2002) while toys have already invaded and dominated education in the developed world, its invasion into the system in most developing world and in Africa in particular has been painfully slow which eventually affect teachers input negatively. But the fact is that toy represents an opportunity to those who can respond to the new paradigm and a threat to those who cannot. Manjulika & Reddy (2002) reported that access to toys varies enormously from continent to continent and from country to country. This is particularly evident

when comparing developed and developing countries –representing a stark digital divide.

Across Africa and most developing countries of the world, Nigeria inclusive there are deluges of challenges confronting the application and management of toys by teachers in training and in the educative process in general. The importance of toy in the educational process is quite evident. Toys hold greater promise in the instructional process compared to conventional methods of teaching. Edge, (2003) believes that toys are capable of activating the senses of sight, hearing and touch of the users. It has the capacity to provide higher interactive potential for user to develop their individual intellectual and creative abilities.

Access to good toys plays a very important role in children's learning and making teachers impart better knowledge to the learners (Udosen and Ekpo, 2016). For instance, playful children are happier, better adjusted, more co-operative, and more popular with their peers than those who play less. Children play longer when a wide variety of toys are available. In one study the availability of toys in infancy was related to the child's Intelligent quotient at 3 years of age. Children with access to a variety of toys are found to reach higher levels of intellectual achievement, regardless of the children's sex, race, or social class. (Elardo, Bradley and Caldwell, 1975). The relation of infants' home environments to mental test performance from 6 to 36 months: A longitudinal analysis, (Bradley, 1985).

The evolution and neurobiology of visual processing, plus the findings of Alexander and Hines (2002) on

male-female differences in toy preferences in nonhuman primates, suggest that an innate sex difference in processing movement, colour or form may contribute to 'adaptive significance' for males and females. There may be a 'biological preparedness' for objects such as toys that prepare the young for a 'masculine' or 'feminine' gender role, which develops more fully when coupled with contemporary gender socialization.

The creative freedom and choice of direction provided by the use of toys in the instructional process empower the pupils to cope with learning problems even without under teacher's interference. This medium is effective for the promotion and attainment of the teachers' objectives in Nigerian schools (Bell-Gam and Iyamu, 2000; Effiong and Ekpo, 2016). Thus, toy-based teaching of any given subject in Nigerian primary schools will help to enhance the intellectual and creative potentials of the pupils. The active involvement of the pupils in the generation of their own knowledge in this process will certainly produce active rather than inert knowledge characteristic of the teacher-dominated pedagogy.

As expressed by Rena (2000), the teacher with access to educational toys experience is always flexible with knowledge of the subject matter and learners, especially the fast and slow learners. He uses a variety of methods and techniques in the course of teaching and learning, and adjusts where necessary. The teachers can establish relationship with the learners considering their intellectual levels and work with them cooperatively so as to contribute effectively to the process of learning.

Research Design

This study adopted an Expost-Facto research design. This design was considered appropriate for the research as it attempted to check the already existing effects of the independent variable (availability, accessibility and use of toys) on the dependent variable (teaching effectiveness of teachers). In this type of design the researcher cannot manipulate the effect but just obtain the effect on already existing natural course of events.

Area of the Study

The area of this study is Uyo Senatorial district. Uyo Senatorial District is made up of nine local government areas such as Ibesikpo Asutan, Uruan, Nsit Ubium, Itu, Uyo, Nsit Ibom, Ibiono, Nsit Atai and Etinan. Uyo Senatorial District falls within the tropical zone with a dominant vegetation of green foliage of trees, shrubs and oil palm tree belt holds the highest density of cash crops in the world. Uyo Senatorial District lies between latitude $4^{\circ} 33'$ and $5^{\circ} 33'$ North of the Equator and Longitudes $7^{\circ} 35'$ and $6^{\circ} 2'$ East of the Greenwich Meridian. Uyo Senatorial District people are predominantly Christians but there are quite a handful of Muslims and pagans.

The traditional predominant occupation include, fishing, farming, tailoring, arts and crafts creation. Neverthe less, presently the majority of the population are in white collar jobs. Petroleum resources, clay, palm trees, mahogany, iroko and other forest resources, coconut limestone kaolin, gas, raffia palm and more abound in this area.

