

PLAY MATERIALS AND TEACHERS' KNOWLEDGE OF GOALS OF PLAY IN PRE-PRIMARY SCHOOLS IN UYO URBAN, AKWA IBOM STATE.

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Abstract

The research study investigated play materials and teachers' knowledge of goals of play activities in pre-primary schools in Uyo Urban of Akwa Ibom State. Three research questions guided the study. The researchers adopted the survey design. The population of the study consisted of all the 685 teachers in all the 18 pre-primary schools in Uyo Urban. The sample of the study consisted of 60 teachers randomly drawn from the pre-primary schools in Uyo Urban of Akwa Ibom State. Frequency, percentage and rank order were used to analyze and interpret the data. The findings on the play materials showed pre-primary schools in Uyo Urban have materials for both the outdoor and indoor activities but their availability varies from school to school. The findings also revealed that teachers are knowledgeable about the role of play activities in children's creative and cognitive development especially on the physical development. This seems to suggest that play activities are not mutually exclusive; hence children's development should be considered holistically through play activities. The following recommendations among others were made, flexible outdoor play components needed by adding equipment and materials capitalizing on the natural features of the play space, creating interest area and active time block each day should be reserved for activities from which the children can select and suggestions for further research were made on the basis of the findings.

Keywords: Play, cognitive development, creative development, pre-primary education

Introduction

Teachers' task in working with young children is to provide an environment in which children's enthusiasm is nurtured and sustained rather than subdued or even destroyed. This is why schools will continue to emphasize the importance of engaging in developmentally appropriate practice. Young children are eager to learn (Essa, 2011). This is awesome responsibility on the shoulders of early childhood educators that can be met through careful and sensitive study and understanding of the characteristics and needs of young children. One of the commonest things among all children is the need to play which serves as a means of learning about and making sense of the world. But more than that, play is essential to all aspects of children's development. Arnold Gesell (1880-1961) cited in Essa (2011) underscores that, play is an important vehicle for developing self-regulation, as well as for promoting language, cognition and social competence. Play promotes mastery as children practice skills; it furthers cognitive development as thinking

abilities are stretched; it involves language, encouraging new uses; it involves physical activity; it helps children work through emotions; its inventive nature makes it creative; and it is often a socializing event. In no way is play a trivial pursuit, but rather it is a serious undertaking necessary to healthy development for all children. Play is the way children come to understand the world (Steglin, 2005).

Play benefits children by allowing them “to use their creativity while developing their imagination, dexterity, physical, cognitive and emotional strength” (American Academy of pediatrics, 2007). Children learn about their world through play when they can freely explore, practice adult roles, master their fears, and develop confidence and new competencies. The importance of play in pre-primary school education is also acknowledged in Nigeria’s National Policy on Education as it states that Early Childhood Care, Development and Education shall among its purposes be to “inculcate in the child the spirit of enquiry and creativity through the exploration of nature, the environment, art, music and the use of toys; develop a sense of cooperation and team spirits; and teach the rudiments of numbers, letters, colours, shapes among others through play; (FRN, 2013).

Government plans to achieve the objectives of pre-primary school education by ensuring that the curriculum of teacher education is oriented towards play-way method as well as make provision in teacher education programmed for specialization in early childhood care and education and for retraining of teachers (FRN, 2013). It is important for teachers to be aware of the different types of play and to recognize that children develop increasing social and cognitive skills as they progress. Infants need appropriate objects, space and time for observation, manipulation, and exploration, which helps them to learn about the properties of their environment. Pre-scholars need sizable blocks of time to engage in self-selected play and many open ended materials that lend themselves to exploration and mastery for instance, clay, blocks, sand and water. In addition, time, space, and materials that lend themselves to social play should always be available, including dolls, dress-up clothes, and blocks. School-age children, while appreciating such open-ended materials, also enjoy some simple organized games with rules (Essa, 2011). A wealth of research supports the value of play (Steglin, 2005). Without the opportunities for play and an environment that supports it, children’s learning is limited. Early childhood programme that promotes and supports learning increase and enhance children’s opportunities for success in school and life (Morrison, 2001).

All children and young people need to play. The impulse to play is innate. Play is a biological, psychological, and social necessity, and is fundamental to the healthy development wellbeing of individuals and communities (Power, 2000). Play is a process that is freely chosen, personally directed and intrinsically motivated. Play is simply about having fun! (Ginsburg, 2007).

Stuart Brown, founder of the National Institute for play, opines that play is anything that spontaneously is done for its own sake but appears purposeless, produces pleasure and joy, leads one to the next stage of mastery (Tippett, 2008). Jeanine Quелlette refers to play as, “activity that is unencumbered by adult direction, and does not depend on manufactured items or rules imposed by someone other than the kids themselves” (Quелlette, 2007). When children play, they are actively engaged in activities they have freely chosen, that is, they are self-direct and motivated from within. Play is free from time, space, and rule constraints and reward by inherent in play rather than dependent on winning.

Playing with toys can be pivotal to a child’s development and toys that children enjoy playing with at different ages can assist in specific areas of development, for example, cognitive and language development. Outdoor play has obvious benefits for increasing levels of physical activity as well as other areas of a child’s wellbeing and development including the opportunity to develop an understanding and respect for the natural world. Playtime at school could offer children a unique opportunity to advance their interacting skills and social cognitive resources through informal self-directed play. Play is vital part of children’s development and is fundamental for every child (Ginsburg, 2006). Play is so important to children’s development that the United Nations High Commission for Human Rights (1989) recognizes it as a basic right of every child.

Many experts agree that play provides the foundation for learning and later academic success. Research demonstrates the importance of child-initiated play in the development of language and literacy skills (Boddrova and Leong, 2007). A cross-national longitudinal study found that children’s language performance at age seven was significantly higher when teachers had allowed children to choose their own activities at age four (Montie, Xiang and Swhweinhart, 2007). Developmental psychologists identify four types of child initiated play: exploratory play, constructive play, dramatic play and for older children, games with rules (Spiegel, 2008).

Guidelines from the Association for childhood Education International (ACEI) and the National Association for the Education of young children (NAEYC), two respected professional

associations, affirm that play is essential for all children's healthy development and learning across all ages, domains and cultures (Essa, 2011). Play does the following:

- Enables children to make sense of their world.
- Develops social and cultural understanding.
- Allows children to express their thoughts and feelings.
- Fastens flexible and divergent thinking
- Provides opportunities to meet and solve real problems
- Develops language and literacy skills and concepts

(Isenberg and Jalongo, 2010).

Children's growing sense of independence is supported when they can confidently and competently use equipment and when space and materials are arranged so they can see what is available and make autonomous choice. Children are more productively involved in activities when the purpose of classroom spaces is clearly defined and when play materials are developmentally appropriate (Shepherd and Eaton, 1997). A variety of interesting and versatile equipment should be available in the outdoor play yard. Such an area should provide activities and equipment that add opportunities for different movement and sensory experiences. Gentle swings and slides, safe places to crawl and feel new surfaces, places to push, pull and roll small toys and opportunity for other action activities should be available outside for the nursery school pupils (Wellhousen, 2002).

The early childhood setting should provide an environment in which these traits are encouraged and valued. Creativity has to be nurtured; it does not happen on its own. The teacher plays an important role in fostering creativity by providing a variety of materials and encouraging imaginative use of them. When children are allowed creative expression, each will produce a different outcome (Drew and Rankin, 2004). It is important in setting an appropriate climate for creativity to provide enough time for children to get involved in and complete their projects. Children need to have ample time block during the day in which they can explore and try out their ideas.

Creativity is, in fact, a part of cognitive development. As children explore and manipulate things, they try out new combinations of the things they already know about. By putting together what they know in new ways, they are being creative. The exploration of infants and toddlers is the prelude to creativity (Gonzalez- Mena and Eyer, 2007). In the infant and toddler programme

of Reggio Emilia in Italy, each facility includes well-stocked art studio and art teacher. In addition, each classroom incorporates an art centre with a range of materials for exploration, and creative construction (Gandini, 2005). By physical manipulating and changing objects, the child constructs knowledge about the objects and their relationships. This is an important point. Knowledge is not something that is “poured” into children by some external source, such as the teacher, but something that the children have to construct for themselves. This is why Piaget’s theory is also called, a constructivist theory (Essa, 2011).

Children’s cognitive development is best promoted when they are in a safe, loving environment where their basic needs are met. Furthermore, such environment must be rich in appropriate stimuli and sensory experiences that help to explore and learn about their world. Science supports many of the intuitions about the benefits of play. Several experimental studies show that school pupils pay more attention to academics after they have had a recess an unstructured break in which children are to play without direction from adults (Pellegrini and Holmes, 2006). Studies also indicate a link between play particularly symbolic, pretend play and the development of language. For example, psychologist Edward Fisher analyzed 46 published studies of the cognitive benefits of play and found that “sociodramatic play” what happens when children pretend together results in improved performances in both cognitive linguistic and affective domains.

Constructive and imaginative play has been identified as the most important for cognitive development (Health Council of the Netherlands, 2004). In early childhood it is important to support and encourage self –directed play activities even these appear meaningless to adults. Allowing a child time and freedom to complete self-directed play activities to their own satisfaction supports the child’s ability to concentrate (Elkind, 2007). Children with access to a variety of toys are found to reach higher levels of intellectual achievement, regardless of the children’s gender, race or social class. Play reduces the tension that often comes with having to achieve or needing to learn and in play adults do not interfere and children relax. In school settings play helps children adjust to new environment as well as giving them basis for extending their learning (Ginsburg, 2007). All in all, the foregoing observations show the importance of play in the development of the child. But without an empirical assessment of teachers’ knowledge regarding the development goals of play in pre-primary school education, there exists little basis for improving play facilities in per-primary schools. Teachers would have great reluctance to

change the status of their perception of play in educational system without adequate proof of need. It was against the background of helping teachers understand the developmental roles of play in pre-primary school education that this study identified play materials and teachers' knowledge of goals of play activities in pre-primary schools as the area of concern for investigation.

Statement of the Problem

Despite the importance of play in the developmental domains of children, many problems seem to beset the goals considering the availability of play materials and teachers' perception of play activities. Some parents and teachers perceive play as a trivial pursuit. Recess, creative activities and physical education have been decreased or eliminated for many children as schools face the pressure of meeting children's academic requirements in respect of literacy, numeracy, and the ability to communicate effectively. Test-taking rather than creative problem solving using play material has become the focus of educational institutions (Essa, 2011). In addition, many parents put pressure on their children at early ages to prepare for the future by spending more time on academic and less on free play (Morrison, 2001).

Teachers of young children often neglect play as part of children's development. Uninhibited gross motor activity is most likely to occur during outdoor play. The outdoor area and time children spend outdoors should be integral parts of the early childhood programme because of their many inherent values. Outdoor play is not just a time for children to expend excess energy while teachers take break. Well-planned outdoor activities can meet a range of developmental and educational objectives (Essa, 2011). But without empirical studies to find out teachers' knowledge of goals of play activities in pre-primary school education, the educational process of improving children's developmental domains the cognitive and creative through play may be misdirected or incomplete. Hence, the need to investigate play materials and teachers' knowledge of goals of play activities in pre-primary schools in Uyo Urban of Akwa Ibom State.

Purpose of the Study

The study investigated play materials and teachers' knowledge of goals of play activities in pre-primary schools in Uyo Urban. Specifically, the study aimed at the following objectives:

1. To assess the availability of play materials for outdoor and indoor activities in pre-primary schools in Uyo Urban of Akwa Ibom State.

2. To ascertain teachers' knowledge of children's creative development through play activities.
3. To determine teachers' knowledge of children's cognitive development through play activities in pre-primary schools

Research Questions

The following research questions were formulated to guide the study

1. What types of play materials are available for outdoor and indoor activities in pre-primary schools in Uyo Urban of Akwa Ibom State?
2. To what extent are teachers knowledgeable about children's creative development through play activities in pre-primary schools?
3. To what extent are teachers knowledgeable about children's cognitive development through play activities in pre-primary schools?

Method

This study was conducted in Uyo Local Government Area of Akwa Ibom State. Three research questions guided the study. The researchers adopted the survey design. The population of the study consisted of all the 685 teachers in all the 18 pre-primary schools in Uyo Urban. The sample of the study consisted of 60 teachers randomly drawn from the pre-primary schools in Uyo Urban of Akwa Ibom State. The respondents were randomly drawn from pre-primary schools on the basis of six respondents from each of the 10 sampled pre-primary schools.

A researchers developed a questionnaire titled, "Developmentally Appropriate Practice Scale (DAPS)" was used to obtain information from the respondents. It is a 3 section questionnaire. Section A of the questionnaire has items on personal data of the respondents regarding name of school, gender of the respondent, and teaching qualification. Section B of the instrument deals with play facilities availability in pre-primary schools while section C which highlights the play activities for pre-primary schools is structured in a 4point scale (Strongly Agree, Agree, Disagree, Undecided and Strongly Disagree) to elicit information from the respondents regarding their views on play activities pupils perform in pre-primary schools in respect of creative and cognitive domains development. The items in the questionnaire were validated by 3 experts.

In order to establish the reliability of the instruments Section C of the DAPS, the instrument was pre-tested on randomly selected 30 pre-primary/primary school teachers who were not

participants in the main study. Split-half method and Spearman-Brown formula (Johnson and Christensen, 2004) was used to determine the internal consistency of the items on each of the two developmental domain variables (creative and cognitive) selected for the study. In this method, the instrument was administered once to the respondents. The research instrument, “Developmentally Appropriate Practices Scale” was administered to the respondents by the researchers in each of the sampled schools by courtesy of the school head teacher. Descriptive statistics (frequency, percentage and rank order) were used to analyze the collected data.

Results

Research Question 1: What types of play materials are available for outdoor and indoor activities in pre-primary schools in Uyo Urban of Akwa Ibom State?

Table 1a: Frequency counts, percentage and rank order of outdoor play materials in pre-primary schools in Uyo Urban by teachers (N=60).

| Items | outdoor play materials | Availability | | Not Available | |
|-------|------------------------|--------------|-------|---------------|-------|
| | | f | % | f | % |
| 1. | Swings | 36 | 60.00 | 24 | 40.00 |
| 2. | Seesaw | 24 | 40.00 | 36 | 60.00 |
| 3. | Merry-go-round | 32 | 53.33 | 28 | 46.67 |
| 4. | Climbing aids | 36 | 60.00 | 24 | 40.00 |
| 5. | Ladder and tunnel | 25 | 41.67 | 35 | 58.33 |
| 6. | Slides | 23 | 38.33 | 37 | 61.67 |
| 7. | Balls | 53 | 88.33 | 7 | 11.67 |
| 8. | Skipping ropes | 38 | 63.33 | 22 | 36.67 |

The data in Table 1a show that among the eight types of outdoor play materials identified for assessment by 60 teachers in terms of availability, 53 teachers (88.33%) ticked “balls”, as the most available play material followed by “skipping ropes” identified by 38 teachers (63.33%) while “swings” and “climbing aids” were respectively ticked by 36 teachers (60.00%). The least available type of play material is “slides” as was identified by only 23 teachers (38.33%). The implication of the finding is that there are different types of outdoor play materials in pre-primary schools in Uyo Urban but their availability varies from school to school with the most available type being “balls” as against the least available outdoor play material type being “slides” as identified by the respondents (88.33% vs. 38.33%).

Table 1b: Frequency counts, percentage and rank order of available types of indoor play materials in pre-primary schools in Uyo Urban by teachers (N=60)

| Items | Indoor Play materials | Available | | Not Available | |
|-------|---|-----------|-------|---------------|-------|
| | | f | % | f | % |
| 1. | Nature Corner with (e.g. stones, gravels, shells, bones, etc). | 37 | 61.67 | 23 | 38.33 |
| 2. | Creative Art Corner with (e.g. drums, flutes, rattles, blocks, puzzles, bell, saw). | 46 | 76.67 | 14 | 23.33 |
| 3. | Mathematics Corner with (e.g. abacus, shapes, charts, bottle caps, counting sticks, clock etc). | 55 | 91.67 | 5 | 8.33 |
| 4. | Science Corner with (e.g. aquarium, charts showing human skeleton, types of fruits, electrical appliances, lengths of objects, teeth and heart structure, etc). | 47 | 78.33 | 13 | 21.67 |
| 5. | Shopping Corner with (e.g. toys, crayons, flowers, spoons, plates, jumbo, pens, phones tricycle, etc). | 47 | 78.33 | 13 | 21.67 |
| 6. | Language Corner with (e.g. desktop computer, mobile phone, radio, alphabet cards, letters of the alphabet chart, picture books, etc). | 42 | 70.00 | 18 | 30.00 |
| 7. | Water-Play Corner with (e.g. water, cups, funnel, jerry can, basin, bucket, bowel, plates and pouring containers etc). | 34 | 56.67 | 26 | 43.33 |
| 8. | Sand-Play Corner with (e.g. containers, shovels, spoons, toy trucks etc). | 34 | 56.67 | 26 | 43.33 |

The data in Table 1b indicate that among the eight types of indoor play materials highlighted for information in respect of their availability by 60 teachers, 55 teachers (92.67%) identified “mathematics corner” and its equipment as the most available play corner, jointly followed by “science” and “shopping” corners as were ticked by 47 teachers (78.33%) respectively. The least available type of indoor play materials are “water-play” and “sand-play” corners which were identified by 34 teachers (56.67%) respectively for each of the two types of play materials. The above findings show that there are provisions for different types of materials regarding indoor play activities in pre-primary schools in Uyo Urban. But the availability of the indoor play materials vary from school to school with the most available types being the “mathematics corner” as against the least available indoor play material types being “water-play” and “sand-play” corners as assessed by the respondents (91.67% vs. 56.67%).

Research Question 2: To what extent are teachers knowledgeable about children’s creative development through play activities in pre-primary schools?

To answer the Research Question 2, respondents’ ratings of the creative developmentally appropriate practices based on a 5-point scale were collapsed into three groups of “Agree”, “Undecided” and “Disagree”.

Table 2: Respondents ratings on their knowledge about children’s creative development through play activities in pre-primary schools.

| Items | Statements | Agree | | Undecided | | Disagree | |
|----------------------------|--|--------------|-------|--------------|-------|-------------|-------|
| | | f | % | f | % | f | % |
| 1. | Play materials which can lend themselves to various uses help in children’s creativity development. | 53 | 88.33 | 5 | 8.33 | 2 | 3.33 |
| 2. | A variety of art materials, blocks, puppets, musical instruments and multipurpose outdoor equipment can support creativity among children. | 49 | 81.67 | 9 | 15.00 | 2 | 3.33 |
| 3. | Books calling for colorings “within the lines” hinder creative expression of nursery school children. | 27 | 45.00 | 9 | 15.00 | 24 | 40.00 |
| 4. | Availability of materials such as crayons, Marking pens, pencils and chalk such Become the favorite materials for drawing. | 53 | 88.33 | 6 | 10.00 | 1 | 1.67 |
| 5. | Children playing drums and singing songs are probably the most common music activity in early childhood education. | 50 | 83.33 | 7 | 11.67 | 3 | 5.00 |
| 6. | Children putting together what they know in new ways express their development of creativity. | 53 | 88.33 | 6 | 10.00 | 1 | 1.67 |
| Average % responses | | 79.17 | | 11.67 | | 9.19 | |

The responses to the statements regarding children’s creative development as indicate in Table 2 show that items 1,4 and 6 respectively were positively endorsed by 88.33% of the respondents, while 83.33% “agreed” with item 5 and 81.67% “agreed” that item 2 statement is an aspect in children’s creative development practice. Less than half of the respondents (45.00%) indicate that item 3 was a creative developmental practice statement. The average percentage responses are: “agreed” (79.17%), “undecided” (11.67%) and “disagreed” (9.16%) respectively.

Research Question 3: How knowledgeable are teachers in children’s cognitive development by play activities in pre-primary schools?

In order to answer the Research Question 3, respondents’ responses to the 5-point scale items were merged into three groups thus: “Agree”, “Undecided” and “Disagree”. Frequency, percentage and rank order statistics were employed to analyze the data as show in Table 3.

Table 3: Respondents rating on their knowledge in children’s cognitive development by play activities in pre-primary schools.

| Items | Statements | Agree | | Undecided | | Disagree | |
|-------|---|--------------|-------|--------------|-------|-------------|-------|
| | | f | % | f | % | f | % |
| 1. | Comparing, grouping, counting, matching or placing objects in logical order encourage and enhance mathematics concepts. | 53 | 88.33 | 5 | 8.33 | 2 | 3.33 |
| 2. | Children learning to throw the ball hard so as to make it go further (force) and rolling objects faster down a steep incline (gravity) are acquiring the scientific Vocabulary of physics. | 45 | 75.00 | 11 | 18.33 | 4 | 6.67 |
| 3. | When children observe that soap and water result in bubbles, water added to sand makes sand moldable while sugar or salt becomes invisible when stirred into water, they are dealing with the scientific vocabulary of chemistry. | 46 | 76.67 | 12 | 20.00 | 2 | 3.33 |
| 4. | The use of puppets as actors is another way to present stories for children. | 47 | 78.33 | 7 | 11.67 | 6 | 10.00 |
| 5. | Charts, lists, labels and notice boards that surround children in the classroom contribute to print awareness and literacy development. | 47 | 78.33 | 8 | 13.33 | 5 | 8.33 |
| 6. | Books with simple pictures and few words are suitable for supporting language literacy development in nursery class. | 48 | 80.00 | 11 | 18.33 | 1 | 1.67 |
| | | 79.44 | | 16.67 | | 5.56 | |

The data in Table 3 show that 88.33% of the participants in the study “agree” that item 1 supports children’s cognitive development, while 80.00% lent positive support to item 6 and 78.33% “agreed” with items 4 and 5 respectively. It is interesting to observe that 76.67 of the respondents in the study “agreed” that item 5 has a part to play in the cognitive development appropriate practice for children. Seventy-five percent of the respondents (75.00%) indicate that item 2 was a

play activity statement about children's cognitive development. The average percentage responses are: "agreed" (79.44%), "undecided" (16.67%) and "disagreed" (5.56%) respectively.