Population of the Study

The population of this study consists of all pre-primary schools pupils in Uyo Senatorial District.

Sample and Sampling Technique

The sample for this study consisted of 240 respondents who were obtained through simple random sampling technique where 40 pre-primary school pupils were random selected from 6 schools each.

Instrumentation

The instrument used for this study was questionnaire developed by me. The questionnaire is tagged " (AVAILABILITY and ACCESSIBILITY OF TOYS AND TEACHING EFFECTIVENESS QUESTIONNAIRE (AATTEQ))" was used to collect data on the independent variables presented in both sections A and B of the questionnaire. While section A measured the demographic data of the respondents, section B measured the independent and the dependent variables such as the availability and accessibility of toys and teaching effectiveness of teachers. For analytical purpose, the researcher developed a key which every information received from the respondents were assigned values for easy analysis. The items were classified according to the variables measured. Items in the instrument were scored independently. For each sub-variable, scores were obtained by summing up the responses. Each of the respondents received a separate row of data which was used for data analysis. The responses to the items in the questionnaire was scored on a four-point rating such as 'strongly agree (4 points), agree (3 points), disagree (2 points) and strongly disagree (1 point) for positively

worded items and vice versa for negatively worded items.

Reliability of the Instrument

In other to confirm the reliability of the instrument, a test-re-test method was used on 30 pre primary school pupils who were not part of the school under study. Treasure child nursery and primary school Awi-Akamkpa in Cross River State was the trial school. A coefficient of 0.79 was obtained. This value was enough to confirm to the reliability of the instrument.

Method of Data Analysis

The data obtained were analysed using Pearson Product Moment Correlation coefficient and independent t-test method to test the hypotheses. All hypotheses were tested at 0.5 level of significance.

Research Question One

The research question sought to find out the relationship between availability of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District. In order to answer the research question, descriptive analysis was performed on the data collected as shown in table 1.

Table 1 presents the result of the descriptive statistics of the relationship between availability of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District. The two variables were observed to have strong to perfect relationship at 88%. The arithmetic mean for availability of toys 14.73 was observed to be greater than the expected mean score of 12.5. In addition to that the

arithmetic mean as regards teaching effectiveness (28.51) was observed to be higher than the expected mean score of 25. The result therefore means that there is remarkable relationship between availability of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District.

accessibility of toys relate with teaching effectiveness of pre-primary school teachers in Uyo Senatorial District. In order to answer the research question, descriptive analysis was performed on the data collected as shown in table 2.

Research Question Two

The research question sought to find out the extent in which

Table 1

Descriptive analysis of the relationship between availability of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District

Variable	N	Arithmetic mean	Expected mean	R	Remarks
Availability of toys	240	14.73	12.5	0.88*	*Strong to perfect relationship
Teaching effectiveness		28.51	25		

Source: Field Survey

Table 2

Descriptive analysis of the extent to which accessibility of toys relate with teaching effectiveness of pre-primary school teachers in Uyo Senatorial District

Variable	N	Arithmetic mean	Expected mean	R	Remarks
Accessibility of toys	240	13.21	12.5	0.89*	*Strong to perfect relationship

Teaching effectiveness		28.51	25		
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Source: Field Survey

Table 2 presents the result of the descriptive statistics of the extent in which accessibility of toys relate with teaching effectiveness of pre-primary school teachers in Uyo Senatorial District. The two variables were observed to have strong to perfect relationship at 89%. The arithmetic mean for accessibility of toy 13.21 was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards teaching effectiveness 28.51 was observed to be higher than the expected mean score of 25. The result therefore means that there is remarkable relationship between accessibility of toys and teaching effectiveness of

pre-primary school teachers in Uyo Senatorial District.

Hypothesis One

The null hypothesis states that there is no significant relationship between availability of toys and teaching effectiveness of teachers in Uyo senatorial district. Two variables were identified;

1. Availability of toys as the independent variable
2. Teaching effectiveness as the dependent variable

Pearson Product Moment Correlation analysis was then used to analyze the data in order to determine the relationship between the two variables (see table 5).