Discussion

The finding in Table 1 revealed that there are different types of outdoor play materials which include skipping ropes, climbing aids, balls, slides, swings. Their availability varies from school to school. This finding is in agreement with Wellhousen (2002) which opines that a variety of interesting and versatile equipment should be available in the pre-primary school environment. There are a number of reasons that can be offered to explain the present study. The pre-primary school setting should provide an environment where certain traits are encouraged and nurtured. This is also in assonance with the opinion of Essa (2011) that well stocked pre-primary school programme should be full of materials that have multiple uses for optimum development of a child.

Furthermore, the finding in Table 2 revealed that there is a high level of teachers' knowledge of children's development through play. The finding is consistent with that of Essa (2011) who states that by physically manipulating objects, pupils construct knowledge about objects and their relationships. Many reasons could be advanced for the findings of this study. When children constantly use materials like building blocks, they tend to build the spirit of creativity.

Finding in Table 3 revealed that 83% of the teachers agree that children's cognitive development is enhanced through play. The finding is in consonant with the finding of Elkin (2007) that allowing a child time and freedom to complete self-directed play activities to their own satisfaction support the child's ability to concentrate. To explain this, when children are allowed by the teachers to freely manipulate objects, children learn vocabulary, concepts, problem solving which are indices of cognitive development in children.

Conclusion

The study investigated play materials and teachers' knowledge of goals of play activities in pre-primary schools in Uyo Urban. It was concluded that there are different types of play materials available for outdoor and indoor activities in pre-primary schools in Uyo Urban of Akwa Ibom State. Play materials are available for both indoor and outdoor activities in pre-primary schools and the materials vary from school to school in terms of quantity and types. Teachers are

quite knowledgeable about the developmental role of play activities in children's creative and cognitive development.

Recommendations

In the light of the findings made in this study, the following recommendations are made for the effective management of play materials and children's play activities.

1. Give feedback – As children interact with materials, they should receive feedback on the success of their actions.
2. Multipurpose – Materials or combination of materials should suggest many possibilities for play. Children's problem solving skills and imaginations will be enhanced by multipurpose materials.
3. Active Time block each day should be reserved for activities from which the children can select.
4. Early Childhood Educators have roles in promoting play.
5. Flexible outdoor play components needed by adding equipment and materials capitalizing on the natural features of the play space, and creating interest area.

REFERENCES

- American Academy of Pediatrics (2007). *The importance of play in promoting healthy child development*. Online at www.pediatrics.org/cgi/doi/10.1542/peds.2006-2697.
- Badrova, E., & Leong, D. V. (2007). *Tools of the mind: The Vygotskian approach to early childhood education*. Columbus, Ohio: Pearson.
- Drew, W. F. & Rankin, B. (2004). Promoting creativity for life using open-ended materials. *Young children*, 59 (4). 38-45.
- Elkind, D. (2007). *The power of play: How spontaneous, imaginative activities lead to happier, healthier children*. Cambridge, MA: Da Capo Press.
- Essa, E. L. (2011). *Introducing to early childhood education* (6th ed.) Belmont, CA: Wadsworth Cengage Learning.
- Essa, E. L. & Burnham, M. (2009). *Information our practice: Useful research on young children's development*. Washinton. DC. NAEYC.
- Federal Republic of Nigeria (2013). *National Policy on Education* (6th ed.). Lagos: NERDC Press.
- Gandini, L. (2005). *From the beginning of the atelier to materials as language*. New York: Teachers College Press, Columbia University.

- Ginsburg, K. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119: 189-191.
- Gonzalez-Mena, J. & Eyer, D. W. (2007). *Infants, toddlers and caregivers*. Mountain View, CA: Mayfield.
- Health Council of Netherlands (2004). *Nature and health: The influence of nature on social, psychological and physical well-being*. <http://www.forhealth.fi/pmqiki/docs/dutch-health-council-review>. Pdf. (Accessed December, 2010).
- Isenberg, P. & Jalongo, M. (2010). *Creative expression and play in early childhood curriculum*. Englewood Cliffs, NJ: Prentice-Hall.
- Johnson, B & Christensen, L. (2004). *Educational Research: Qualitative, Quantitative and Mixed Approaches*. New York: Pearson Education Inc.
- Montie, J., Xiang, Z., & Schweinhart, L. (2007). *The role of preschool experience in children's development: Longitudinal findings from 10 countries*. Ypsilanti, MI: High Scope Press.
- Morrison, G. S. (2001). *Early childhood education today (8th ed.)* Upper Saddle River, NJ: Merrill Prentice Hall.
- Pellegrini, A. D. & Holmes, R. M. (2006). *The role of recess in primary school* Oxford: Oxford University Press.
- Power, T. (2000). *Play and exploration in children and animals*. London: Lawrence Erlbaum Associates.
- Quellette, J. (2007). The death and life of American imagination. *The Rake Magazine*. <http://www.secretsofthecity.com/magazine/death-and-life-american-imagination>. Retrieved 28-7-2009.
- Saracho, O. N. & Spodek, B. (2007). *Theories of socialization and social development*. Greenwich, CT: Information Age Publishers.
- Shepherd, W., & Eaton, J. (1997). Creating environments that intrigue and delight children and adults. *Child Care Information Exchange*, 117:42-47.
- Spiege, A. (2008). *Creative play makes for kids in control*. <http://www.npr.org/templates/story.phb>. Retrieved 28-2-2015.
- Tippet, K. (2008). *Play, spirit and character: Speaking of faith*. Minnesota: American Public Media.
- United Nations High Commission for Human Rights (1989). *Convention on the rights of the Child (Resolution 44/25)*. New York: Author.
- Wellhousen, K. (2003). *Outdoor play everyday: innovative play concepts for early childhood*. Clifton Park, New York: Thompson Delmar Learning.

CHALLENGES OF GAME-BASED LEARNING STRATEGY IN TEACHING MATHEMATICS IN PRIMARY SCHOOLS IN NKANU WEST LOCAL GOVERNMENT AREA OF ENUGU STATE

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Abstract

The study was designed to determine the challenges of game-based learning strategy in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State. Three research questions guided the study. Descriptive survey research design was adopted. The population of the study comprised of 665 primary school teachers in 54 public primary schools in Nkanu West Local Government Area of Enugu State. A sample of 200 primary school teachers was used for the study using simple random sampling technique. The researchers developed an instrument titled “Challenges of Game-Based Learning Strategy in Teaching Mathematics in Primary School (CG-BLSTMPs)” Questionnaire. The instrument was validated by three experts. Cronbach Alpha was used to measure the internal consistency and co-efficient of 0.92, 0.77 and 0.79 were obtained with an overall co-efficient of 0.83. Data collected were analyzed using weighted mean to answer the research questions and standard deviation to determine the homogeneity or otherwise of the respondents' views. Findings of study revealed that teachers do not use the available games such as circle race game, binary tic tac game geo-board game among others to teach mathematics in primary schools. Findings of the study also revealed that teachers are faced with challenges of using game-based to teach mathematics which includes; lack of teacher's knowledge or proficiencies on the use of game, inadequate time for instruction of using game and large class size among others. The study also disclosed that adequate spaces for game should be provided to enable teachers use game in teaching mathematics and gaming materials such as software, hardware, slide, and boards among others should be made available for teachers to use in teaching mathematics among others. Based on the findings, it was recommended among others that Enugu State Government in conjunction with Parent Teachers Association (PTA) should provide adequate and functional game materials and infrastructural facilities in primary schools in order to enable teachers use diversify strategy to teach mathematics to pupils for better understanding which will stimulate effective teaching and learning process.

Key words: Primary Education, Mathematics, Teaching Strategy and Game-Based

Introduction

Primary education is the first formal schooling system a child is exposed to after home education. It welcomes the child to the process of socialization under the tutelage of a teacher. Primary education is a pupil-centred education that prepares and grooms the mind of a child for future academic endeavors. The Federal Republic of Nigeria in the National Policy on Education (2013) defined primary education as the education given in an institution for children aged six to 11 plus. It went further to explain that the rest of the education system is built upon it and is the key to the success or failure of the whole system. This is evident by the fact that, basic literacy and numeracy skills as well as sound attitudes are developed in the right way in primary education. In primary schools, Mathematics, English language and one major Nigerian language (Hausa, Yoruba or Igbo) are among the core subjects offered by every pupil in the primary school.

Mathematics is not only considered as an important subject in primary schools but also regarded as the father of all science subjects. Mathematics is a science subject that deals with the counting and measuring of numbers. Mathematics, according to Gouba (2008) deals with logical reasoning and quantitative calculations. Mathematics is a body of knowledge essential for the achievement of scientific and technological nation (Anaduaka, Okafor & Uche, 2013). In Nigeria, despite the fact that the government has clearly confirmed the importance of Mathematics by making it a core and compulsory subject at primary school levels, primary school pupils are yet to understand or grasp the rudiments or components of primary school Mathematics (Akinsola, 2010). In primary school, Mathematics is broken down into six themes, which are Numbers and Numeration, Basic Operations, Measurement, Algebraic Process, Practical and descriptive geometry and Everyday Statistics. The way in which pupils understands any of the theme of mathematics is dependent on the teaching strategies employed by teacher in the classroom. In education, teaching strategies are the major instruments used in achieving the goals of any subject matter.

Teaching strategy may be defined as the selection of activities and techniques by teachers to help learners achieve pre-determined instructional objectives (Onokpaunu, 2016). Teaching strategy is a general plan which includes all the parts of the teaching situation; namely: the objectives, teaching methods, teaching aids and evaluation strategies (Pei-Shi, 2012). According to Taylor (2009), teaching strategies is seen as the principles used for instruction. Taylor further stressed that the type of teaching strategy adopted depends on the knowledge and skills the teacher is trying to convey. Similarly, Olawodun (2009) stated that teaching strategies refer to the techniques used by

the teachers in the classroom, his/her activities, behaviours and actions taken for effective teaching of pupils. Teaching strategies determine the classroom tactics a teacher may take to achieve learning objectives. Teaching strategies cannot operate in a vacuum, they require certain factors to support their effectiveness. Hence, Norman (2011) posited that teaching strategies involve the use of all instructional materials, facilities and other resources available to a teacher in order to meet the instructional needs of all pupils and enable them progress from dependent to independent learners.

The 21st century classroom is emphasizing on the need to move from the traditional instructional strategies to pupils' oriented strategies where pupils are encouraged to process academic information on their own. Examples of these teaching strategies include; think-per share, self-instructional, game-based, peer tutoring among others. In this paper, game-based was discussed. In primary schools, the use of non-traditional instructional strategies such as game-based learning helps to inculcate creativity skills among pupils and also equips them to have a firsthand information or knowledge in any subject matters.

Game-based learning strategy is the use of games to reinforce, motivate and promote learners to learn so as to achieve the instructional goals. Trybus (2015) posited that Game-based learning strategy is the process of using certain gaming principles and applying these principles to real-life settings/situation in order to engage users and motivate them to learn for effective teaching-learning processes. Game-based involves engaging pupils with the use of educational materials in a playful and dynamic way. Game-based learning is not just creating games for pupils to play, it is designing learning activities that can incrementally introduce pupils to certain concepts, and guide users towards an end goals. Also, Sadeghi and Dousti (2013) posited that game-based learning strategy entails increased learning efficacy, immediate feedback during game play; repetition, drill, and practice of essential language skills, pupils-centered learning, increased motivation, and an element of fun. Game-based learning strategy helps to remove the elements of difficulty in the course of teaching and learning primary school Mathematics because pupils are subjected to mathematical exercises through active participation with their hands, head and heart in a safe environment.

Game-based learning strategy is essential in teaching and learning processes as it increases overall motivation of pupils, helps pupils in problem-solving, increases class cooperation and makes

pupils have fun and be happy among others. Agwagah (2001) identified some of the importance of game as; games get pupils actively involved in the learning activities, and this will help to overcome apathy and indifference, with game the lesson can be pupil centred, games offer means of helping students continuously learn new concepts and reinforce certain previously learned skills. Other importance includes; games provide strong motivation for students to commit themselves wholeheartedly to the learning experience, the motivation is often enhanced by the competitive element and games encourage creative thinking in students, stir the sense, stimulate inquisitiveness and promote understanding of the world. Despite the importance of game in teaching and learning process, primary school teachers are still faced with certain challenges that militates the use of game in teaching mathematics. Game-based learning has a huge potential to positively impact pupils learning but it is difficult to effectively integrate game in teaching mathematics to pupils if teachers are not knowledgeable enough on how to use the game which will negatively affect pupil's performance in mathematics (Demirbilek & Tamer, 2010). Pupils still see mathematics as a difficult subject to be passed and as such run away from mathematics classes. Also, the performance of pupils in mathematics both in internal and external examination is not encouraging. Document cited by the researchers in the course of this study, in the Examination and Statistics office of the Ministry of Education, Enugu State shows that pupils' achievements in Mathematics in Common Entrance Examination in the area from the year 2014 to 2018 is not encouraging. In 2014, 11,200 candidates sat for the Common Entrance Examination. Out of this number, 39 percent scored high while 61 percent scored low. In 2015, 10,014 candidates sat for the examination. Out of this number, 41 percent scored high and 59 percent scored low. In 2016, out of the 10,589 candidates who sat for the examination, 44 percent scored high while 56% scored low. In 2017, out of the 9,986 candidates who sat for the examination, 38 percent scored high and 62 percent scored low. In 2018, 10,758 candidates sat for the examination, out of this number, 46 percent scored high while 54 percent scored low (Enugu State Examination Development Centre, 2018). Therefore, it is against this background that this study was designed to determine the challenges of game-based learning strategy in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State.

Statement of the Problem

Mathematics education is the bedrock of scientific and technological development in any country. Nigeria as a developing country needs Mathematics in order to stay in touch or compete with its counterparts in the recent scientific and technological innovations that are shaping the systems of the world and as such, the teacher should use technological educational materials to teach pupils mathematics for better understanding. Considering the premium status of primary school Mathematics in the preparation of future mathematicians, scientists and technologist, the persistent poor academic achievement of pupils in the subject needs urgent intervention. Hence, teachers are encouraged to shift from the conventional or teacher-centred teaching strategies to pupil-centred strategies in order to make the instructional contents of primary school Mathematics friendlier to pupils. Although, there are calls for the application of gaming instructional strategies in teaching Mathematics because it is suitable for the age of primary school pupils and increases their understanding but its effectiveness requires empirical evidence. Furthermore, the National Policy on Education (NPE) stipulated that play of which game is part of it can be used to teach children but the problem now is are teachers implementing it? In addition, teacher's proficiencies in using game to teach children and availability of game materials among others also need to be ascertained. These problems prompted the researchers to determine the challenges of game-based learning strategy in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State.

Purpose of the Study

The main purpose of this study is to determine the challenges of game-based learning strategy in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State. Specifically, the study sought to:

1. Determine the available games that teachers use in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State.
2. Determine the challenges of game-based learning strategy in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State.
3. Determine the possible solutions to the challenges of game-based learning strategy in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State.

Research Questions

The following research questions were raised for the study;

1. What are the available games that teachers use in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State?
2. What are the challenges of game-based learning strategy in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State?
3. What are the possible solutions to the challenges of game-based learning strategy in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State?

Method

The study was designed to determine the challenges of game-based learning strategy in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State. Three research questions were raised for the study. Descriptive survey research design was adopted. The population of the study comprised of 665 public primary school teachers in the fifty-four (54) public primary schools in Nkanu West Local Government Area. Using simple random sampling technique of balloting without replacement, 200 teachers were selected as the sample for the study. 10 teachers each were selected from 20 schools out of the 54 public primary schools in the area. The researchers developed an instrument titled “Challenges of Game-Based Learning Strategy in Teaching Mathematics in Primary School (CG-BLSTMPS)” Questionnaire. The questionnaire contained 28 items on a 4-point rating scale of Strongly Agree (SA-4 points), Agree (A-3 points), Disagree (D-2 points) and Strongly Disagree (SD-1 point) for the three clusters. Face and content validity of the instrument was determined by three experts; two in the Department of Early Childhood and Primary Education and one in Measurement and Evaluation in the Department of Educational Foundation all from the Faculty of Education, Nnamdi Azikiwe University, Awka. Cronbach alpha was used to obtain reliability coefficients of 0.92, 0.77 and 0.79 with overall coefficient of 0.83 for the three clusters of the instrument. The data collected were analyzed using mean (\bar{x}) to answer the research questions and standard deviation to determine the homogeneity or otherwise of the respondents' views. In analyzing the mean (\bar{x}), value of 2.50 and above was regarded as agreed and value below 2.50 was regarded as disagreed.

Results

Research Question 1: What are the available games that teachers use in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State?

Table 1: Respondents Mean Ratings on the available games that teachers use in teaching mathematics in primary schools. (N = 200)

| S/N | Available games that teachers use in teaching mathematics includes | Mean (\bar{x}) | SD | Decision |
|---------------------|---|--------------------|------|----------|
| 1. | I use circle race game to teach pupils mathematics. | 1.97 | 0.92 | Disagree |
| 2. | I use slide game to teach mathematics to pupils. | 2.20 | 0.47 | Disagree |
| 3. | I use binary tic tac toe to teach mathematics to pupils. | 2.36 | 0.58 | Disagree |
| 4. | I use tertries game to teach pupils mathematics. | 2.09 | 0.76 | Disagree |
| 5. | I use mathematics on the globe game to teach mathematics to pupils. | 2.14 | 0.39 | Disagree |
| 6. | I use power tac toe to teach pupils mathematics. | 1.99 | 0.45 | Disagree |
| 7. | I use geo-board game in teaching mathematics to pupils. | 1.99 | 0.81 | Disagree |
| 8. | I use card game in teaching pupils mathematics. | 1.97 | 0.50 | Disagree |
| Cluster Mean | | 2.09 | 0.61 | Disagree |

Table 1 shows the mean scores of the available games used by teachers in teaching mathematics in primary schools in Nkanu West L.G.A. The cluster means score of 2.09 implies that the respondents do not use the available games in teaching mathematics in primary schools. This is because the mean scores of all the items are below 2.50. The standard deviation which falls between 0.39 to 0.92 shows that the respondents were homogeneous in their opinions.

Research Question 2: What are the challenges of game-based learning strategy in teaching Mathematics in primary schools in Nkanu West Local Government Area of Enugu State?

Table 2: Respondents Mean Ratings on the challenges of game-based learning strategy in teaching mathematics in primary schools (N = 200)

| S/N | Challenges of game-based learning strategy in teaching mathematics in primary schools includes | Mean (\bar{x}) | SD | Decision |
|---------------------|--|--------------------|------|----------|
| 9. | Inadequate gaming materials such as software, hardware, slide, and boards among others. | 3.13 | 0.63 | Agree |
| 10. | Inadequate space for game. | 3.23 | 0.27 | Agree |
| 11. | Lack of teacher's knowledge or proficiencies on the use of game | 3.42 | 0.81 | Agree |
| 12. | Inadequate time for instruction of using game. | 3.35 | 0.49 | Agree |
| 13. | Large class size. | 3.37 | 0.52 | Agree |
| 14. | The cost associated with developing a game | 3.35 | 0.70 | Agree |
| 15. | Creating a gaming atmosphere that is adapted to all the learner's ability. | 3.38 | 0.46 | Agree |
| 16. | Combining engaging game with achieving the curriculum. | 3.40 | 0.22 | Agree |
| 17. | Teacher's behavior management. | 3.40 | 0.83 | Agree |
| 18. | Teacher's negative feelings towards using games in the classroom. | 3.33 | 0.74 | Agree |
| Cluster Mean | | 3.34 | 0.57 | Agree |

Table 2 shows the mean scores of the challenges of game-based learning strategy in teaching mathematics in primary schools in Nkanu West L.G.A. The cluster means score of 3.34 implies that the respondents agreed that all the items so stated are the challenges of game-based learning strategy in teaching mathematics. This is because the mean scores of all the items are above 2.50. The standard deviation which falls between 0.22 to 0.83 shows that the respondents were homogeneous in their opinions.

Research Question 3: What are the possible solutions to the challenges of game-based learning strategy in teaching Mathematics in primary schools in Nkanu West Local Government Area of Enugu State?

Table 3: Respondents Mean Ratings on the possible solutions to the challenges of game-based learning strategy in teaching mathematics in primary schools (N = 200)

| S/N | Possible solutions of the challenges of game-based learning strategy includes | Mean (\bar{x}) | SD | Decision |
|---------------------|--|--------------------|------|----------|
| 19. | Making available gaming materials such as software, hardware, slide, and boards among for teachers to use in teaching mathematics. | 2.64 | 0.61 | Agree |
| 20. | Providing adequate spaces for game to enable teachers use game in teaching mathematics. | 3.00 | 0.42 | Agree |
| 21. | Teacher's knowledge or proficiencies on the use of game can be improved through attending workshops and seminars. | 2.55 | 0.70 | Agree |
| 22. | Providing adequate time for instruction when using game in teaching any concept in mathematics. | 3.17 | 0.43 | Agree |
| 23. | Discouraging the use large class size to enable teachers handle pupils effectively when using game to teach mathematics. | 2.88 | 0.26 | Agree |
| 24. | Improvising game materials by head teachers and teachers in teaching mathematics. | 2.95 | 0.80 | Agree |
| 25. | Teachers creating a gaming atmosphere that will accommodate the entire learner's ability during mathematics instructions. | 2.73 | 0.58 | Agree |
| 26. | Teachers' making sure that pupil understands one concept effectively before going into another concept. | 3.22 | 0.65 | Agree |
| 27. | Positive Teacher's behavior management in teaching mathematics. | 3.31 | 0.83 | Agree |
| 28. | Teachers having interest towards using games in the classroom. | 3.46 | 0.53 | Agree |
| Cluster Mean | | 2.99 | 0.55 | Agree |

Table 3 shows the mean scores of the possible solutions to the challenges of game-based learning strategy in teaching mathematics in primary schools in Nkanu West L.G.A. The cluster means score of 2.99 implies that the respondents agreed that all the items so stated were the possible solutions to the challenges of game-based learning strategy in teaching mathematics. This is because the mean scores of all the items were above 2.50. The standard deviation which falls between 0.26 to 0.83 shows that the respondents were homogeneous in their opinions.

Discussion

Findings of the study in table 1 revealed that primary school teachers do not use the available games in teaching mathematics in primary schools in Nkanu West Local Government Area of Enugu State. They do not use the available games such as circle race game, binary tic tac, geo-board game among others. This finding is in accordance with Paul (2015), who posits that for games to be an effective way of teaching mathematics, teachers should be aware and use game or incorporate games into the teaching programme in order to stimulate pupils learning. The author further revealed that teachers do not incorporate games in teaching-learning process and because the teachers do not incorporate games in teaching mathematics pupils' performance in the subject tends not to be improved.

Findings of the study in table 2 revealed that primary school teachers are faced with challenges of using game to teach mathematics in primary schools in Nkanu West Local Government Area of Enugu State. These challenges include; lack of teacher's knowledge or proficiencies on the use of game, inadequate time for instruction of using game, large class size, the cost associated with developing a game and creating a gaming atmosphere that is adapted to all the learner's ability among others. This finding is in line with Denham, Mayben, and Boman (2016), who states that lack of teacher's knowledge or proficiencies on how to use game is one of the challenges that hinder teachers from using game in the classroom to teach pupils mathematics. Also, Odiagbe (2016) posits that the challenges of game-based learning strategy in teaching mathematics can be categorised as; infrastructural challenge, teachers challenge and environment challenge.

Moreso, the findings of the study in table 3 revealed some of the possible solutions to the challenges of game-based learning strategy in teaching mathematics. These solutions include; making available gaming materials such as software, hardware, slide, and boards and providing adequate spaces for game to enable teachers use game in teaching mathematics among for teachers to use in teaching mathematics among others. This finding is in accordance with Denham, Mayben and Boman (2016), who posits that teachers improve on their knowledge when they attend in-service training. This in-service training will enable them participate in activities that will help them to develop their knowledge and skills to not only to use commercially available games, but also to design their own games and teach pupils how to design games for effective teaching and learning process. The authors further revealed that through effective professional development,

teachers can improve on their technological, pedagogical, and content knowledge required to effectively use game into the classroom thereby increasing the chance of using game to positively improve pupil's performance in mathematics.

Conclusion

Teachers and learners are important subset of the educational system, and the interaction between them goes a long way in improving pupils' learning in any subject area. Based on the findings of the study, the researchers observed that primary school teachers do not use or incorporate the available games in teaching mathematics to pupils in primary schools. It was concluded that inclusion of games in the curriculum by curriculum experts will make teachers incorporate the use of game in teaching mathematics to primary school pupils. Also, supervising teachers by the head teachers to ensure that teachers incorporate games in teaching mathematics for better understanding will bring about effective and efficient learning outcomes in pupils learning of mathematics. Based on the findings of the study, the researchers observed that primary school teachers are faced with challenges in using game to teach mathematics to pupils. In addition, primary school teachers lack the requisite instructional competencies to integrate game in their instructional delivery. It was concluded among other that teachers attending in-service training will help them in improving their knowledge on how to use game to teach primary school pupils mathematics. With these observations, it was concluded that, the over reliance of primary school teachers on traditional method of teaching Mathematics will not instil creative thinking and problem solving abilities among pupils in handling mathematical problems in primary schools.

Recommendations

Based on the findings, the following recommendations were made:

1. Teachers should be encouraged to undergo in-service workshops and seminars to enable them acquire knowledge and skills on how to use game in order to deliver Mathematics effectively in primary schools.
2. Enugu State Government in conjunction with Parent Teachers Association (PTA) should provide adequate and functional game materials and infrastructural facilities in primary schools in order to enable teachers diversify their mathematics teaching for better understanding which will stimulate effective teaching and learning process.

REFERENCES

- Agwagah, U.N.V. (2001). *Mathematical games for primary schools*. Nsukka: Mike social press
- Akinsola, M.K. (2010). Teachers instructional methods and students attitude towards mathematics. *International Electronic Journal of Mathematics Education*, 3(1), 60-73.
- Anaduaka, U.S., Okafor, C. F., & Uche, S. (2013). Nigerian school children and mathematics phobia: How the mathematics teacher can help. *American Journal of Educational Research*, 1(7), 247 – 251.
- Demirbilek, M., & Tamer, S. L. (2010). Math teacher's perspectives on using educational computer games in math education. In *Procedia - Social and Behavioral Sciences* (Vol. 9, pp. 709–716). <http://doi.org/10.1016/j.sbspro.2010.12.222>
- Denham, A. R., Mayben, R., & Boman, T. (2016). Integrating game-based learning initiative: Increasing the usage of game-based learning within K-12 classrooms through professional learning groups. *TechTrends*, 60, 70–76. <http://doi.org/10.1007/s11528-015-0019-y>
- Federal Republic of Nigeria (2013). *National Policy on Education*. Lagos: NERDC Publishers
- Gouba, L. (2008). *The importance of mathematics in everyday life*. South Africa: Africa institute for Mathematical Services, Muizenberg.
- Norman, F.O. (2011). *Meeting the educational needs of all students*. Office Education, North American Division. Seventh Day Adventists Schools.
- Odiagbe, S.I. (2016). The National Minimum Standard on early child care center in Nigeria and the status of pre-primary education in Uhumwode LGA of Edo State. *American Journal of Educational Research*, 3 (4), 399-405.
- Olawodun, Y.L. (2009). Strategies for effective teaching of accounting in senior secondary schools in Kaduna State. *Business Education Journal* 1(2), 183-192.
- Onokpaunu, M. O. (2016). *Analysis of web-based instructional technologies for use by business education lecturers in tertiary institutions in Delta State*. Unpublished masters' thesis, Department of Vocational Education, Faculty of Education, Nnamdi Azikiwe University, Awka.
- Paul, E. (2015). Games a rationale for their use in the teaching of mathematics in school. *Journal for Research in Mathematics Education* 15(1), 103-113.
- Pei-Shi, W. (2012). The effect of learning styles on learning strategy use by EFL learners. *Journal of Social Sciences*, 8(2), 230-234
- Sadeghi, K., & Dousti, M. (2013). The effect of length of exposure to CALL technology on young Iranian EFL learners' grammar gain. *English Language Teaching*, 6(2), 14-26.
- Taylor, J. (2009). *Different kinds of teaching strategies in solving the crisis of American education*. California: Berkeley Hills Books
- Trybus, J. (2015). Game-Based Learning: What it is, why it works, and where it's going. New Media Institute. Retrieved from <http://www.newmedia.org/game-based-learning--what-it-is-why-it-works-and-where-its-going.html>

ENHANCING CHILDREN'S READING SKILLS THROUGH THE USE OF SHARED BOOK READING AMONG PRIMARY SCHOOL PUPILS IN AWKA METROPOLIS

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Abstract

The study investigated the use of shared book reading in developing children's reading skills in primary schools in Awka metropolis. The design of the study was descriptive survey. Four research questions were posed to guide the study. A total of 239 teachers teaching in the 52 government approved primary schools in the area of the study constituted the population. All of 239 teachers constituted the sample for the study. Data was collected using 30 item researcher-developed questionnaire tagged Developing Children's Reading Skills Through Shared Book Reading (DCRSTSBR). The instrument was face validated by 3 experts; two in Early Childhood and one from Measurement and Evaluation all from the Faculty of Education, Nnamdi Azikiwe University, Awka. Cronbach Alpha was used to test for reliability of the instrument. The items yielded coefficient of 0.79 and the instrument was therefore adopted for the study. Mean values were used to answer the research questions. Findings revealed that active participation in literacy, understanding that pictures can provide clues among others are the importance of shared book reading. Introducing the story by discussing the title, cover and author among others are the strategies that can enhance children's participation during shared reading. Non-availability of developmentally appropriate reading text, pupils feeling shy among others are the pupil's challenges. Some of the possible solutions to these challenges include; collecting reading books that are appropriate for the level of the pupils with consideration of pupil's interest and introducing the text by discussing the title, cover and author. Based on the findings, it was recommended that government at all levels, should support learning by providing primary schools with developmentally age-appropriate books for learning and organize workshop to educate teachers more on developing reading skills through the use of shared book reading.

Keywords: literacy, reading, shared book reading.

Introduction

The importance of literacy in education cannot be overlooked. Literacy according to Bainbridge (2019) are all the skills needed for reading and writing. They include such things as awareness of the sounds of language, awareness of print, and the relationship between letters and sounds. Other literacy skills include vocabulary, spelling and comprehension. Bainbridge (2019) is of the opinion that literacy is the ability to read, write, speak and listen in a way that allows one to communicate effectively and make sense of the job world. Lack of vital literacy skills holds a person back at every stage of life. As a child, they would not be able to succeed at school, as a young adult they would be locked out of the market, and as parents, they may not assist their children academically.

In low income and middle income countries, 43 percent of children according to Black, (2017), under the age five do not reach their developmental potential. In Kenya, one of the

best-educated countries in sub-Saharan Africa, only 30 percent of third graders can read at the second grade level (Piper, 2010), and 34 percent of preschool children are “on track” for language and numeracy development (Kenya National Bureau of Statistics, 2013). The lack of adequate literacy preparation is the key risk factor for poor performance in primary school worldwide (Behrman et al 2006).

Reading according to Collins and Cheek (2017), requires the use of complex thought unit in order to understand a printed message. According to Tracy (2016), reading is the only form of entertainment that is also an essential life skill that must be nurtured from a child’s earliest years. According to Fosudo (2010), once children know how to read, they still need support to reach their potentials as readers. Most children have problems with reading and related language skills. The author further asserted that the poor reading skills among children is an offshoot of technological advancements that have brought about overall changes in family, social, and economic conditions. Poor reading habits occur in children when reading is not considered a relevant leisure activity as it does not form part of children’s social interaction. Thus reading is considered a solitary pursuit and is not attractive compared with interactive activity on the internet (Fosudo, 2010).

Reading ability which is a major form of literacy is a vital part of one’s overall development. It is the foundation for doing well at school, socializing with others, developing independence, managing money or working. In Nigeria, literacy is recognized as a basic tool for personal and national development. The National Policy on Education (2004), places the inculcation of permanent literacy and numeracy, and ability to communicate effectively as one of the objectives of school education. This calls for provision of adequate resources to compliment education. These resources can take children far above technical literacy to developing reading culture which makes permanent literacy attainable.

Reading as an active process of constructing meanings of words help readers to direct information towards a goal and focuses their attention. Development of reading is essential especially for emergent readers. The role of reading in early childhood education can never be over emphasized especially in the early years. Research have shown that poor reading skills in the early years can have a far-reaching and long-lasting impact on the child (Hoff, 2013; Pace, Alper, Burchinal, Golinkoff, & Hirsh-Pasek, 2018). Children who enter school with good reading skills have better chances at school, better chances of entering higher education and better economic success in adulthood (Blanden, 2006). In contrast, children who have poor reading skills at age five are more than twice as likely to be unemployed at age thirty-four than

children who have normal developing reading skills at age five (Law, Rush, Schoon, & Parsons, 2009).

Children with poor reading skills receive poor grades at school, get easily distracted and frustrated, have behavior problems, seems to dislike school, and often fail to develop to their full potentials. Fosudo (2010), asserts that children with poor reading skills have a higher chance of anti-social behavior. Delinquency; school violence, bullying, hacking computer and even examination malpractices have a correlation with poor reading habits. This does not mean that those with poor reading skills display such behavior; however poor reading skills are associated with such behavioral patterns while good literacy habits help develop a steady and constructive mind.

Children can be motivated to read and thus form good reading habit through storytelling, reading together (shared book reading). Formation of reading habit through/book clubs as well as provision of conducive reading environment devoid of unwarranted noise and distractions is critical. Storytelling is a basic and enduring form of literacy expression in Nigeria cultures. The Integration of storytelling and oral literacy including shared book reading tradition should be pronounced in school curriculum especially in primary schools (Washbrook, 2010).

Reading together or shared book reading is a good way of introducing pleasure or fun in reading. Peca, Alper, Burchinal, Golinkoff and Hirsh-Pasek (2013) opined that reading together can take place anywhere - in the classroom, library, or at home. Parents, school librarians, teachers, and children can read aloud to themselves at home, in the class or library, getting to an exciting point in the story book before stopping. The interest generated according to researchers will inspire many pupils to continue to read the story on their own. In the course of shared book reading, the passage read aloud can be discussed and a new book can be introduced to the pupils before shared reading commences. The experience of reading and hearing increases speed, facilitates comprehension, good pronunciation; develops reading and critical thinking skills. Shared book reading also puts confidence in some timid children and encourages them to develop a voluntary reading habit (Washbrook, 2010).

There are good theoretical reasons for believing that shared book reading interventions may have language-boosting effects, if delivered at a realistic rate. Research has shown that shared book reading tends to include a number of potentially language boosting behaviours which have been linked with positive language outcomes in the past. For example shared book reading tends to result in child directed speech with higher levels of lexical and syntactic

diversity than play-based interaction (Cameron-Faulker & Liven, 2018), and high levels of lexical and syntactic diversity in child-directed speech (Huttenlocher, Vasilyeva, Cymerman, & Levine, 2012). Shared book reading is also likely to foster high levels of joint attention, contingent talk and responsiveness, which have also been linked to positive language outcomes. (Farrant & Zubrick, 2013). It also provides ample opportunities to use techniques such as expanding, recasting and asking open-ended questions, all of which have shown to be positively related to children's oral language development as reported by Huttenlocher, Waterfall, Vasilyeva, Vevea, and Hedges (2010).

Observations over the years, have shown that the acquisition of reading skills through shared book reading has beneficial effect on all school subjects, including social studies, science, mathematics, and so on. Poor reading skill can make a child develop poor attitude toward school and can create self-esteem problems later in life (Fosouodo, 2010). A study carried out by Henry (2013) showed that early in the primary grades, children who are struggling with how to read begin to experience failure and related negative effects in interpersonal skills. These effects can include aggressions, lowered levels of personal regard, and seeking of personal validation in venues that are anti-social. Reading cannot be perfected if the learner is not properly guided to acquire the necessary skills. The different skills and methods used by teachers in teaching reading over the years have not achieved much from observations, hence the need to try out shared book reading in developing reading skills in primary school children. This is the gap this study sets out to fill.

Purpose of the Study

The general purpose of the study was to develop children's reading skills through the use of shared book reading among primary school pupils. Specifically, the study determined:

1. The importance of shared book reading.
2. Strategies that will enhance children's participation during shared book reading.
3. The challenges pupils face during shared book reading.
4. Possible solutions to the challenges pupils face during shared book reading.

Research Questions

The following research questions guided the study

1. What are the importance of shared book reading?
2. What are the strategies that will enhance children's participation during shared book reading?

3. What are the challenges pupils face during shared book reading?
4. What are the possible solutions to the challenges pupils face during shared book reading?

Method

The main purpose of the study was to investigate the use of shared book reading in developing children’s reading skills in primary schools in Awka metropolis. A descriptive survey research design was adopted for the study. Four research questions guided the study. All the 239 public primary school teachers in the 52 government approved primary schools in Awka metropolis constituted the population. All of them constituted the sample of the study. A 30- item researcher-developed instrument titled Developing Children’s Reading Skills Through Shared Book-Reading (DCRSTSBR). A four point rating scale of Strongly Agree (4 points), Agree (3 points), Disagree (2 points) and Strongly Disagree (1 point) was used.

The instrument was face validated by 3 experts; two in Early Childhood Education and one from Measurement and Evaluation all from the Faculty of Education, Nnamdi Azikiwe University, Awka, Anambra State. The reliability of the instrument was obtained using Cronbach alpha statistical tool and reliability co-efficient 0.79 was obtained. Based on this, the research instrument was therefore adopted for the study. Mean were used for the data analysis. Mean responses of 2.50 and above were regarded as agreed while those below 2.50 were regarded as disagreed.

Results

Research Question 1: What are the importance of shared book reading?

Table 1: Mean Responses of Teachers on the Importance of Shared Book Reading

| S/N | Importance of shared book reading include: | X | Decision |
|-----|---|------|----------|
| 1 | Active participation in literacy | 2.70 | Agree |
| 2 | Understanding that pictures can provide clues to text | 2.68 | Agree |
| 3 | Recognizing and identifying letters and sounds and connections between them | 2.80 | Agree |
| 4 | Increasing sight word development | 2.71 | Agree |
| 5 | Developing a stronger understanding of phonics | 2.82 | Agree |
| 6 | Recalling main ideas and details from stories | 2.60 | Agree |
| 7 | Developing and using new reading strategies | 2.90 | Agree |
| 8 | Learning to predict the events of a story | 2.77 | Agree |
| 9 | Developing a sense of encouragement and confidence | 2.81 | Agree |
| 10 | Offering valuable opportunities for children to explore the joy of reading | 2.85 | Agree |
| 11 | Providing struggling readers the support they need to read on their own | 2.63 | Agree |

The result in table 1 shows that all the eleven items had the mean ratings above 2.50. This indicates that teachers agreed to all the items as the importance of shared book reading.

Research Question 2: What are the strategies that will enhance children’s participation during shared book reading?

Table 2: Mean Responses of Teachers on the Strategies that will Enhance Children’s Participation during Shared Book Reading.

| S/N | Strategies to enhance children’s participation during shared book reading include: | X | Decision |
|-----|---|------|----------|
| 12 | Introducing the story by discussing the title, cover and author | 2.87 | Agree |
| 13 | Asking the pupil to make predictions regarding what they think the story might be about | 2.80 | Agree |
| 14 | Reading the story aloud to the pupils using appropriate inflation and tone | 2.54 | Agree |
| 15 | Asking brief questions to determine pupil’s comprehension level | 2.77 | Agree |
| 16 | Concluding the reading section by reserving time for reactions and comments | 2.83 | Agree |
| 17 | Asking pupils to relate the story to their similar experiences | 2.88 | Agree |
| 18 | Asking the children to retell the story in their own words | 2.67 | Agree |
| 19 | Allow time for independent reading | 2.64 | Agree |
| 20 | Making crafts related to the story shared | 2.57 | Agree |

The result in Table 2 shows that all the ten items eliciting responses on the strategies that will enhance children’s participation during shared book reading have mean scores above 2.5 points which indicate agreement. This shows that the teachers are in agreement that the items so listed are the strategies that will enhance children’s participation during shared book reading.

Research Question 3: What are the challenges pupils face during shared book reading?

Table 3: Mean Responses of Teachers on the Challenges Pupils face during shared Book Reading

| S/N | Challenges pupils face during shared book reading | X | Decision |
|-----|--|------|----------|
| 21 | Text may not be appropriate for all pupils | 2.57 | Agree |
| 22 | Some pupils may not be interested in the text or book shared | 2.67 | Agree |
| 23 | Pupils may depend on others to do the reading | 2.65 | Agree |
| 24 | Some of the pupils may feel shy thereby not participate fully in the reading | 2.76 | Agree |
| 25 | Non availability of books for the reading exercise | 2.82 | Agree |

Results in table 3 show that all the items had mean ratings of above 2.50. This implies that the respondents accepted them as likely challenges pupils face during shared book reading.

Research Question 4: What are the possible solutions to the challenges pupils face during shared book reading?

Table 4: Mean Responses of Teachers on the Possible Solutions Pupils face during shared Book Reading.

| S/N | Possible solutions to the challenges pupils face during shared book reading | X | Decision |
|-----|--|------|----------|
| 26 | Collecting books that is appropriate for the reading level of the pupils | 2.76 | Agree |
| 27 | Selecting books that is of interest to the pupils | 2.77 | Agree |
| 28 | Teachers can re-read the story and allow time for independent reading | 2.53 | Agree |
| 29 | Encouraging the pupils to read at their own pace, to enhance their participation | 2.85 | Agree |
| 30 | Providing sufficient books for the reading pleasure of pupils | 2.75 | Agree |

Results from table 4 shows that every item listed had the mean rating of above 2.50. Again this implies that these are the possible solutions to the challenges pupils face during shared book reading in primary schools.