TABLE 3
Pearson Product Moment Correlation Analysis of the relationship between the availability of toy and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District.

Variable	Σy	Σy^2	Σx	Σx^2	Σxy	r
Availability of toys (X)			3536	53272		
Teaching effectiveness (Y)					103153	88*
			6864	200568		

***Significant at 0.05 level; df =238; N =240; critical r-value = 0.139**

Table 3 presents the obtained r-value as (0.88). This value was tested for significance by comparing it with the critical r-value (0.139) at 0.05 levels of significance with 238 degree of freedom. The obtained r-value (0.88) was greater than the critical r-value (0.139). Hence, the null hypothesis was rejected. The result therefore means that there is significant relationship between the availability of toy and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District.

Hypothesis Two

Null hypothesis: there is no significant relationship between the accessibility of toy and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District. In order to test the hypothesis, two variables were identified as follows:-

1. Accessibility of toy as the independent variable

2. Teaching effectiveness as the dependent variable.

Pearson Product Moment Correlation analysis was then used to analyze the data in order to determine the relationship between the two variables (see table 3). Table 4 presents the obtained r-value as (0.89). This value was tested for significance by comparing it with the critical r-value (0.139) at 0.05 levels with 238 degree of freedom. The obtained r-value (0.89) was greater than the critical r-value (0.139). Hence, the null hypothesis was rejected. The result therefore means that there is significant relationship between the accessibility of toy and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District

TABLE 4

Pearson Product Moment Correlation Analysis of the relationship between the accessibility of toy and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District

Variable	Σx	Σx^2	Σy	Σy^2	Σxy	r
Accessibility of toy (x)	3171	42849			92529	0.89*
Teaching effectiveness (y)	6864	200568				

***Significant at 0.05 level; df =238; N =240; critical r-value = 0.139**

Discussion of findings

The result of the data analysis in table 3 which sought to find the relationship between the availability of

toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District, was significant due to the fact that the obtained r-value

(0.88) was greater than the critical r-value (0.139) at 0.05 level with 238 degree of freedom. This result implies that there is significant relationship between the availability of toy and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District. The result is in agreement with the research findings of Goshit (2006), who observed that most schools, both private and government, do not pay adequate attention to provision of toys for use by the teachers and pupils. The result of the findings also agreed with the findings of Levin and Wadmany (2006), who highlighted that teachers "educational beliefs filter their attitude and decisions as well as determining quest to make toys available for teaching. The result of the analysis caused the null hypotheses to be rejected while the alternative one was retained.

The result of the data analysis in table 4 which sought to find the relationship between the accessibility of toy and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District, was significant due to the fact that the obtained r-value (0.89) was greater than the critical r-value (0.139) at 0.05 level with 238 degree of freedom. This result implies that there is significant relationship between the accessibility of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District. The result is in agreement with the research findings of Liverpool (2002) who observed that while toy has already invaded and dominated education in the developed world, its invasion into the system in most developing world and in Africa in particular has been painfully slow which eventually affect teachers input

negatively. The result of the findings also agreed with the findings of Agommnoh and Nzewi (2003) who believed that primary school pupils who are exposed to toy or video-based instructions have significantly better results than those who were taught using the conventional method. The result of the analysis caused the null hypotheses to be rejected while the alternative one was retained.

Conclusions

The following conclusions were drawn based on the findings of study.

1. Pre-primary school teachers in Uyo Senatorial District are effective in teaching with toys.
2. Toys are adequately available, accessible and effectively use by teachers in teaching pupils in Uyo Senatorial District.
3. There is significant relationship between the availability of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District.
4. There is significant relationship between the accessibility of toys and teaching effectiveness of pre-primary school teachers in Uyo Senatorial District.

Recommendations

Based on the findings of the research, the following recommendations are necessary:

1. Government and school authorities should make sure adequate toys are available for teachers in order to teach pupils effectively.
2. The toys should also be accessible to all teachers for them to use without limitations

3. Teachers should ensure that they use the toys and teach their pupils all times.

4. Teachers can also make improvised toys when schools can not provide the readymade ones.

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