Discussion

Findings of the study in table 1 indicated the importance of shared book reading to include active participation in literacy, understanding that pictures can provide clues, recognizing and identifying letters and sounds, increasing sight word, providing support for struggling readers, developing sense of encouragement and confidence among others. These findings collaborate with the findings of Washbrook (2010) who posited that the experience of reading and hearing increases speed, facilitates comprehension, good pronunciation; develops reading and critical thinking skills. Shared book reading puts confidence in some timid children and encourages them to develop voluntary reading habits. This implies that the importance of shared book reading is encompassing and can never be over-emphasized.

The findings in table 2 also revealed that children's participation in shared book reading can be enhanced through, introducing the text by discussing the title, cover, and author, asking pupil to make predictions regarding what they think about the text, teachers asking brief questions to determine pupil's comprehension level, and teachers reading the story aloud to the pupils using appropriate inflation among others. This finding is in line with Huttenlocher, Vasilyeva, Cymerman, & Levine (2010) who posits that shared reading provides ample opportunities to use techniques such as expanding, recasting and asking open-ended questions, all of which have shown to be positively related to children's oral language development. Similarly, Peca, Alper, Burchinal, Gorlinkoff, & Hirsh-Pasek (2013) in their study on impact of shared book reading, Peca et al found that, in the course of shared book reading, passage read aloud can be discussed and a new book can be introduced to the pupils before its shared reading commences.

The study also found that there were ample challenges faced by pupils during shared book reading. These challenges included pupils depending solely on others to read for them, non-availability of books, some pupils may not be interested in the text shared, text may not be appropriate for pupil's level among others. This finding is in consonance with Fosudo, (2010) who posits that reading cannot be perfected if the learner is not properly guided to acquire the necessary skills. The different skills and methods used by teachers over the years have not achieved much according to Fosudo, hence there is need to assess the appropriateness of children's text, encourage text that will invoke children's interest and encourage shared book reading.

Results in table 4 revealed that all the items listed were the possible solutions to the challenges pupils face during shared book reading. They include, collecting books that is appropriate for the reading level of the pupils, selecting books that are of interest to the pupils,

encouraging pupils to read at their own pace and providing sufficient book for the reading pleasure of pupils among others. This finding is in agreement with (Behrman et al, 2006), who posits that lack of adequate literacy preparation is the key risk factor for poor reading performance in primary school worldwide. This is to say when children are provided with the essentials for reading instruction like developmentally appropriate materials, reading or shared reading becomes fun thereby enriching learner's lives and increase in literacy development abilities.

Conclusion

Shared book reading is an essential technique in developing children's reading skills. Some of challenges children face in acquiring reading skills can be surmounted through an effective use of shared reading. Findings revealed that active participation in literacy, understanding that pictures provide clues, developing and using new reading strategies and providing support among others are the importance of shared book reading. Also, asking brief questions to determine pupils' comprehension level, asking pupils to retell stories in their own words and concluding the reading section by reserving time for reactions, are the strategies to enhance children's participation during shared book reading. Again, age-inappropriate text, feeling shy among others are the challenges pupils face during shared book reading. And, collecting books that is appropriate for the reading level of pupils among others are possible solutions to the challenges pupils face during shared book reading.

Recommendations

Sequel to the findings of this study, the following recommendations are made:

1. Government at all levels, should organize workshop to educate teachers more on the strategies and challenges of developing literacy skills through the use of shared book reading. Such workshops should incorporate other issues about literacy development, so that teachers' knowledge is constantly up-dated for them to impact skills effectively to learners.
2. Both Federal, State and Local governments should support learning by providing primary schools with developmentally age-appropriate books for learning.

REFERENCES

- Behrman, J., Hoddinott, J., Maluccio, J. A., Soler-Hampejsek, E., Behrman, E. L. Martorell, R. Stein, A. D. (2006). What determines adult skills? Impacts of pre-school, school-years, and post-school experiences in Guatemala. *Latin American Economic Review*, 23(4), 1-32.
- Black, M. M., Walker, S. P., Fernald, L. C., Andersen, C. T., DiGirolamo, A. M., Lu, C., Devercelli, A. E. (2017). Early childhood development coming of age: science through the life course. *The Lancet*, 389(10064), 77-90.
- Blanden, J. (2006). *Bucking the trend – What enables those who are disadvantaged in childhood to succeed later in life?* London: Department for Work and Pensions.
- Cameron-Faulkner, T., & Liven, C. (2018). A comparison of book text and child directed speech. *First Language*, 33, 268-79. doi:10.1177/0142713487613
- Collins, M., & Cheek, E., (2017). *Assessing and guiding reading instruction*. New York: McGraw Hill.
- Farrant, B.M., & Zubrick, S. R (2013). Parent-child book reading across early childhood and child vocabulary in the early school years: Finding from the Longitudinal Study of Australian Children. *First Language*, 33, 280-293. doi: 10.1177/0142723713487617
- Federal Government of Nigeria (2004.) National policy on education. (NERDC) Nigeria Education Research Development Council *Publishers*.
- Fosudo, S. (2010) “Reading as part to success” A Lecture delivered at the College Library Day, Adeniran Ogunsanya College of Education, Otto/Ijanikin, Lagos on February 24th.
- Hoff, E. (2013). Interpreting the early language trajectories of children from low-SES and language minority homes: implications for closing achievement gaps. *Developmental Psychology* (49),4-14.doi:10.1037/a0027238
- Huttenlocher, J., Vasilyeva, M., Cymerman, E., & Levine, S. (2012). Language input and child syntax. *Cognitive Psychology*, 45, 337-374. doi:10. 1016/S0010-0285(02)00500-5
- Huttenlocher, J., Waterfall, H., Vasilyeva, M., Vevea, J., & Hedges, L. V. (2010). Sources of variability in children’s language growth. *Cognitive Psychology*, 61, 343-365. doi: 10.1016/j.cogpsych.2010.08.002
- Kenya National Bureau of Statistics (2013). *Nyanza Province Multiple Indicator Cluster Survey 2011, Final Report*. Nairobi, Kenya: Author.
- Law, J., Rush, R., Schoon, I., & Parsons, S. (2009). Modelling developmental language difficulties from school entry into adulthood. *Journal of Speech, Language and Hearing Research*, 52 (4)1401-1416. doi:10.1044/1092-4388(2009/08-0142)
- Pace, A., Alper, R., Burchinal, M. R., Golinkoff, R. M., & Hirsh-Pasek, K. (2018). Measuring success: Within and cross-domain predictors of academic and social trajectories in elementary

school. *Early Childhood Research Quarterly*. Advanced online publication.
doi:10.1016/j.ecresq.2018.04.001

Piper, B. (2010). Kenya Early Grade Reading Assessment Findings Snapshot. Research Triangle Park, North Carolina, USA: RTI International.

Washbrook, E. (2010). *Low income and early cognitive development in the U.K.* London: Sutton Trust.

AVAILABILITY AND UTILIZATION OF INSTRUCTIONAL MATERIAL IN THE IMPLEMENTATION OF EARLY CHILDHOOD LITERACY CURRICULUM IN PUBLIC SCHOOLS IN ORUMBA SOUTH L.G.A.

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Abstract

This study investigated the availability and utilization of instructional materials for the implementation of early childhood literacy curriculum in public schools in Orumba South L.G.A, of Anambra State. Two research questions guided the study. The design was a descriptive survey. The population comprised of 110 pre-school teachers. A sample of 50 pre-school teachers were drawn using simple random sampling techniques. Instrument for data collection was a questionnaire which was developed by the researchers. The instrument was validated by three experts. The reliability of the instrument was determined using Cronbach Alpha Reliability Coefficient which yielded a value of 0.60 and 0.70 with an overall reliability of 0.65. Data collected were analyzed using percentage, mean and standard deviation. The major findings were: that some of the instructional materials were not available for in the implementation of early childhood literacy curriculum and that teachers do not use some of the instructional materials. In conclusion, the teacher do not use instructional materials which would have helped them for gain information's, think, recall and also assimilate what they have been taught. This hinder the implementation of early childhood literacy curriculum. Based on these findings, recommendation was made: The State Government and Parents Teacher Association (P.T.A) should join hands in providing instructional materials in early childhood education. Workshops and seminars should be organized at times to re-train teachers on how to use instructional materials.

Keywords: Early, childhood, teachers, literacy and instructional materials.

Introduction

Throughout the ages, education whether formal or informal has been recognized as an instrument for individual and societal transformation. This is the main reason why every society continuously strive to bequeath upon its successive generations education that is not only qualitative but functional as well. The Federal Republic of Nigeria (2013) in her National Policy on Education recognizes education as an instrument par excellence for effecting national development. For education to actually serve its real purpose of societal transformation, the indispensable components of such education must include quality infrastructure in the form of conducive and adequate classrooms, quality instructors (teachers) at all levels who are highly motivated and plus relevant instructional materials, and curriculum (Okolo 2016).

To get the required result in education, there is the need for the society to lay a strong foundation at the early childhood level of education. This foundation should therefore be centered in the early development of the children. Early childhood education (ECE) is the education given in an education institution to children prior to their entering into the primary school. The early years are crucial for the development of an individual. It is the foundation for the success or failure of the whole system of education and any support given at this stage with appropriate practice helps to promote development (FRN 2013).

There was a time in the Nigeria educational system when there was no curriculum for children in early childhood education, children were taught based on the proprietors' initiative. Children were just sent to school to stay and wait for the parents or guardian to come back from their daily activities and pick them up. Recently as a result of modernization and globalization, early childhood curriculum came forth. With recent researches, it was found that 0-6 years is a critical period in the life of any child. The brain at this point develops faster than ever (Obioma 2013). Anything that the child learns here affects the Child's adulthood. As a result of this, it became important that children need to be provided with stimulating, friendly and safe environment.

Today, awareness on the part of teachers of young children in ensuring early childhood curriculum implementation cannot be over emphasized. At the simplest level, curriculum is defined as a course of study. According to Brewer (2012) and Estes (2011), Curriculum is everything that is taught and learned for most early childhood educators. Tanner, (2013) defines curriculum as a plan or programme of all experience which the learner encounters under the direction of a school. Similarly, Gatawa (2014), posits that Curriculum is the totality of the experiences of children for which schools are responsible. From these definitions above, it can be deduced that curriculum means all the experiences to which a learner is to be exposed under the guidance of a teacher. It is the teacher that implement the curriculum. In early childhood curriculum, it comprises of different forms which it is expected that the teacher makes use of it. The different forms of curriculum include literacy curriculum, numeracy curriculum among others. For the purpose of this study literacy curriculum will be discussed. According to Harnby (2015), literacy is the ability to read and write. According to Obidike, Enemuo and Onwuka (2019), literacy means the ability to use language, number, images, computer and other basic means to

understand, communicate, gain useful knowledge, solve mathematical problems and use the dominant symbol systems of a culture. On the other hand literacy curriculum are educative materials which teachers make reference to, in carrying out literacy activities in schools, (Nnamuch 2018). The author referred to it as instructional materials, instructional aids, instructional resources and instructional devices.

The literacy curriculum of a typical nursery school includes identification of pictures, picture reading, object recognition, alphabets, numbers, nursery rhymes, recognition and identify shapes, coloring, story time in some cases, rudiments of reading, writing and arithmetic among others. The emphasis of most is on the intellectual development of the children much is devoted to the learning of alphabets, and memorization of facts, poems and some short passages from various books in English language than to recreational and social activities (Federal Ministry of Education 2013). However, literacy curriculum may not be progressive without adequate curriculum implementation.

According to Morris, Wooding and Grant (2011), implementation is a continuous process that includes a set of activities designed to put a program or activity into practice. The National Policy on Education (FRN 2013) referred curriculum implementation as to how the planned or officially designed course of study is translated by the teacher into learning experiences for the benefits of the learner. According to Onwuka (2015), Curriculum implementation entails putting into practice the officially prescribed courses of study to help the learner acquire knowledge or experiences. Curriculum implementation can also be referred to the stage when the curriculum itself, as an educational programme is put into operation by a required implementation agent. Onwuka (2015) identified the teacher as the agent in the curriculum implementation process by saying that Implementation is the manner in which the teacher selects and mixes the various aspects of knowledge contained in curriculum document or syllabuses. According to the author, implementation takes place when the teacher has constructed syllabus, prepares the teaching environment with necessary instructional materials, interact with the learner, which makes the learner acquire the planned knowledge, ideas, and attitudes aimed at enabling the learner function effectively in the society. The teacher needs to be committed and knowledgeable in the use of instructional materials while implementing the curriculum.

To a layman, instructional materials simply could be regarded as teaching aids employed by the teacher to improve the effectiveness of instruction. According to Eya and Ureme (2011) instructional materials are teaching materials which a teacher utilized in the course of presenting a lesson in order to make the content of the lesson understandable to the learners. The implication is that the use of instructional materials is inevitable if effective teaching and learning must be achieved.

Instructional materials are further categorized into diagrams, models, charts toys, cartoons, and maps among others. Others include radio, television, chalkboard, sustention boards. (Eze 2012). The author also gave brief history of instructional material in education and the importance such as gaining of information, retention, recall, thinking, reasoning, interest, imagination as well as better assimilation. Instructional materials are the backbone of whole range of the classroom communication and expedite teaching and learning through various senses of the teachers and learners (Okeke 2013). Hazel (2014), made it clear to show the value of visual materials. Visual materials includes: charts, chalkboard, textbook, models, pictures and flashcard among others. The author also said this “that what I hear I forget, what I see, I remember and what I do, I know” it is essentially important to teach pre-school children with materials (toys) which can be seen and handled by them.

When a teacher uses instructional materials in teaching, the learner interacts with those instructional materials and they learn from them. Oni (2016) stated that the availability and adequate use of instructional materials promote effective teaching and learning activities in the school while their inadequacy affects the academic performance negatively. According to Ikegulu (2014), instructional materials are used by teachers to enhance the quality of instruction and they help children to understand what has been taught. Availability is the fact that something can be bought, used, or reached, or how much it can be. While Utilization is the action of making practical and effective use of something. (Harnby 2015).

Statement of the Problem

State Government has brought many innovations in our basic school sector by introducing pre-primary education and its curriculum, yet the quality of primary education still dwindles. Observation made by the researcher shows that primary school pupils are having problem with their literacy curriculum. This could be as a result of teachers not making proper use of

instructional materials in teaching literacy curriculum. Despite the introduction of pre-primary education and its objectives which is expected to produce balanced and bright primary school pupils, pupils still perform below expectation. In most teaching and learning situations, teacher do not make use of instructional materials. They prefer “chalk and talk” method which rarely appeals to pupils’ sense of vision and learning. However, the use of instructional materials has not received the necessary attention desired in early childhood education. Where there were instructional materials, pupil learn a lot because they see, touch and feel. These concerns motivated the researcher to carry out this study on the availability and utilization of instructional materials for the implementation of early childhood literacy curriculum in Orumba South L.G.A. Anambra State.

Purpose of the Study

The main purpose of this study was to investigate the availability and utilization of instructional materials in the implementation of early childhood literacy curriculum in public schools in Orumba South L.G.A. Specifically, the study sought to:

1. determine the availability of instructional materials for the implementation of early childhood literacy curriculum in public schools in Orumba South L.G.A.
2. determine the utilization of instructional materials for the implementation of early childhood literacy curriculum in public schools in Orumba South L.G.A.

Research Questions

The following research questions guided the study:

1. What instructional materials are available for the implementation of early childhood literacy curriculum in public schools in Orumba South L.G.A?
2. What instructional materials do teachers utilize in the implementation of early childhood literacy curriculum in public schools in Orumba South L.G.A?

Method

The design of this study was descriptive survey aimed at investigating the availability and utilization of instructional materials in the implementation of early childhood literacy curriculum in public schools in Orumba South. The population of the study comprised forty-two (42) government owned pre-schools and 110 pre-school teachers in Orumba South of Anambra State. The researchers used simple random sampling techniques by balloting to select twenty-five (25)

pre-primary schools out of the forty-two (42) pre-schools in Orumba South. Also, simple random sampling technique by balloting was use to select two teachers each from the 25 selected schools giving a total of fifty (50) pre-school teachers respondents. The instrument for data collection for the study was a structured questionnaire developed by the researchers which had 28 items. The title of the questionnaire is “Instructional Materials Use for the Implementation of Early Childhood Literacy Curriculum (IMUIECLC)”. The researchers formulated the questions from stated research questions. The questionnaire was made up of three sections, A, B and C. A dealt with personal data while section B had 14 items which focus on availability and section C comprised 14 items which sought information on utilization. The section B items on the questionnaire were structured using Available and Not Available while section C were structured using four point likert scale of Strongly Agree= 4, Agree= 3, Disagree= 2, and Strongly Disagree= 1. The validity of the instrument was established by three experts.

The data were trial tested with ten (10) teachers from Orumba North L.G.A. Cronbach Alpha Reliability Co-efficient was used to determine the reliability which yielded 0.60 and 0.70 for the two clusters. The overall reliability is 0.65. The researchers adopted face-to-face questionnaire administration to ensure that all the questionnaires were collected and none lost. A total of 50 questionnaires were distributed. The data collected from the study were analyzed using percentage, mean and standard deviation to answer the research questions. Any item with percentage from 50 and above are available while item with percentage below are not available. This applies to research question one. For research question two a four-point scale were used. The mean cut off point for the items was 2.50. This means that any item with a mean of 2.50 and above was regarded as being agreed while those below the mean cut off 2.50 were disagree.

Results

Research Question I: What instructional material are available for the implementation of early childhood literacy curriculum in public schools in Orumba South L.G.A.

Table 1: Percentage availability of instructional materials for the implementation of early childhood literacy curriculum in public schools in Orumba South L.G.A.

| S/N | ITEMS | Available % | Not Available % | Decision |
|-----|----------------------------------|-------------|-----------------|----------|
| 1. | Desktop Word Walls | 30 | 70 | NA |
| 2. | Journals | 45 | 55 | NA |
| 3. | Reading Alphabet Teaching Charts | 75 | 25 | A |
| 4. | Books | 80 | 20 | A |
| 5. | Children's Dictionary | 47 | 53 | NA |
| 6. | Nursery Rhyme Posters | 80 | 20 | A |
| 7. | Calendar | 90 | 10 | NA |
| 8. | Labels | 70 | 30 | A |
| 9. | Newspapers | 40 | 60 | NA |
| 10. | Coupons | 47 | 53 | NA |
| 11. | Map | 76 | 24 | A |
| 12. | Tape/CD Players | 20 | 80 | NA |
| 13. | Music and Books on Tape /CD | 20 | 80 | NA |
| 14. | Computer with Keyboard. | 30 | 70 | NA |

A = Available.

NA = Not Available.

Table 1 shows that items numbers 1, 2, 5, 9, 10, 12, 13 and 14 are not available. This can be seen from their percentage of availability. They have percentage score below 50% which is the bench mark for availability. Also, items number 3, 4, 6, 7, 8 and 11 have percentage score of above 50% which is the bench mark for availability. These items show that they are available for teaching literacy in public schools in Orumba South L.G.A. In conclusion, this means that some of the instructional materials which help them in the implementation of early childhood literacy curriculum were not available.

Research Question 2: What instructional materials do teachers utilized for the implementation of early childhood literacy curriculum.

Table 2: Mean score of respondents on the instructional materials teachers utilized for the implementation of early childhood literacy curriculum in public schools in Orumba South L.G.A.

| S/N | Items: Instructional materials utilized by teachers | X | SD | Decision |
|---------------------|---|------------|------------|--------------|
| 15. | Desktop Word Walls | 2.3 | 0.3 | Disagree |
| 16. | Journals | 2.0 | 0.2 | Disagree |
| 17. | Reading Alphabet Teaching Charts | 3.4 | 0.4 | Agree |
| 18. | Books | 3.7 | 0.5 | Agree |
| 19. | Children’s Dictionary | 2.1 | 0.2 | Disagree |
| 20. | Nursery Rhyme Posters | 2.5 | 0.4 | Agree |
| 21. | Calendar | 3.8 | 0.4 | Agree |
| 22. | Labels | 3.2 | 0.4 | Agree |
| 23. | Newspapers | 1.9 | 0.3 | Disagree |
| 24. | Coupons | 2.3 | 0.3 | Disagree |
| 25. | Map | 3.6 | 0.4 | Agree |
| 26. | Tape/CD Players | 1.8 | 0.3 | Disagree |
| 27. | Music and Books on Tape /CD | 1.7 | 0.3 | Disagree |
| 28. | Computer with Keyboard. | 2.4 | 0.3 | Disagree |
| Cluster mean | | 2.6 | 0.4 | Agree |

Table 2 shows that items number 15, 16, 19, 23, 24, 26, 27, and 28 have the mean scores 2.3, 2.0, 2.1, 1.9, 2.3, 1.8, 1.7 and 2.4 respectively which were below the cutoff point of 2.50 therefore were disagreed while items 17, 18, 20, 21, 22, and 25 have the mean scores of 3.4, 3.7, 2.5, 3.8, 3.2 and 3.6 respectively which were above cut off points 2.50 therefore were agreed. In conclusion this means teachers do not use some of the instructional material in teaching early childhood literacy curriculum which makes children to remember and retain what they have learn. The cluster mean also agreed that teacher do not use some of the instructional materials and the standard deviation scores attests to it.

Discussion

The findings in Table 1 revealed that some of the instructional materials which help in the implementation of early childhood literacy curriculum were not available. Instructional materials (Tape/CD player, Music, Coupons) helped in gaining of information retention, recall, thinking, reasoning, interested imagination as well as better assimilation. The findings of this study is in line with Oni, (2016), who posits that the availability and adequate use of instructional materials

promote effective teaching and learning activities in the schools while their inadequate affects the academic performance negatively. Since the instructional material is not available, there is no how it can be utilized

The finding in Table 2 revealed also that teachers do not use some of the instructional material which help in the implementation of early childhood literacy curriculum. The implication is that the use of instructional materials is inevitable if effective teaching and learning must be achieved. The findings are in line with that of Ikegulu (2014), who posits that instructional materials are used by teachers to enhance the quality of instructions and they help children to understand what has been taught. This is in line with Hazel (2014) who also made it clear to show the value of visual materials (charts, chalkboard, textbook, models, pictures and flashcard among others). The author also said this “that what I hear I forget, what I see, I remember and what I do, I know”. It is essentially important to teach pre-school children with materials (toys) which can be seen and handled by them.

Conclusion

The schools do not have enough teaching and learning materials which help in the implementation of early childhood literacy curriculum. Teachers do not make use of some materials which helps the children to retain what they have been taught. Finally, the teachers do not use instructional materials which help them to gain information’s, think, recall and also assimilate what they have been taught. This hinder the implementation of early childhood literacy curriculum.

Recommendations

Based on the findings, the following recommendations were made:

1. The State Government and Parents Teacher Association (P.T.A) should join hands in providing instructional materials in early childhood education
2. Workshops and seminars should be organized at times to re-train teachers on how to use instructional materials.
3. Teachers should improvise materials for teaching literacy curriculum in early childhood.

REFERENCES

- Brewere, H.O & Estes, T.B. (2017). *Pre-primary education in Nigeria, policy implementation and Problems* London, Bittle Press.
- Eya, P.E & Ureme, M.C. (2011). Availability and utilization of instructional materials for social studies in junior secondary school in Enugu State. *Nigeria Journal of Research and Productive*. 19 (1) 1-12.
- Eze, J.U. (2012). Fundamental of teaching practice Enugu. *Nigeria Audio-Visual Journal of Education*.
- F.M.E. (2013). *Essential features of early childhood education curriculum and scheme of work*. (A Practical Guide to Nursery Education).
- Federal Republic of Nigeria (2013). *National Policy on Education*. Abuja, Federal Government Press.
- Gatawa, B.O. (2014). *Curriculum and Reality in Africa Primary Schools* London: Harlow' Long Man Press.
- Harnby B. (2015). Cambridge university Cambridge Advance Learners Dictionary & Thesaurus. Press.
- Hazel, M.N. (2014). Teaching aids and resources for effective teaching and learning Jos University. *Journal of Education* 413.
- Ikegulu, B.O. (2014). Instructional materials development in implication of the comprehensive study of Geography in secondary schools in Lagos. Nigeria.
- Morris, Z.S, Wooding, S. & Grant, J. (2011), The understanding time lags in translational research. *Journal of the Royal Society of Medicine*, 104 (12), 510-520.
- Nnamuch, P. N. (2018), Assessment of instructional materials used in teaching and learning of economics in government secondary schools in Enugu East local government area of Enugu state. *Unpublished B.Ed. thesis*. Godfrey Okoye University, Ugwuomu Nike, Enugu.
- Obanye, B.C. (2015). Primary school science and method. *Instructional Journal of Education Research* (4), 96-106
- Obidike, N. D, Enemuo, J. O. & Onwuka L. N. (2012). *Childhood education literacy for the 21st century: instructional strategies and procedures*. Enugu. Kelu Press.
- Obioma, A.R. (2013). *Foreword I Nigeria minimum standard for early childcare centers in Nigeria*. Onitsha, Baseten.

Okeke, M.J. (2013). Teaching instructional material in schools University of Nigeria Nsukka.
Journal of Technical Education

Okolo, F.R. (2016). Curriculum development. An introduction Kumasi, skills Press. *Journal of Curriculum Studies* (2),62-70.

Oni, J.O. (2016). *Education resources: An introduction*. Abeokuta: Gbemisodipo Press limited 1-21.

Onwuka, C.J. (2015). Implementation of early childhood education in Nigeria. *Journal of Teachers Association of Nigeria*. 4,25

Tanner, C.O. (2013). *Teachers as curriculum planners narrate experience* New York: Teachers College Press.

PERCEIVED INFLUENCE OF PLAY ON LEARNING ACTIVITIES AMONG PUPILS IN ANAMBRA STATE

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Abstract

The study examined perceived influence of play on learning activities among pupils in Anambra State. Descriptive survey research design was used for the study. Three research questions and three hypotheses were formulated to guide the study. The population of the study comprised all the 128 teachers (77 males and 51 females) from the 33 public primary schools in Njikoka L. G. A. of Anambra State. The reliability of the instrument was obtained using Cronbach Alpha method which yielded 0.82. An item structured questionnaire was developed and used for data collection. Mean and standard deviation were used to answer the research questions while t-test was used to test the null hypotheses. The null hypotheses were tested at 0.05 level of significance. Major findings revealed that play is one of the essential ways pupils learn problem-solving skills, develop their self-confidence, develop their cognitive skills by introducing them to new ideas, absorb experience into existing schema and develop mental capacity to improve learning performance. It was therefore recommended among others that Anambra State Government, through the academic planners should integrate appropriate play such as structured, unstructured and risky play in their curriculum development to enhance learning. Teachers should also be exposed to training on learning activities in order to up-date their skills and knowledge on organizing play suitable for pupils.

Keywords: Perceived influence, play, learning activities, pupils

Introduction

Play is an essential part of early years' education and development. It is a powerful and important activity. It is through play that young children learn concepts and skills, including social skills, physical skills and language skills. It is vital to integrate play into the lives of children and set the foundation in facilitating and maintaining healthy and active lifestyles (Zeng, Ayyub, Sun, Wen, Xiang & Gao, 2017). In other words, children can learn through play by offering them a chance to ask questions, work collaboratively and conduct structured experimentation. The best learning happens when children play.

Play is one of the main ways in which children learn and develop. Researchers from Education & Psychology have suggested that play is a sturdy mediator of learning various skills throughout a person's life. This is in correspondence to Piagetian, which has significantly influenced

developmentally appropriate practice. It includes the perceptive that children learn naturally through play with the teachers facilitating opportunities for play in the environment they are exposed to. Obviously, children are born naturally curious and ready to learn. Ashari and Husharri (2018) stated that play is a natural activity for children as they tend to be very creative and resourceful when playing independently or with peers. Play activities is an important medium for children which allows them to use their creativity while developing their imagination, and physical, cognitive, and emotional strength (Kenneth, 2007). According to research on brain development, play actually shape the structural design of the brain. Lester and Russell (2019) emphasized that play creates a brain that has increased flexibility and improved potential for learning later in life. Also, play is valued for its role in learning, however, play can be built into everyday routines, classroom and outdoor activities.

Play takes different forms for different children. Having choices is important since an action that appeals to one child may be of no interest to another, and the child's interest is likely to change throughout the play period. In general, there are three forms of play for children: Structured, unstructured and risky play (Sarah, 2015). Each has unique benefits and is important for optimal child development.

Structured play is any type of activity that has a set of rules or instructions with a goal. Structured play, also known as goal-oriented and guided play, generally involves using logic to solve problems (Sarah 2015). Structured play helps pupils to develop their personality in emotional, social, cognitive and physical aspects. It involves teacher scaffolding and intervention. In structured play, teachers may ensure children focus on certain games. However, within the set confines, they encourage children to direct the flow of the activity. Examples of structured play are puzzles, organized sports, construction toys, sorting games and building blocks. Similarly, if teachers or parents identify toys or games children gravitate to when they are allowed to engage in free play, consider subtly removing those toys from the environment to encourage children to use their creativity to come up with new activities. Some plays without teachers' intervention is known as unstructured play.

Unstructured play is the kind of physical activity in which pupils established their own objectives. Unstructured play might be called free play, unguided play, spontaneous play and adventure play. Thiessen, Gluth and Corso (2013) stressed that during unstructured play, children can learn how to work together, adapt to different situations, experiment, explore and solve problems, construct meaning and also begin to learn what they like, what they are good at and how to express their

individuality and develop a positive self-concept. Thiessen et al added that if children are not provided with the opportunity for unstructured play by pursuing their own play tasks, they may not only lose the opportunity to learn vital skills linked to social interaction but their creative development may also be inhibited. In unstructured play environments, children need to make their own decisions on how to make use of their surrounds.

A playground without rules can be a nightmare and without set rules, children are given a blank slate. Sandseter and Kennair (2011) defined risky play as a thrilling and exciting play that can include the possibility of physical injury. The categories of risky play include; climbing, swinging, or jumping from height, high speed, (swinging, sliding, running at speed), playing with dangerous tools (e.g. knives, axes, ropes), dangerous elements, (moving water, edges, fire), rough and tumble (wrestling, play fighting, sword play) and disappear/get lost (hiding, playing alone, outdoors and exploring new areas. Although children are actually learning something very important, they should also be properly guided as they engage in such a challenging play to avoid injuries.

Every learning activity should be intentional, meaningful and useful. The teacher's fundamental task is to get children to engage in learning activities (building blocks, painting pictures) that are likely to result in achieving the intended learning. Learning activities as the name implies are activities designed or deployed by the teacher to bring about, or create the conditions for learning. It is a range of activities promoted to achieve learning, such as dissemination activities, discussion activities, discovery activities and demonstration activities. It refers to advances in mental processes associated with perception, memory, reasoning, problem-solving, language-learning and other aspects of brain development that occur with increasing age (Rao, Sun, Wong, Weekes, Shaeffer & Lee, 2014). Play influences all areas of development, it offers children the opportunity to learn about the self, others, and the physical environment.

Gender is an element of identity that young children are working hard to understand and a topic that early childhood teachers are not always sure how best to address (Jamie, 2016). It was believed that male characteristics is associated with power, opportunity and prestige. The gender roles that children assume, as defined by our culture, affect their role from determining the interests to deciding how to play and how to use the materials (Meier & Henderson, 2007). For instance, boys are more active, physical and play in larger spaces than girls. In contrast, girls are more complaint and play closer to adults than boys. More so, play activities taught at school age has the goal of enhancing the academic

performance of the pupils particularly when such plays are integrated in the lessons; such participation and academic performance is different for both boys and girls where boys are observed to perform relatively better than girls. (Dinella & Weisgram, 2018). However, it provides opportunity for learners to improve on their learning activities irrespective of their gender.

Nevertheless, it appears some primary school management in Anambra State pay more attention to academic activities and prevent pupils from engaging in play in order to avoid distraction. This creates academic monotony and boredom which adversely affect learning activities of pupils' in primary schools in Anambra State and this prompted this study.

Statement of the problem

It is said that 'all work and no play makes a child a dull child and all play and no work makes the child a merry toy'. Learning occurs when children play and the teacher awareness of the learner audience is an essential element. To say the least, this will help to contribute to the cognitive, physical, social and emotional well-being of pupils.

The writer however observed that learning through play cannot be practiced well due to the constraints faced by teachers, the perplexities in controlling children in the classroom, time constraints, lack of play materials, lack of creativities and ideas, and the absence of conducting learning through play in a systematic way. This therefore creates a gap in knowledge among the pupils who did not learn through play. Among other things, it may have some certain implications on children's ability to store new information as children's cognitive capacity is enhanced by change in activity. It is against this backdrop that this study is set out to examine the perceived influence of play on learning activities among pupils in Anambra State.

Research Questions

The following research questions guided the study;

1. What are the mean scores of male and female teachers on the perceived influence of structured play on learning activities of pupils in Anambra State?
2. What are the mean scores of male and female teachers on the perceived influence of unstructured play on learning activities of pupils in Anambra State?

3. What are the mean scores of male and female teachers on the perceived influence of risky play on learning activities of pupils in Anambra State?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. There is no significant difference in the mean scores of male and female teachers on the perceived influence of structured play on learning activities of pupils in Anambra State.
2. There is no significant difference in the mean scores of male and female teachers on the perceived influence of unstructured play on learning activities of pupils in Anambra State.
3. There is no significant difference in the mean scores of male and female teachers on the perceived influence of risky play on learning activities of pupils in Anambra State.

Method

Descriptive survey research design was used for the study. The area of the study was Anambra State. Three research questions and three hypotheses guided the study. The population of the study comprised all the 128 teachers (77 males and 51 females) from the 33 public primary schools in Njikoka LGA in Anambra State. The reliability of the instrument was obtained using Cronbach Alpha method which yielded 0.82. An item structured questionnaire was developed and used for data collection. The instrument had two sections namely; A and B. Section A is on the background information of the respondents such as gender. Section B had three clusters of B1 to B3 with 6, 8 and 7 items respectively. Section B of the instrument therefore contains a total of 21 items, all structured on a four-point rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree weighted at 4, 3, 2 and 1 respectively. The reliability of the instrument was ascertained using Cronbach Alpha and it yielded reliability co-efficient of 0.84, 0.83 and 0.80 for clusters I, II and III respectively and the overall coefficient of the instrument was 0.82. Mean and standard deviation were used to answer the research questions while t-test was used to test the null hypotheses. The null hypotheses were tested at 0.05 level of significance.

Results

Research Question 1: What are the mean scores of male and female teachers on the perceived influence of structured play on learning activities of pupils in Anambra State?

Table 1: Mean ratings and standard deviation scores of male and female teachers on the perceived influence of structured play on learning activities among pupils in Anambra State.

| S/ N | ITEMS | Male Teachers (N =51) | | | Female Teachers (N =77) | | |
|---------------------|--|------------------------|-------------|--------------|-------------------------|-------------|--------------|
| | | Mean | SD | Decision | Mean | SD | Decision |
| 1 | improve their intellectual reasoning. | 2.67 | 1.08 | Agree | 2.61 | 0.89 | Agree |
| 2 | enhance their communication skills. | 2.57 | 1.05 | Agree | 2.59 | 1.12 | Agree |
| 3 | develop their cognitive skills by introducing them to new ideas. | 2.43 | 0.94 | Disagree | 2.40 | 1.04 | Disagree |
| 4 | promote their personality development. | 2.44 | 1.03 | Disagree | 2.46 | 1.09 | Disagree |
| 5 | install cooperation within a team for cognitive growth. | 2.65 | 1.10 | Agree | 2.72 | 1.11 | Agree |
| 6 | helps pupils absorb experience into existing schema. | 2.47 | 1.13 | Agree | 2.49 | 1.15 | Agree |
| Cluster Mean | | 2.54 | 1.06 | Agree | 2.55 | 1.07 | Agree |

Data presented on Table 1 showed that the mean scores of male and female teachers are above the cut off mean of 2.50 for all items with exception of items 3 and 4 and this indicated agreement with the items as perceived impact of structured play on learning activities among pupils. The perceived influence of structured play on learning activities among pupils in Anambra State include that; structured play helps pupils improve their intellectual reasoning, enhance their communication skills, develop their cognitive skills by introducing them to new ideas and absorb experience into existing schema. The standard deviation scores for male and female teachers which stood at 1.06 and 1.07 respectively indicated convergence of their responses and thus their responses were homogenous.

Research Question 2: What are the mean scores of male and female teachers on the perceived influence of unstructured play on learning activities of pupils in Anambra State?

Table 2: Mean Ratings and Standard Deviation Scores of Male and Female Teachers on the Perceived influence of Unstructured Play on Pupils Learning activities

| S/ N | ITEMS | Male Teachers (N =51) | | | Female Teachers (N =77) | | |
|---------------------|---|------------------------|-------------|--------------|-------------------------|-------------|--------------|
| | | Mean | SD | Decision | Mean | SD | Decision |
| 7 | develop their creativity. | 2.76 | 1.09 | Agree | 2.81 | 1.02 | Agree |
| 8 | build strong emotional tolerance. | 2.54 | 1.05 | Agree | 2.52 | 1.11 | Agree |
| 9 | cope effectively with stress and relating well with others. | 2.46 | 1.04 | Disagree | 2.48 | 1.13 | Disagree |
| 10 | take control of their own learning. | 2.50 | 1.14 | Agree | 2.44 | 1.14 | Disagree |
| 11 | build empathy and creativity. | 2.72 | 1.06 | Agree | 2.77 | 1.06 | Agree |
| 12 | make toys to develop self-reliance skills. | 2.43 | 1.16 | Disagree | 2.45 | 1.04 | Disagree |
| 13 | have sense of freedom and control. | 2.45 | 1.03 | Disagree | 2.52 | 1.15 | Agree |
| 14 | to experiment and adapt to different situations. | 2.62 | 1.04 | Agree | 2.56 | 1.07 | Agree |
| Cluster Mean | | 2.56 | 1.08 | Agree | 2.57 | 1.09 | Agree |

From Table 2, items 7, 8, 11 and 14 have mean scores above the cut off mean of 2.50 for both male and female teachers and this indicated their agreement with the items as the perceived influence of unstructured play on learning activities among pupils. Thus, the perceived influence of unstructured play on learning activities among pupils include that; unstructured play helps pupils develop pupils' creativity, build strong emotional tolerance, empower them to take control of their own learning and to experiment and adapt to different situations. The mean scores of male and female teachers are below the cut off mean of 2.50 for items 9 and 12 which indicated agreement with the items The standard deviation scores which stood at 1.08 and 1.09 for male and female teachers respectively indicates that their mean ratings were little clustered and this implies that there is just little variation from their responses.

Research Question 3: What are the mean scores of male and female teachers on the perceived influence of risky play on learning activities of pupils in Anambra State?

Table 3: Mean Ratings and Standard Deviation Scores of Male and Female Teachers on the Perceived influence of Risky Play on Pupils Learning Activities

| S/ N | ITEMS | Male Teachers (N =51) | | | Female Teachers (N =77) | | |
|---------------------|---|------------------------|-------------|--------------|-------------------------|-------------|--------------|
| | | Mean | SD | Decision | Mean | SD | Decision |
| 15 | engage in play-fighting to discover their strengths | 2.54 | 1.07 | Agree | 2.56 | 1.05 | Agree |
| 16 | climb trees to develop their self-confidence | 2.61 | 1.04 | Agree | 2.65 | 1.00 | Agree |
| 17 | learn problem-solving skills | 2.57 | 1.04 | Agree | 2.60 | 1.14 | Agree |
| 18 | run down the school building and steep hills | 2.60 | 1.17 | Agree | 2.58 | 1.02 | Agree |
| 19 | develop exercise motor skills | 2.47 | 1.05 | Disagree | 2.41 | 1.15 | Disagree |
| 20 | increase their muscle flexibility | 2.43 | 1.05 | Disagree | 2.49 | 1.04 | Disagree |
| 21 | to develop mental capacity to improve cognitive performance | 2.53 | 1.03 | Agree | 2.58 | 1.04 | Agree |
| Cluster Mean | | 2.54 | 1.06 | Agree | 2.55 | 1.06 | Agree |

Table 3 showed that male and female teachers mean scores are above 2.50 for items 15, 16, 17, 18 and 21 revealing agreement with the items as the the perceived influence of risky play on learning activities among pupils. Thus, the perceived influence of risky play on learning activities among pupils include that risky play helps pupils engage in play-fighting to discover their strengths, climb trees to develop their self-confidence, learn problem-solving skills, run down the school building steep hills, develop exercise motors skills, increase their muscle flexibility and to develop mental capacity to improve learning performance. However, items 19 and 20 have mean scores below the cut off mean of 2.50 for both male and female teachers and this indicated their disagreement with the items. The standard deviation scores of male and female teachers which are 1.06 and 1.06 indicated homogeneity in their ratings.

Hypothesis 1: There is no significant difference in the mean ratings of male and female teachers on the perceived influence of structured play on learning activities among pupils in Anambra State.

Table 4: The t-test of Significant Difference between the Mean Ratings of Male and Female Teachers on the Perceived influence of Structured Play on learning activities among Pupils in Anambra State

| Respondents | N | X | SD | t.cal | t.crit. | Df | ∞ | Remark |
|-----------------|-----------|------|------|-------|---------|-----|----------|-----------------|
| Male Teachers | 51 | 2.54 | 1.06 | 0.05 | 1.96 | 126 | 0.05 | Not Significant |
| Female Teachers | <u>77</u> | 2.55 | 1.07 | | | | | |
| Total | 128 | | | | | | | |

Data presented on Table 4 revealed that the t-calculated value of 0.05 is less than t-critical value of 1.96 at 0.05 level of significance and 126 degree of freedom. Thus, the null hypothesis is not significant. Therefore, there is no significant difference in the mean ratings of male and female teachers on the perceived impact of structured play on learning activities among pupils in Anambra State.

Hypothesis 2: There is no significant difference in the mean ratings of male and female teachers on the perceived influence of unstructured play on learning activities among pupils in Anambra State.

Table 5: The t-test of Significant Difference between the Mean Ratings of Male and Female Teachers on the Perceived influence of Unstructured Play on Learning Activities among Pupils in Anambra State

| Respondents | N | X | SD | t.cal | t.crit. | Df | ∞ | Remark |
|-----------------|-----------|------|------|-------|---------|-----|----------|-----------------|
| Male Teachers | 51 | 2.54 | 1.08 | 0.06 | 1.96 | 126 | 0.05 | Not Significant |
| Female Teachers | <u>77</u> | 2.55 | 1.09 | | | | | |
| Total | 128 | | | | | | | |

Data presented on Table 5 revealed that the t-calculated value of 0.06 is less than t-critical value of 1.96 at 0.05 level of significance and 126 degree of freedom. Thus, the null hypothesis is not significant. Therefore, there is no significant difference in the mean ratings of male and female teachers on the perceived influence of unstructured play on learning activities among pupils in Anambra State.

Hypothesis 3: There is no significant difference in the mean ratings of male and female teachers on the perceived influence of risky play on learning activities among pupils in Anambra State.

Table 6: The t-test of Significant Difference between the Mean Ratings of Male and Female Teachers on the Perceived influence of Risky Play on Learning Activities among Pupils in Anambra State.

| Respondents | N | X | SD | t.cal | t.crit. | Df | α | Remark |
|-----------------|-----------|------|------|-------|---------|-----|----------|-----------------|
| Male Teachers | 51 | 2.54 | 1.06 | 0.05 | 1.96 | 126 | 0.05 | Not Significant |
| Female Teachers | <u>77</u> | 2.55 | 1.06 | | | | | |
| Total | 128 | | | | | | | |

Data presented on Table 6 revealed that the t-calculated value of 0.05 is less than t-critical value of 1.96 at 0.05 level of significance and 126 degree of freedom. Thus, the null hypothesis is not significant. Therefore, there is no significant difference in the mean ratings of male and female teachers on the perceived influence of structured play on learning activities among pupils in Anambra State.

Discussion

The finding of the study revealed that the perceived influence of structured play on learning activities among pupils in Anambra State include that: structured play helps pupils improve their intellectual reasoning, improve their communication skills, install cooperation within a team for cognitive growth and absorb experience into existing schema. This is in line with the findings of Zeng et al (2017) who reported that structured play has influence on learning activities of pupils due to the fact that structured play is ideal for boosting pupils' confidence, encourage resilience and also develop problem-solving skills. It also helps pupils to use their creativity, while developing their imagination, physical, cognitive and emotional strengths. Pupils who engage in structured play gain satisfaction, happiness, refreshment, sense of belonging, esteem actualization and competitive spirit. The result of the findings is in agreement with Brittain (2016) who believed that sports can have a positive influence on how children learn and develop lifelong skills such as self-esteem and the ability to socially interact with other pupils.

The result of this study also revealed that the perceived influence of unstructured play on learning activities among pupils include that unstructured play helps pupils develop their creativity, build strong emotional tolerance, to take control of their own learning and to experiment and adapt to

different situations. This is in agreement with the finding of Thiessen, Gluth and Corso (2013) which indicated that unstructured play has influence on learning activities of learners in the classroom. The possible explanation for the agreement in the findings could be due to the fact that unstructured play is inevitable in the school system. It also allows pupils to create and explore their environment without set rules. This boosts learning activities of pupils. Since, no rules in unstructured play, pupils can use their imagination and initiatives to develop their games.

The findings of this study further showed that the perceived influence of risky play on learning activities among pupils include that risky play helps pupils engage in play-fighting to discover their strengths, climb trees to develop their self-confidence, to learn problem-solving skills, run down the school building steep hills and to develop mental capacity to improve learning performance. This supported that finding of Sandseter (2011) who observed that the effect of children being able to engage in risky play such as climbing trees, running and jumping are the enhancement of their competence and confidence. This also corroborated the finding of Brussoni, Gibbons, Gray, Isahikawa, Sandseter, Bienenstock, Chabot, Fuseli, Janssen, Pickett, Power, Stranger, Sampson and Tremblay (2015) who observed that risky play has been associated with promoting children's health and learning activities. Risky play comes with many benefits for learning and development.

Conclusion

Teachers are in agreement with their perceived influence of structured play, unstructured play and risky play on learning activities among pupils in Njikoka Local Government of Anambra State. Learning through play is therefore implicated as one of the essential ways pupils learn and develop. Through it pupils come to acquire some essential skills for their all-round development as the above study revealed.

Recommendations

1. Anambra State Government, through the academic planners should integrate appropriate play such as structured, unstructured and risky play in their curriculum development to enhance learning.
2. The government, together with the school management should create enabling environment for learning through play. The schools should be provided with necessary play and instructional materials for teachers.

3. The school head-teachers and teachers should regularly inspect the risky play engaged by pupils to avoid exposing themselves to danger and ensure that the playground is free of dangerous tools.
4. Teachers should be exposed to training on learning activities in order to up-date their skills and knowledge on organizing play suitable for pupils.

REFERENCES

- Ashari, Z.M. & Hushari, N. (2018). Teachers' perception towards play-based pedagogy to promote cognitive and social skills amongst preschoolers with learning disabilities. *10th International Conference on Engineering Education*. Available at doi: 10.1109/ICEED/2018.8626936.
- Brittain, A. (2016). The effect of structured activities and sports on children. *Childhood Education, Education*.
- Brussoni, M., Gibbons, R., Gray, C., Isahikawa, T., Sandseter, E.B.H., Bienenstock, A., Chabot, G., Fuseli, S.H., Janssen, I., Pickett, W., Power, M., Stranger, N.I., Sampson, M. & Tremblay, M.S. (2015). What is the relationship between risky outdoor play and health in children? A systematic review. *International Journal of Environmental Research and Public Health*, 12(1), 6423-6454.
- Dinella, L.M. & Weisgram, E.S. (2018). Gender-typing of children's toy: Causes, consequences and correlated. *Sex Roles*. 79, 253-259.
- Jamie, S. (2016). Early childhood classroom; Influences on development within sociocultural contexts. *Resources publication*. <http://www.naeyc.org/resources>.
- Kenneth, R.G. (2007). The importance of play in promoting healthy child development and maintaining strong parent. *Child Bonds*. 119(1), 23-30.
- Lester, S. & Russell, W. (2019). Play based learning. *State of play issue, everyday magazine playgroup*. South Australia.
- Meier, D.R., & Henderson, B. (2007). Learning from young children in the classroom. *The art and Science of Teacher Research*. New York: Pearson
- Sandseter, E.B.H. (2011). Children's risky play in early childhood education and care. *Orial*, 1(1), 1-29.
- Sandseter, E.B.H. & Kennair, L.E.D. (2011). Children's risky play from an evolutionary perspective: The anti-phobic effects of thrilling experiences. *Evolution Psychology*, 9(1), 257-284.
- Thiessen, M., Gluth, S. & Corso, R. (2013). Unstructured play and creative development in the classroom. *International Journal for Cross-Disciplinary Subjects in Education*, 4(4), 1341-1346.
- Zeng, N., Ayyub, M., Sun, H., Wen, X., Xiang, P. & Gao, Z. (2017). Effects of physical activity on skills and cognitive development in Early childhood: A systematic review. *BoMed Rese International*, 1(1), 1-13.

NUTRITION AND HEALTH PRACTICES IN EARLY CHILDHOOD: IMPLICATION FOR CHILD DEVELOPMENT

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Abstract

The study focused on the nutrition and health practices in early childhood and its implication for child development. The study was carried out in Awka South Local Government Area of Anambra State. Three research questions guided the study. Descriptive survey design was adopted to carry out the study. The population of the study was 82 private schools in Awka South L.G.A with 246 early childhood teachers. Simple random sampling was used to select 137 early childhood teachers from 52 schools randomly selected from the study area. A structured questionnaire titled Nutrition and Health Practices in Early Childhood (NHPEC) was used as the instrument for data collection which contained twenty-three (23) items. The validation of the instrument was done by three experts, two from Early Childhood and Primary Education and one expert from department of educational management and policy. Cronbach alpha was to determine the reliability of the instrument at 0.70. The analysis of the data was done through mean score. Findings revealed that, early childhood caregivers are aware in area of nutrition practices that contributes to child development but lacks programs like seminar that will help them to keep up with new knowledge that concerns nutrition and child development. And ways government is involved in issues concerning nutrition and health practices in early childcare centers is unsatisfactory. Based on the findings, it was recommended, among others, that school children should be fed with a balanced and healthy diet and regular scheduled immunization should be maintained by the government.

Keywords: Early childhood education, Nutrition, Health practices and child development.

Introduction

Early childhood is seen as the bedrock of education because of how crucial the level is for the development of young children. When proper handling is missed at this stage, the effects of the errors are seen at the later years of the children and need much work by caregivers to correct. According to Federal Republic of Nigeria (FRN, 2013), early childcare development and education (ECCDE) is the care, protection, stimulation and learning promoted in children from age 0 - 4 years in a crèche or nursery. Early childhood education is a system through which children are made to acquire knowledge which stir up the spirit of creativity, acquisition of skills and enquiry in them and make them understand who they are and what is expected of them (Esimone & Umezina, 2013). The important of this type of education for children cannot be neglected. It is a foundation training that offers an opportunity for children's acceleration on all aspect of development. This level of education can be accessed by children within these age limits through

three main categories as identified by the Federal Republic of Nigeria in the National Policy on Education (FRN, 2013). The categories include: Daycare / crèche (ages 0-2); Pre-nursery / play group (ages 3-4) and Nursery / kindergarten (ages 3- 5).

The objectives of this level of education are focused on the handling, care and education of children within the stipulated age grade. The integrated early childhood development in Minimum Standard for Early Childcare Center in Nigeria (2007) constituted the objectives to deal with providing care and support for children in form of good nutrition and health, healthy and safe environment and protection and security. Among other objective includes inculcating social norms, spirit of enquiry and creativity; ensuring smooth transition from home to school and providing adequate care and supervision for the children while their parents are at work. The first on the objective provisions emphasized on providing care and support for the child through ensuring a good nutrition, good health and a healthy and a safe environment for the proper development of the child. Obiweluozor (2013) opined that the quality of care in these areas mentioned surely determines the level of development the child can attain.

Development is expected from every living being after birth. Development of human is simply the process of growth and change that takes place between birth and maturity (James, 2019). The author sees it as a progressive series of orderly coherent changes. In line with this definition, development implies the improvement in function and behavior of individuals which brings quantitative and qualitative changes in them and, continues throughout life. This however expressed that development is not only about realizing human values but, also about increasing the values and their capacities towards sustaining the improvement of the individual. Child development therefore entails the biological, psychological and emotional changes that occur in human between birth and the conclusion of adolescence as the individual progresses from dependency to increasing autonomy (Toga, Thompson & Sowell, 2019). Every child goes through this process of development. The developmental process continues with a predictable sequence but unique for every child. A child is said to be developing if the child is making progress in what he does with his mind and body (Ewuzie, Nwonye & Ayomah, 2015). Nneji and Nneji (2015) in the same vein stated that the body needs to be taken care of to fulfill its condition in rendering its services for a healthy mind. A child is expected to achieve certain milestone as they go through the predictable sequence and time frame. There are four major domains of development expected

in children. It includes cognitive, social-emotional, physical and language development (Fraser-Thrill, 2019).

However, certain factors may hinder and influence the attainment of these developmental milestones expected from these children and their sequence of development. Such factors include genetic factor (nature) and environmental factor (nurture). The causes of unhealthy development as well as disease, disorders and developmental problems are best viewed as roles played by gene and environment (Unachukwu, Ebenebe & Nwosu, 2019). This is probably the intensions at this level of child education and development where their organ and faculties are needed to be nurtured through proper/adequate nutrition and health practices.

Nutrition during the early years of life is fundamental for child development and good health. Nutrition according to World Health Organization (WHO, 2014) is the intake of food considered in relation to the body's dietary needs. North Virginia Community College (2014) defined nutrition as the science of food, the nutrient in foods and how the body uses those nutrients. Nutrition is the science that interprets the interaction of nutrients and other substances in food in relation to maintenance, growth, reproduction, health and diseases of an organism (Joint Collection Development Policy, 2014). Nutrition involves food intake, digestion, assimilation, metabolism, catabolism and excretion. In line with the above definitions, nutrition is the process of deriving helpful substances from edibles which provides the body with essential nutrients for its maintenance, growth and development. However, nutrition focuses on how diseases, conditions and developmental problems can be prevented or reduced by eating right and healthy dieting.

Healthy diet has been misunderstood by many and mistaken for eating or feeding three times a day or having three square meals a day. Junk foods and many processed foods, mostly taken as snack and in between meals, have also equated and replaced the real idea of food. This has been viewed as nutrition and eating healthy by many individuals that do not know or realize the place of balanced diet in providing the nutrient their body need for proper development. Ensuring that the children get healthy diet through right nutrition is imperative to their overall development. The caregivers and parents in their care need to ensure that they feed well and also source for nutrient in various foods for a balanced diet. Sources for nutrition in children include breast feeding. Breast feeding is recommended for the first three years of life with exclusive breast feeding during the first six months after birth. The exclusive breast feeding for the stipulated six months means no other food or liquid should be given to the child except breast milk (Whitney & Rolfes, 2013).

After that duration, other compliments gotten from other food nutrient can be added to breast feeding to support the feeding of the child. Nutrition can also be gotten from all the classes of food and their combinations. These classes of food include macronutrients (carbohydrate, fat, proteins, fiber and water) and micronutrient (minerals and vitamins).

The nutrients from these classes of food work towards keeping children healthy and sound in both mind and body thereby ensuring a safe development. A Latin phrase, “Men Sana in Copore Sano”, which means a healthy mind in a healthy body can be used to specify that: for the mind to be healthy, the body must be healthy as well and any altercation between the mind and the body affects the development of the child involved. This however expresses the position of health in proper child development. Marrian–Webster dictionary (2018) defined health as the general condition of being sound in body, mind or spirit especially freedom from physical disease or pain. In line with this definition, health can be seen as the overall good condition of a human being which enables them to function adequately in their daily activities. This indicates that the concept of being healthy has shifted from being the absent of illness or disease hindering the body to function well to inculcating the wellness of general aspect of human life, which can be maintained by regular health practices.

Health practices cannot be eliminated when proper child development is involved as it helps to maintain in them a healthy mind in a healthy body. According to National Council of Educational Research and Training, India (2017), health practices can be seen as all practices performed in association to the preservation and promotion of health This involves ensuring a safe environment, exercising to maintain physical fitness, sleep and siesta, immunization, medical attention and hygiene. Hygiene among other practices contributes to the health and general wellness of the child. Oswalt, Reiss and Dombeck (2015) stated that promoting good personal hygiene habits does more than protect the children from the threat of germs and diseases but also help to promote their general health and wellbeing. Cambridge dictionary online (2019) also defined hygiene as the degree to which people keep themselves or their environment clean, especially to prevent diseases. It can be infer that, hygiene has broad term and cannot be equated to cleanliness alone. It includes overall cleanliness, health and medicine. The practices of hygiene are adopted as preventive measures in reducing the incidence and spreading of diseases and, such should not be overlooked in early childhood settings. Negligence to these practices and nutrition could implicate the sequence of development which is unique in every child.

Statement of the Problem

Nutrition and health practices play an important role on child development especially at their formative age. The misconception between right feeding and health measures and, what some adults and caregivers have come to believe and view as the right measures in child development have become worrisome as to the damage it may cause to the child's development at this level. In the same vein, the call for early childhood education has been on the increase in both rural and urban areas. The rise in this demand in most rural and urban areas have led to the increase of early childhood centers in those areas with much attention focused on the gain of such establishment rather than being motivated by the love and care of the young ones, which would see to their proper development.

The establishment of early childhood centers and the growing misconception on nutrition and health practices that aids development in children have raised major concern about the fate of the young ones in the care of such centers. The quality and standard of these established schools and, the qualification of the kind of teachers and caregivers employed to handle the affairs of the children has come to be questioned. These have become a big challenge to early childhood care and education and to the overall development of the child.

Hence, the position and attitudes of early childhood centers and the concern of government in childhood education and its standard in private sector was what led to this study. This study therefore investigated the nutrition and health practices in early childhood education and its implication for child development.

Purpose of the Study

The study investigated nutrition and health practices in early childhood education and its implication to child development in Awka South Local Government Area of Anambra State. Specifically, the study aims:

1. To determine the awareness of caregivers on nutrition towards proper child development.
2. To determine the health practices caregivers engage in early childhood centers towards effective child development.
3. To determine ways government are involved in maintaining and addressing issues concerning nutrition and health practices.

Research Questions

The following research questions guided the study

1. What areas of nutrition are caregivers aware for proper child development?
2. What are the health practices that caregivers engage in early childhood education towards maintaining proper child development?
3. What ways are government involved in maintaining and addressing issues concerning nutrition and health practices in ECE centers?

Method

The study was conducted to investigate nutrition and health practices in early childhood and its implication for child development. Three research questions guided the study. Descriptive survey research design was adopted to carry out the study. The population of the study consisted 82 private early childhood centers and 246 early childhood teachers in Awka south local government area of Anambra state. Simple random sampling was used to select 137 early childhood teachers from 52 schools randomly selected from the 82 private schools in the study area. The instrument used for data collection was a 23 item structured questionnaire by the researcher titled Nutrition and Health Practices in Early Childhood (NHPEC). The items are structured on a four (4) point rating scales of Strongly Agree (SA, 4pionts), Agree (A, 3pionts), Disagree (D, 2pionts) and Strongly Disagree (SD, 1piont) and was validated by 2 experts in early childhood and primary education department and one expert from department of educational management and policy.

The reliability of the instrument was determined using Cronbach alpha and estimate of 0.70 was obtained which showed its reliability. Mean score was used to analyze the research questions and in taking decision, mean scores above 2.50 were considered as agreed while those below 2.50 were considered as disagreed. One hundred and thirty-seven (137) questionnaires were administered and one hundred and twenty-six (126) questionnaires were returned and analyzed.

Results

Research Question 1: What areas of nutrition are caregivers aware for proper child development?

Table 1: Mean responses of caregivers' awareness on nutrition towards proper child development.

| S/N | Item | SA | A | D | SD | X | DECISION |
|-----|--|----|----|----|----|-----|----------|
| 1 | Children are to be fed well before coming to school. | 41 | 54 | 25 | 6 | 3.0 | Agree |
| 2 | Children are to be fed with a well-balanced diet. | 31 | 50 | 33 | 12 | 2.8 | Agree |
| 3 | Snacks given to children should be more of healthy snacks than junks. | 28 | 40 | 38 | 20 | 2.6 | Agree |
| 4 | Exposing children to a variety of foods in early life makes it easier for children to enjoy a health promoting diet. | 56 | 35 | 17 | 18 | 3.0 | Agree |
| 5 | Nutrition awareness seminars are organized for caregivers termly. | 22 | 41 | 18 | 45 | 2.3 | Disagree |
| 6 | Breast milk contains essential nutrient and antibodies a baby need for proper development. | 84 | 34 | - | 8 | 3.5 | Agree |

The data presented in table 1 above shows that the respondents agreed with five (5) items as areas of nutrition that caregivers are aware for proper child development. These items 1, 2, 3, 4 and 6 has means score of 3.0, 2.8, 3.0, 2.3, and 3.5 respectively. Item 5 with mean score of 2.3 was disagreed by the respondents. Table one shows that the respondents agreed with 5 items while 1 item was disagreed based on the mean rating.

Research Question 2: What are the health practices that caregivers engage in early childhood education towards maintaining proper child development?

Table 2: Mean responses of health practices caregivers engage in early childhood education centers in maintaining proper child development.

| S/N | Item Statements | SA | A | D | SD | X | DECISION |
|-----|--|----|----|----|----|-----|----------|
| 7 | I ensure that the classrooms are cleaned daily before day activities. | 90 | 36 | - | - | 3.7 | Agree |
| 8 | I make sure that children make use of educational mat while sitting on the floor. | 67 | 46 | 13 | - | 3.3 | Agree |
| 9 | I ensure that the classrooms are well ventilated and lighted. | 72 | 43 | 11 | - | 3.4 | Agree |
| 10 | I ensure that the children make use of toilet and sanitary facilities available in the school. | 75 | 42 | 9 | - | 3.5 | Agree |
| 11 | I ensure that children's lunch foods are well kept before lunch time. | 69 | 50 | 7 | - | 3.4 | Agree |
| 12 | I ensure that children's feeding area is well arranged and hygienic. | 75 | 51 | - | - | 3.5 | Agree |
| 13 | I ensure weekly health inspection of children's personal and oral hygiene. | 66 | 29 | 17 | 14 | 3.1 | Agree |
| 14 | I practice first aid in time of emergency. | 62 | 48 | 12 | 4 | 3.3 | Agree |
| 15 | I engage children in daily physical exercise regime/periods. | 56 | 47 | 13 | 10 | 3.1 | Agree |
| 16 | I ensure provision of clean water in my class. | 66 | 53 | 7 | - | 3.4 | Agree |
| 17 | I made provisions for wash hand basin with soap and water in my class. | 59 | 55 | 8 | 4 | 3.3 | Agree |
| 18 | I ensure proper hand washing practices in my class after using the toilet, before preparing children's food or serving them, before and after eating food. | 77 | 39 | 10 | - | 3.4 | Agree |
| 19 | I ensure proper disposal of liquid and solid wastes in my class. | 74 | 36 | 6 | 10 | 3.3 | Agree |
| 20 | I ensure that children make use of their personal cutlery in school. | 66 | 40 | 6 | 8 | 3.3 | Agree |

Table 2 above shows that, based on the mean ratings, the respondents agreed with the entire item presented as the health practices they engage in proper child development.

Research Question 3: What ways are government involved in maintaining and addressing issues concerning nutrition and health practices in ECE centers?

Table 3: Teachers’ Mean Responses on the ways government are involved in maintaining and addressing issues concerning nutrition and health hygiene in ECE.

| S/N | Item | SA | A | D | SD | X | DECISION |
|-----|--|----|----|----|----|-----|----------|
| 21 | The Home-grown school feeding and health program (HGSFHP) is on-going and effective in the school. | 22 | 11 | 41 | 52 | 2.0 | Disagree |
| 22 | Government making provision for health workers to visit schools for routine immunization. | 74 | 35 | 8 | 9 | 3.3 | Agree |
| 23 | The government makes provision for health materials/equipment for school use. | 16 | 20 | 28 | 62 | 1.9 | Disagree |

In table 3 above, it shows that the respondents disagreed with two (2) items which includes items 21 and 23 with mean scores of 2.0 and 1.9 respectively. Item 22 was agreed by the respondents with mean score of 3.3. Table 3 shows that the respondents disagreed with 4 items while 1 item was agreed based on the mean rating.

Discussion

The findings from Table 1 revealed that caregivers are aware in nutrition areas that are important to child development but lacks program like seminar which will help them to keep up with new knowledge that concerns nutrition and child development. This awareness however will help them in taking proper care of the children under their care as they strive to maintain and inculcate it in their day to day activities while dealing with the children. This is in agreement with the findings of National Academies of Sciences, Engineering and Medicine (NASEM, 2018), who posits that children thrives and develop well when they have positive interactions with adult who are competent in supporting their development and learning.

Findings from Table 2 revealed that teachers in early childhood centers are active in health practices that foster proper child development. The activities of these daily health practices carried out by caregivers are a way of ensuring a healthy mind in a healthy body in children which help them to maintain a proper child development. This is in agreement with Oswalt, Reiss and Dombeck (2015), who posits that promoting good health and personal hygiene habits does more

than protect the children from threat of germs and diseases but also help to promote their general health and development.

Findings from Table 3 showed that the government is involved in maintaining and addressing issues concerning nutrition and health practices in private early childhood centers in Awka South through providing health workers to schools for routined inspection and immunization for children. It revealed also that government involvement are not felt in ways like providing feeding and health equipment/materials to children through the home grown school feeding and health program (HGSFHP). The findings indicate that government roles and involvement in early child care centers in private schools is unsatisfactory. This finding is similar to that of Okoye (2012) which states that government agencies do not effectively carry out their functions in basic education.

It can be inferred from the study that the lack /inadequacy of both nutrition and health practices in early childhood can severe the health and development of young children. In line with this, World Health Organization (2014) reported that 43 million children under age five are overweight or obsessed and 20 million children under age five suffers from acute malnutrition. Implication of neglecting nutrition and health practices in early childhood can be seen on the maladjustment of the child's health and development. According to United Nations International Children's Fund (UNICEF, 2017), the outcome of insufficient food intake, repeated infectious diseases and under nutrition is one of the world's most serious problem with long-lasting harmful impacts on health and devastating consequences on development of children. This revealed that the misjudgment of nutrition and healthy diet by many have brought about malnutrition, under-nutrition, obesity, overweight and other ailment among young children. In the same vein, United Nations Children's Emergency Fund (UNICEF, 2011) reported that 101 million children across globe are under weight and one in four children is stunt in growth. These chronic conditions suffered by some unfortunate children are perceived to be caused by neglect, ignorance and poverty thereby severing and jeopardizing their major domain of development. Hence, since the early years of children are seen as their formative age and crucial for their development, proper nutrition through healthy diet and health practices sustains the developmental nature of children at this stage. This indicates that any shaky foundation, based on these factors, will cause retardation in their development and in turn affect their overall developments. Therefore, Health and hygiene practices can be seen as preventive measures in reducing the incidence and spreading of diseases. Since a child needs a

balanced and healthy diet together with health practices to fuel the rate of growth and development that occurs during early childhood, such should not be over looked in early childhood setting.

Conclusion

Proper child development has been pinned on nutrition and health practices as they play a major measure in preventing and reducing the incidences of under development and spreading of disease. As a major factor in child development in the formative age, its importance should be known and practiced by caregivers that work with children and, parents should be involved as well. The nutrition and health practices if not maintained through proper care and attention by caregivers who are aware of the importance of nutrition and health practices will lay a weak foundation for children at this level which will directly implicate their future development. Therefore, it is of utmost importance for every caregiver to make nutrition and health practices their priority and be serious with the attention and care given to children at this level. The outcome of this focused attitudes of caregivers and parent will most likely be seen on their academic and social life which will aid them to contribute to the development of their society and nation at large.

Recommendations

Base on the findings of the study, the following recommendations were made:

1. Caregivers should consider themselves as important stakeholders when it comes to child upbringing and development. They strive to engage them in healthy practices that would see to their proper development.
2. Children should be well fed with a balanced and healthy diet together to supply them with enough nutrients they need to fuel their rate of growth and development.
3. Caregivers should be exposes to new knowledge based on nutrition and health practices through possible seminars to help them keep up with knowledge regarding nutrition and health practices that are important for child development.
4. State government, through her agencies, should support nutrition and health practices in schools by maintaining regular immunization schedules of children and; through their regulatory bodies ensures that early childhood centers have basic requirements in health, hygiene and child protection.

REFERENCES

- Ekwuzie, M. A., Nwonye, V.N., & Ajomah, U. M. (2015). The importance of nutrition education for primary school children. *Journal of Research and Practices in Childhood Education, 1* (1), 119 – 128.
- Esimone, C.C. & Umezinwa, E. C. (2013). Music in early childhood education: an instrument for preserving the Igbo musical culture in Nigeria. *Journal of educational and social research, 3* (7), 514 – 518.
- Federal Republic of Nigeria. (2013). *National policy on education (6th Ed)*. Lagos: NERDC.
- Fraser-thrill, B. (2019). *Domains in human development*. Retrieved from www.verywellfamily.com/definition-of-domain-32883232
- Health. (2019). In Merriam-Webster's online dictionary. Retrieved from www.merriam-webster.com/dictionary/health
- Hygiene. (2019). In Cambridge online dictionary. Retrieved from www.dictionary.cambridge.org/dictionary/English/hygiene
- James, M. T. (2019). *Human development: Biology*. Retrieved from www.britannica.com
- Joint Collection Development Policy. (2014). *Human Nutrition vs national library of medicine, national institution of health*. Retrieved from www.en.m.wikipedia.org/wiki/nutrition 21th November 2019.
- National Academies of Science, Engineering and Medicine. (2018). *Child development and early learning: A foundation for professional knowledge and competences*. NW, Washington: Author.
- National Councils of Educational Research and Training. (2017). *Sanitation and hygiene: sSupplementary material for the upper primary stage*. Sr Aurobindo marg, New Delhi: Author.
- Nigerian Educational Research and Development Council. (2007). *National minimum standards for early child care centers in Nigeria*. Lagos: NERDC.
- Nneji, B & Nneji, C. (2015). Nutrition and health in childhood care and education: the challenges and paralogsms of poverty. *Journal of Research and Practices in Childhood Education, 1* (1), 129 – 140.
- North Virginia Community College. (2014). *what is nutrition?* Retrieved from www.nucc.edu/home/jsass/nutrition/definenuitrition.htm
- Obiweluzor, N. (2015). Early childhood education in Nigeria, policy implementation: Critique and way forward. *Africa journal of teachers education (AJOTE), 4* (4), 1 – 8.
- Okoye, C. A. (2012). *Evaluation of the implementation of the UNICEF child friendly School Initiative Programme in Enugu State*. (Master's Thesis). University of Nigeria, Nsukka.

Oswalt, A., Reiss, N. S. & Dombeck, M. (2015). *Early childhood hygiene*. Retrieved from www.gracepiontwellmess.org/462-child-development-paenting-early-3-7/article/14296-early-childhood-hygiene.

Toga, A.W., Thompson, P.M., Sowell, E.R., & Thompson, S. (2019). *Child development: Mapping brain maturation*. Retrieved from www.en.m.wikipedia.org/wiki/child-development 19th November 2019.

Unachukwu, G. C., Ebenebe, R. C., & Nwosu, K. C. (2019). *Bruner: Systems of representation*. Developmental psychology and education (3rd Ed). Enugu, Nigeria: Timex press.

UNICEF, WHO & World Bank. (2011). *Joint child malnutrition estimates – levels and herd*. New York, Geneva & Washington DC: Author.

United Nations International Children’s Fund. (2017). *Wash nutrition: a practical guidebook on the increasing nutritional impact through integration of wash and nutrition programs*. Retrieved from www.actioncontrelafaim.org/fr/content/wash-nutrition-practical-guidbook-increasing-nutritional-impact-through-integration-wash

Whitney, E. & Rolfes, S. R. (2013). Understanding nutrition (Bed.). *Wadsworth, Cengage Learning*, 1, 667 – 670. ISBN 978-1-133-58752-1.

World Health Organization. (2014). *what is nutrition?* Retrieved from www.who.int/topics/nutrition/on.

EXTENT OF GOVERNMENT'S INVOLVEMENT IN PROMOTING INCLUSIVE EDUCATION FOR BASIC EDUCATION DELIVERY IN OWEERI MUNICIPAL COUNCIL, IMO STATE.

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Abstract

This study investigated the extent of government's involvement in promoting inclusive education for Basic education delivery in Owerri municipality, Imo state. A descriptive survey design was adopted. Three research questions guided the study. All the 142 pre-primary school teachers in the 24 government owned pre-primary schools in Owerri Municipality were used for the study, hence there was no sampling because all the participants were used due to the small number of the population. A 30 item Questionnaire titled "Extent of Government's Involvement in Promoting Inclusive Education for Basic Education Delivery" (EGIPIEBED) was used to collect the data. The instrument was validated by 3 research experts. The data collected were analysed using mean. A gross reliability coefficient of 0.67 was obtained using Cronbach-Alpha method. The major findings of the study were that extent of government's involvement in providing human and material resources for promoting inclusive education is of low extent. Also, the government is lagging behind in rendering some services that are deemed fit for effective inclusive education. Based on the findings, it was recommended that government should endeavour to employ adequate and qualified human resources needed for effective inclusive education. Also government should provide the necessary material resources needed for promoting inclusive education.

Keywords: Education, Inclusive education, Basic education.

Introduction

A new born child is just a helpless being whose growth, development and wellbeing solely depends on his parents and care-givers. There are factors which are essential for the growth and development of the child. Love, belongingness, food, shelter, clothing, education constitute the major factors needed for the growth, development and wellbeing of the child. If a child is denied any of these needs, he will be found wanting in his physical, cognitive, emotional and social development. Love, food, shelter and clothing are the basic needs of man; and they are prerequisite for an individual to thrive and adapt to the society.

Education is the engine that drives the cognitive and intellectual development of man. It is the process of learning and training in order to develop knowledge and to acquire skills. According to Parankimalil (2012), education is a systematic process through which a child or an

adult acquires knowledge, experience, skill and sound attitude which makes an individual civilized, refined, cultured, and educated. Oando and Akinyi (2019), emphasized that education is a fundamental right of the child with or without disability. It is presumed to be the key to a better childhood and a better future for all children. The general objective of education is to equip an individual with appropriate skills, values and knowledge to function effectively and contribute meaningfully to his or her dynamic society. Education is a pivotal tool in the development of a nation, and it is a responsibility of the state and core element of any developmental policy committed to social justice. Hence, it is the sole duty and the responsibility of the government of a nation to provide and promote a sound quality education for its citizens. However, it is so sad to think and much more to say that people with disabilities are provided with little or less of these needs. They seem not to receive sound quality education, neither are they given equal and fair treatment in the society. Masud and Jahirul (2013), observed that there is continuous discrimination towards children with special needs and exclusion of them from schools. This will automatically, result to the questioning of the essence of Education for All (EFA) as proposed by the government, which will ensure that all receive basic education.

Basic education is a veritable tool needed for the advancement of a developing nation like country Nigeria. It is fundamental to human and national development, and the foundation upon which other levels of education are built. It is also an indispensable priority for human and national progress. Every individual is entitled to this basic education, because it is through it that the skills of literacy and numeracy will be inculcated in the individual. Yoloje in Obiunu, (2011) opined that the concept of basic education is not a relatively new concept to the Nigerian education system. The provision of basic education for all citizens, according to Ochoyi and Danladi in Anaduaka and Okafor (2013), has been a global objective which Nigeria like some other nations set out to achieve through the Universal Basic Education (UBE) programme. The need for such intervention scheme in the nation's educational system is borne out of the realization of the role of education in an individual's life and in the promotion of social, political and economic development in every nation. The UBE scheme provides free, Universal and compulsory Basic Education (UBE) to all children regardless of sex, age, ethnic or religious inclinations, language or status. It is also to accommodate comprehensive adult literacy programme. The scheme is therefore designed to ensure adequate and qualitative education that is directed towards the achievement of the nation's

goals and objectives. The goals of the nation according to the National Policy on Education (2014), are the building of; a free and democratic society, a just and egalitarian society, a united, strong and self-reliant nation, a great and dynamic economy and a land full of opportunities for all citizens.

However, the educational activities and practices of the nation Nigeria, are not in tandem with the stated philosophy and goals of the country. Over the years, there has been a gap between educational policies and goal attainment due to inadequate implementation of these policies (Okoroma 2006). The disabled persons in the society barely have the freedom to participate actively in the various activities of human endeavours. They are being downgraded, disparaged and undervalued which adversely affects their self-esteem. One of the goals of the nation is to build a just and an egalitarian society; but the disabled persons are neither given a fair nor just treatment in the society. They barely have the freedom to partake in the political affairs of the nation, they do not have a voice in the society, they are not given a due consideration in promulgation of the laws of the nation, even in the midst of people, they are painfully isolated. They do not have the opportunity to secure a gainful employment in the workforce and labour market. Garuba in Sambo and Gambo (2015), lamented that there is also the usual problem of attitude towards persons with handicap, which in most cases is far from being favourable. The local culture is a great influence on perception of disability and the resulting attitude towards it. Parents and other family members may be ashamed of exposing their children with disabilities, as these children might 'tarnish their image', especially in African societies where the common way of explaining phenomena are unscientific. With these unjust treatment being meted out to the disabled persons in the society, one, doubts the efficacy of one of the nation's goals that says to build bright opportunities for all citizens. The current National Policy on Education (FRN, 2013) states that the children with disabilities whose educational needs should be addressed are those with a visual impairment, a hearing impairment, a physical or health impairment, mental retardation, an emotional disturbance, a speech impairment, a learning disability, or multiple handicapping conditions. These disabled persons are subjected to only attend the school known as special school which is specifically established for them by the government. This is the base of the social discrimination which they face in the society. They seem to have been written off that they cannot partake in the regular classroom together with those without disabilities. It was as a result

of the need and urge to shun these discriminatory and segregationally attitudes encountered by the disabled persons in respect to socialization and education that developed the concept of inclusive education.

Inclusive education calls for integration and inclusion despite the disability or impairment. According to Offem, Bosah and Asiegbu (2017), the emergence of inclusive education is the need to respond to the diversity of students in the light of social, justice, equity, and democratic participation and as part of a wider interest in an inclusive society. Inclusive education is an approach that ensures the presence, participation and achievement of all students in education. This may be in formal schools, or in non-formal places of learning, such as extra-curricular clubs and humanitarian camps. It often involves working to change the structures, systems, policies, practices and cultures in schools and other institutions responsible for education, so that they can respond to the diversity of students in their locality. Inclusion emphasizes opportunities for equal participation, but with options for special assistance and facilities as needed, and for differentiation, within a common learning framework. (Sightsavers, 2011). Omede (2016), further explained that inclusion differs from previously held notions of integration and mainstreaming which tended to be concerned principally with disability and special educational needs and implied learners changing or becoming ready for or deserving of accommodation by the mainstream. By contrast, inclusion is about the child's right to participate and the school's duty to accept the child. Inclusion rejects the use of special schools or classrooms to separate students with disabilities.

Inclusive education will help to eradicate discriminatory attitudes meted out to persons with disabilities. Garuba (2003), elaborated that inclusion is based on the assumption that:

- a. The original place of the child with special needs is in the regular classroom. Therefore, no condition should be allowed to remove him/her from that environment.
- b. All children have the right to learn and play together. Inclusion is thus a fundamental human right. For instance, the Nigerian constitution makes a provision for suitable education for all children.
- c. Denying opportunity to children to learn under the same roof with other children, is devaluing and discriminatory.
- d. Exclusion is inhuman and indefensible.

Inclusivity is generally promoted worldwide. Taiwo (2015), reported that the international community (represented by various heads of governments from across the world) in 1990 agreed on the need to provide Education for All - EFA (UNESCO, 1990). The EFA declarations made provisions for all children, focusing on various causes of marginalization such as gender, family income (poverty), ethnicity and location. Disability was also mentioned as a source of marginalization, and thus a need for education for children (and adults) with disabilities was identified. Peter in Dreyer (2017), opined that the Dakar Framework for Action adopted a World Declaration on Education for All (EFA) in 2000, which established the goal to provide every girl and boy with primary school education by 2015. It also clearly identified Inclusive Education as a key strategy for the development of EFA. The Salamanca Statement and Framework for Action endorsed by 92 governments and 25 international organizations at the World Conference on Special Needs Education, June 1994 in Salamanca, Spain proclaims that every child has unique characteristics, interests, abilities, and learning needs and that those with special education needs must have access to regular schools which should accommodate them with a child-centered pedagogy capable of meeting those needs. Ashirun (2010), stated that inclusive education is a system whereby the disabled and non-disabled children are educated together in one classroom with modifications in physical structures, equipment and methods to suit the conditions of diverse special needs learners.

The practice of inclusive education anchors on the notion that every child should be an equally valued member of the school culture. In other words, children with disabilities benefit from learning in a regular classroom, while their peers without disabilities gain from being exposed to children with diverse characteristics, talents and temperaments. Supporters of inclusion use the term to refer to the commitment to educate each child, to the maximum extent appropriate, in the school and classroom he/she would otherwise attend. It involves bringing the ancillary services to the child, and requires only that the child will benefit from being in the class (rather than having to keep up with the other students). This is a salient aspect of inclusion, and requires a commitment to move essential resources to the child with a disability rather than placing the child in an isolated setting where services are located (Smith in Ajuwon, 2008). Inclusive education is the best way for proper and judicious use of scarce educational human, material and financial resources; ensuring that such resources are properly deployed to give all children equal access to qualitative

functional and effective education where they learn, play and grow together in same classes and school environment.

Statement of the Problem

The discriminatory attitude which is being faced by persons with disability is quite alarming. This really affects them academically, emotionally, socially and psychologically. Education for all is purely disability free. By implication, every individual is expected to have and experience Basic education, entitled to enjoy his or her fundamental human rights and freedom, equal, fair and just treatment in the society. Regrettably, the persons with special needs are left out, left behind and seem to be relegated in the background. They have been subjected to conditions unworthy of human wants. It is against this backdrop that the researcher embarked on this study to actually examine the extent of government's involvement in promoting inclusive education for basic education delivery.

Research Questions

The following research questions were generated which guided the study.

1. To what extent are Imo state government involved in providing human resources needed in promoting inclusive education for Basic education delivery?
2. To what extent are Imo state government involved in providing material resources needed in promoting inclusive education for Basic education delivery?
3. To what extent are Imo state government involved in rendering the services necessary for promoting inclusive education for Basic education delivery?

Method

The research adopted a descriptive survey design. Descriptive survey is the design which aims at collecting data and describing in a systematic manner the characteristics, features or facts about a given population (Nworgu 2015). The design was adopted for the study because data was collected from a given population to ascertain Imo state government's involvement in promoting inclusive education for basic education delivery. The area of study is Owerri Municipal Council of Imo State The population of the study comprised all the teachers in the government owned pre-primary school in Owerri Municipal Council. There are 142 teachers in the 24 government owned

pre-primary schools. All the 142 teachers were used because the number is not large and could be conveniently used for the study; hence there was no sampling. A 29 item questionnaire developed by the researcher titled “Extent of Government’s Involvement in Promoting Inclusive Education for Basic Education Delivery (EGPIEBED) was used as the instrument for data collection. The instrument was trial tested using 40 pre-primary teachers in public primary schools in Awka South Local Government Area, Anambra state. A gross reliability coefficient of 0.67 was obtained using the Cronbach Alpha method. This showed that the instrument was reliable. The instrument was validated by three experts. One from Educational Foundations Department, and two in Early Childhood and Primary Education Department from faculty of Education, Nnamdi Azikiwe University, Awka. The experts made some corrections which formed the basis for modifying the items. Arithmetic Mean was used as the statistical tool for data analysis. A mean rating that falls within the range of 3.50-4.00, 2.50-3.49, 1.50-2.49 and 1.00-1.49 above were taken to be Very High Extent (4), High Extent (3), Low Extent (2), and Very Low Extent (1) respectively. Mean responses above 2.5 were accepted, and those below 2.5 were rejected.

Results

Research Question 1: To what extent is Imo state government involved in providing human resources for Basic education delivery?

Table 1: Mean response on the extent of Imo state government’s involvement in providing human resources needed for promoting inclusive education for Basic education delivery.

| S/N | ITEMS | \bar{x} | DECISION |
|-----|---|------------|-------------------|
| 1. | Special education teachers are sufficient. | 2.1 | Low extent |
| 2. | Well trained specialists in education are large in numbers. | 2.3 | Low extent |
| 3. | Qualified care givers are proportional to pupils’ ratio. | 2.4 | Low extent |
| 4. | The administrative staff are pretty good for their daily tasks. | 2.6 | High extent |
| 5. | Consultants are always seen when needed. | 2.2 | Low extent |
| 6. | Guidance Counsellors are sufficient in number. | 2.5 | High extent |
| 7. | Medical Practitioners are always available when need be. | 2.1 | Low extent |
| 8. | Clinical Psychologist is attached to each school. | 1.9 | Low extent |
| 9. | Security guards are capable and adequate. | 2.7 | High extent |
| 10. | Janitors are employed with respect to schools’ demands. | 2.4 | Low extent |
| | Cluster Mean | 2.3 | Low Extent |

Table 1 above showed that with mean scores of 2.6; 2.5; and 2.7; government’s involvement in providing human resources needed for inclusive education is of high extent. This indicates that the

administrative staff are pretty good for their daily tasks, guidance counsellors are sufficient in number and also security guards are adequate. Whereas with the mean scores of 2.1, 2.3, 2.4, 2.2, 2.1, 1.9, and 2.4, government’s involvement in promoting inclusive education is of low extent. This also points out that special education teachers are not sufficient, well trained specialists in education are highly needed, qualified care givers are not proportional to the ratio of the pupils, consultants are not seen when the need arises, medical practitioners are not always available, clinical psychologists are not attached to each school, and the janitors are also not employed with respect to the demands of the school. Government’s involvement in providing human resources needed in promoting inclusive education for basic education delivery is of low extent.

Research question 2: To what extent is Imo state government involved in providing material resources needed in promoting inclusive education for Basic education delivery?

Table 2: Mean response on the extent of government’s involvement in providing material resources needed in promoting inclusive education for Basic education delivery.

| S/N | ITEMS | \bar{x} | DECISION |
|-----|--|------------|-------------------|
| 11. | Finance and funds are always released to schools. | 2.2 | Low extent |
| 12. | Classrooms are well equipped to suit children’s individual learning needs. | 2.4 | Low extent |
| 13. | Accommodative teaching and learning aids are adequately provided. | 2.3 | Low extent |
| 14. | Water runs consistently. | 2.6 | High extent |
| 15. | Transport and good road for accessibility are made available | 2.8 | High extent |
| 16. | Effective and accommodative furniture are provided for the students. | 2.5 | High extent |
| 17. | Rehabilitation aids are provided and utilized | 2.1 | Low extent |
| 18. | Pupils’ Individualized Education Plan (IEP) are utilized by the teachers, | 2.2 | Low extent |
| 19. | ICT tools are available in sufficient quantities. | 2,4 | Low extent |
| 20. | Accommodative sports and play facilities are not lacking in schools. | 2.5 | High extent |
| | Cluster Mean | 2.4 | Low Extent |

Data in Table 2 above showed that with mean response of 2.6, 2.8, 2.5, and 2.5; government’s involvement in providing material resources needed in promoting inclusive education for basic education delivery is of high extent. This indicates that water runs consistently, there is availability

of transport and good road for accessibility, effective and accommodative furniture are provided for the pupils, also accommodative sports and play facilities are not lacking in schools. Moreover, with the mean response of 2.2, 2.4, 2.3, 2.1, 2.2, and 2.4; government's involvement in providing material resources needed in promoting inclusive education for basic education delivery is of low extent. This implies that finance and funds are not always released to schools, classrooms are not well equipped to suit children's individual learning needs, accommodative teaching and learning aids are not adequately provided, rehabilitation aids are not well provided and utilized, pupils' individualized education plans are not utilized by the teachers, and ICT tools are not available in sufficient quantities. Government's involvement in providing material resources needed in promoting inclusive education for basic education delivery is of low extent.

Research question 3: To what extent is Imo state government involved in rendering services necessary for promoting inclusive education for Basic education delivery?

Table 3: Mean response on the Imo state government's extent of rendering services necessary for promoting inclusive education for Basic education delivery.

| S/N | services rendered by the government includes | \bar{x} | DECISION |
|---------------------|--|------------|-------------------|
| 21 | Training teachers on inclusive education. | 1.7 | Low extent |
| 22 | Organizing cultural activities and ethos that promotes inclusion. | 2.3 | Low extent |
| 23 | Widening participation to increase educational opportunities for all learners. | 2.1 | Low extent |
| 24 | Organizing conferences and seminars for both parents and teachers. | 2.2 | Low extent |
| 25 | Ensuring consistent remuneration of staff when due. | 2.6 | High extent |
| 26 | Enacting and implementing legislation that promotes inclusion. | 1.5 | Low extent |
| 27 | Providing equal and just opportunities for participation in the social and political affairs of the country. | 1.4 | Low extent |
| 28 | Carrying out thorough and constant supervision to ensure standard and effective teaching method | 2.8 | High extent |
| 29 | Ensuring flexible resourcing system to promote inclusion | 2.1 | Low extent |
| Cluster Mean | | 2.1 | Low Extent |

Data in Table 3 above showed that with mean response of 2.6; and 2.8; respectively, government's involvement in the rendering of services needed for promoting inclusive education for basic education delivery is of high extent. This explains that government ensures the consistent remuneration of staff when due, and also carries out thorough and constant supervision to ensure standard and effective teaching method. More so, with the mean response of 1.7, 2.3, 2.1, 2.2, 1.5,

1.4. 2.1 and 2.4; government's involvement in rendering the services needed in promoting inclusive education for basic education delivery is of low extent. This indicates that government rarely train teachers on inclusive education, organize cultural activities and ethos that will promote inclusion, widen participation to increase educational opportunities for all learners, organize conferences and seminars for both parents and teachers. Also, there is poor enactment and implementation of legislation that promotes inclusion, poor provision of equal and just opportunities for participation in social and political affairs of the country. Government hardly ensures flexible resourcing system to promote inclusion, and rarely organizes social and academic activities that will help the pupils to easily bond with one another. Government's involvement in rendering the services needed for promoting inclusive education is of low extent.

Discussion

Findings revealed that the extent of government's involvement in promoting inclusive education for basic education delivery was low extent. This is in line with the study of Ezra (2018), who observed that government seem to have done little in meeting up to solving problems and barriers of inclusive education. With the results obtained, there are still a lot and many more to be done by the government as regards to inclusive education. It is not all about signing treaties and attending world leaders' forum regarding inclusive education, but it entails taking immediate and prompt action from the outcome of the treaties, and forums which will automatically result to full implementation of inclusion.

The findings further revealed that government's involvement in provision of material resources for inclusion was low extent. There is a great loophole in the areas of provision of material resources for inclusive education. Eskay and Oboegbunam (2013), observed that there is lack of adequate provision of materials and finance needed for the running of education and maintenance of education centers. There are, nevertheless, still countries where inclusive education is not considered a priority, or where they are challenged by a shortage of teachers, inadequate resources, oversized classes and a national curriculum that is inflexible and didactic, as they struggle to implement education reform that will enable all learners to access schooling (Kalyanpur, Sharma, Forlin, Guang-xue, & Deppeler, in Forlin 2013). All these are one of the major needs for inclusion. If these are in place, the teachers and the pupils will be so glad to and

motivated to learn with ease and without worries. The government really need to invest more in education, because sound and quality education will help move our country forward.

Findings also revealed that government's extent in rendering the services necessary for inclusion is of low extent. The findings revealed that government is not measuring up to this need. The failure of government in taking up this measure has cost the victims a lot, both the special needs pupils and their parents, the teachers and the normal pupils too are also not left out. This is evident in the words of Adera and Asimeng-Boahene, (2011) which expresses that government's failure to render some services that will promote inclusion has caused students with disabilities to continue to experience exclusion from any form of education in too many regions, which is entrenched within a failure by society to recognize their capabilities and rights. The government being the driver of this nation need to wake up from their slumber, else accident will be inevitable in our nation's journey to development and progress. The necessary services for promoting inclusive education include; creating awareness on organizational culture and ethos that promotes inclusion, widening participation to increase educational opportunities for all learners, organizing conferences and seminars for both parents and teachers, enacting legislation that promotes inclusion, equal, just and fair treatment to all and sundry not minding the disability or impairment, flexible resourcing system to promote inclusion, and organizing social and academic activities that will help the pupils to easily bond with one another.

Conclusion

Everyone is entitled to basic education because education is one of the major aspect human development. Inclusion is a means through which the foundation for peace and unity in the entire nation will be laid. Inclusion will help ensure that everyone is carried along without prejudice, bias nor sentiment. Also, much effort has to be put in place as regards to the implementation of the national philosophy and national policy on education. This will go a great way to the attainment of the educational goals and objective. Inclusion will be very effective if these measures are put in place.

Recommendations

Based on the findings, it was recommended that

1. The government really need to invest more in education, because sound and quality education will help move our country forward.
2. Imo state government should endeavour to recruit and make available the required human resources needed for inclusive education. These human resources include; special education teachers, well trained specialists in education, qualified care givers, consultants, medical practitioners, clinical psychologists and janitors.
3. Imo state government should provide the material resources needed for promoting inclusive education. The material resources include; funds, well equipped classroom, accommodative teaching and learning aids, rehabilitation aids and ICT tools.
4. Imo state government should also endeavour to checkmate the teachers to ensure that they are really utilizing those resources efficiently and effectively. This can be done by frequently paying visits to schools and monitoring the teachers on how often and effective they utilize the resources.
5. Imo state government should frequently render the required services that will help promote and boost inclusive education. These services include; training teachers on inclusive education, organizing cultural activities and ethos that promote inclusion, widening educational opportunities for participation, organizing conferences and seminars for both parents and teachers, enacting and implementing legislation that promotes inclusion, and organizing social and academic activities that will help the pupils to easily bond together.

REFERENCES

- Adera, B.A. & Asimeng-Boahene, L. (2011). The perils and promises of inclusive education in Ghana. *The Journal of the International Association of Special Education* 12(1), 28-32.
- Ajuwon, P. M. (2008). Inclusive education for students with disabilities in Nigeria. Benefits, challenges and policy implementations. *International Journal of Special Education*. 23(3) 11-16.
- Anaduaka, U.S. & Okafor, C.F. (2013). The Universal Basic Education (UBE) Program in Nigeria. Problem and progress. *Basic Research Journal of Education Research and Review* 2(3) 42-48.
- Ashiriun, M. (2010). Challenging attitudes towards disability in building an inclusive society: A global view. The LEATON in *Academic Journal of Interdisciplinary Studies*. 1(2). www.sightsavers.org
- Eskay, M. & Oboegbunam, A. (2013). Learners with disabilities in an Inclusive education setting in Nigeria: Implementations for administrations. *US-China Education Review*. 3(15) 313-3

- Ezra, G. (2018). The effectiveness of inclusive education on learners with disabilities: Mvunguti education zone, Lilongwe. Unpublished PhD dissertation of Africa University of Guidance, Counselling and Youth Development, Malawi.
- Federal Republic of Nigeria (2013). *Nigerian National Policy on Education*, (6th ed.). Lagos: NERDC Press.
- Federal Republic of Nigeria (2009). Review on Nigerian Educational System and Structure. *Official Gazette*. 9 (57).
- Forlin, C. (2013). Changing paradigms and future direction for implementing inclusive education in developing countries. *Asia Journal of Inclusive Education*. 1(2) 19-29.
- Garuba, A. (2003). Inclusive education in the 21st century challenges and opportunities for Nigeria. *Asia Pacific Disability Rehabilitation Journal*. 14(2) 191-200.
- Masud, A. & Jahirul, M. (2013). Implementing inclusive education in primary schools, in Bandladesh: Recommended strategies. Article in Educational Research for policy and practice. *Educational Research Policy and Practice* (2014) 13: 167-180. DOI 10.1007/S10671-9156-2.
- Nworgu, B.G. (2015). *Educational Research: Basic Issues and Methodology* (3rd ed.). Enugu: University Trust Publishers.
- Oando, S. & Akinyi, M. (2019). Discrimination in education of children living with disability: Tales of gender based experiences in huma bay County, in Jaworski, A.J. (Ed.). *Advances in Sociology Research*. 27. 129-146.
- Obinnu, J.J. (2011). Teachers perception of the universal basic education rogram, as an educational reform policy. *The Social Science Journal* 6(2) 150-154.
- Offem, O.U., Bosah, I.P., & Asiegbu, C.E. (2017). Parental perceptions towards their special needs children and inclusive education. *Journal of Early Childhood and Primary Education* 1(1) 55-64.
- Okoroma, .N.S. (2006). Educational policies and problems of implementation in Nigeria. *Australian Journal of Adult Learning*. 46, (2) 243-263.
- Omede, A.A. (2016). Policy framework for inclusive education in Nigeria. Issues and challenges. *Public Policy Administrative Research*. 6(5) 33-38.
- Parankimalil, J. (2012). *Meaning, nature and aims of education*. Retrieved from www.johnparankimalil.wordpress.com/2012/meaning-nature-and-aims-of-education/.
- Sambo, A.M. & Gambo, M.B. (2015). Administration of Inclusive Education in Nigerian Schools: Issues and Implementation Strategies. *National Journal of Inclusive Education*. 3(1) 107-115.
- Sightsavers (2011). Towards inclusive education. Retrieved from www.sightsavers.org.
- Taiwo, M.M (2015). Teachers negotiation of inclusive practice in Nigerian classrooms. Unpublished PhD, Dissertation of University of Edinburgh.
- Universal Basic Education Act (2004). Retrieved from <https://ubeconline.com>.

KNOWLEDGE AND ATTITUDE OF NNAMDI AZIKIWE UNIVERSITY UNDERGRADUATE STUDENTS TOWARDS PRE-MARITAL SICKLE CELL SCREENING

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Abstract

This study focused on the knowledge and attitude of undergraduate students of Nnamdi Azikiwe University, (NAU) Awka towards sickle cell screening. Two research questions and one hypothesis guided the study. The design of the study was descriptive survey design. Simple random sampling technique by balloting was used to select two faculties from the 13 faculties at Nnamdi Azikiwe University, Awka. Using simple random sampling technique, a sample size of 200 (100 for male and 100 for female undergraduate students) were selected. A well-structured 32 item questionnaire with two clusters was used for collection of data. The instrument was validated by three experts, two from the Department of Human Kinetics and Health Education and one expert from Measurement and Evaluation Unit of Educational Foundation Department both in Faculty of Education, Nnamdi Azikiwe University, Awka. The reliability of the instrument was established using the Cronbach's Alpha Reliability Coefficient and the reliability obtained on cluster bases were 0.86 and 0.79 respectively. The overall reliability obtained was 0.82. Mean and standard deviation was used to answer research question one, simple percentage was used to answer research question two. T-test was used for the hypothesis at 0.05 level of significance. Findings revealed that both male and female students of the university have good knowledge of the pre-marital sickle cell screening and both male and female have negative attitude towards the screening. The researchers concluded that based on this finding, there is still much work to be done among the undergraduate students in the area of practicing pre-marital sickle cell screening. Based on the findings the researchers recommended among others that the issue of creating awareness about sickle cell (SCD) should be a continuous process in the media and in the schools.

Key word: Sickle cell, disease, university, screening, undergraduate

Introduction

Genetic blood disorders seem to be common in Nigeria and may have accounted for a major proportion of physical and mental handicap. One of these genetic disorders is sickle-cell disorder. Sickle cell seems to be one of the most common inherited hemoglobinopathies and constitutes a major public health problem worldwide. According to the World Health Organization (2011), approximately 240 million people are carriers of this disorder and at least 200,000 affected individuals are born annually. Sickle cell is an irreversible, manageable health problem predominantly seen amongst various tribes worldwide particularly in sub-Saharan Africa, India, Saudi-Arabia, Sicily, Greece, southern Turkey and Mediterranean countries (World Health Organization, 2011). The mutation that results in Hemoglobin S (HbS) is believed to have

originated in several locations in Africa and India. Its prevalence varies but it is high in these countries because of the survival advantage to heterozygotes in regions of endemic malaria (Maakaron & Taher, 2019). HbS is the most common type of abnormal hemoglobin and the basis of Sickle Cell trait and sickle cell disease.

Characteristics of this disorder include a low number of red blood cells (anemia), repeated infections, and periodic episodes of pain. Similarly, symptoms of sickle cell disease usually begin in early childhood. The severity of symptoms varies from person to person. The symptoms include; paleness, often seen in the skin, lips, or nail beds, tiredness, dizziness, short of breath, feeling lightheaded, being irritable, trouble paying attention, and a fast heartbeat (Miller, 2018). Other symptoms according to Al kindi, Salha and Al kendi (2012) are yellowing of the eyes and skin, organ damage, especially the lungs, kidneys, spleen, and brain, and pulmonary hypertension. Pulmonary hypertension occurs in about one-third of adults with sickle cell disease and can lead to heart failure. Sickle Cell disease can result to leg ulcers, bone or joint damage, gallstones, kidney damage, eye damage, delayed growth and death

Sickle cell disease has several signs and symptoms which include anemia, episodes of pain, hand and foot syndrome, jaundice, frequent infection, and vaso occlusion among others. George, (2011), asserts that anemia is very common because the cells when elongated are fragile and breaks apart easily to die leaving chronically shortage of red blood cells to carry oxygen to tissues. Anemia can lead to fatigue, irritability, dizziness and light headedness with fast heart rate and difficulty in breathing when the body cannot get oxygen to energize the tissue. According to the World Health Organization (WHO, 2019), Sickle cell disease has continued to be a major global public health issue. Approximately 5 percent of the world's population carries trait genes for hemoglobin disorders, mainly, sickle-cell disease and thalassemia. Rees (2010), stated that children and adults born with sickle cell disease in the developed countries have longer lives with fewer complications, due to early diagnosis and the availability of treatment options. However, the WHO regretted that Sickle cell disease remains a major killer of infants and children in the developing countries, particularly in Sub-Saharan Africa, where an estimated 50 to 90 percent of infants born with sickle cell disease die before their fifth birthday. WHO, further forecasted that **by the year 2050, the number of people with sickle cell disease is expected to increase to about 30 percent of the global population. Similarly, in Sub-Sahara Africa, the prevalence of sickle cell trait has reached levels as high as 40 percent.**

In Nigeria, as observed by Alkindi, Salha and AL-kend (2012), 24 percent of the population are carriers of the mutant gene and the prevalence of sickle-cell anemia is about 20 per 1000 births. This means that in Nigeria alone, about 150, 000 children are likely to be born annually with sickle-cell anemia, making Nigeria the world's number one sickle cell disease endemic nation (WHO, 2019). Deaths from Sickle Cell disease complications occur mostly in children under five years, adolescents and pregnant women. Abioye-Kuteyi, Oyegbade, Bello and Osakwe (2009), stated that about 25 percent of adults in Nigeria have the sickle cell gene, while the hemoglobin (Hb) C trait is largely confined to the Yoruba people of South-Western Nigeria, in whom it occurs in about 6 percent of the population.

Despite recent advances in the management of sickle cell disease through improved care, re-induction of foetal hemoglobin synthesis and bone marrow transplantation, the condition continues to cause high morbidity and early death in Nigeria (Abioye-Kuteyi, et al., 2009). Abioye-Kuteyi et al. further noted that the chronic nature of sickle cell disease in Nigeria is associated with high morbidity, reduction in life expectancy of the affected, poor school attendance, the potential risk of the development of drug addiction, and its burden on the affected families. These are all indicative that the condition is a major public health problem in Nigeria. As a result, it is highly imperative for people of reproductive age group to understand the genetics of sickle cell disease, know their own blood type, and if they carry the S gene choose in advance of selecting right partners for future marriages (that is, non-carriers of SS gene). This is the starting point towards managing sickle cell disease. Olarawaju (2013), reported that knowledge of sickle cell disease was found to be low despite good awareness among respondents. He further advised that more awareness should be created through different means.

In line with the management of sickle cell disease, Omuemu, Obarisiagbon and Ogboghodo (2013) stated that methods of preventing genetic diseases include pre-marital screening and genetic counselling, pre-natal diagnosis, preconception diagnosis, implantation of normal embryos after in-vitro-fertilization and in-utero therapy using stem cell transplantation. However, prevention of the disease through carrier identification and genetic counselling appears to remain the only realistic approach to reducing the impact of the disease. In support of the afore stated, Jadan, Al baali, Siddiqui, Naeem, Rashdi Mahrouqi and Hinai (2018), stated that pre-marital sickle cell screening is needed to control the huge burden of morbidity and mortality. This is because, pre-marital screening of sickle cell disease not only provide information about the health and wellbeing

of the individual, it is also important in assessing their health related reproductive risk. It helps people concerned to make important and major life decisions that will benefit family members either now or in the future.

Pre-marital Sickle cell screening implies the screening of the prospective couples for a genetic disease, genetic predisposition to a disease, or a genotype that increases risk of having a child with a genetic disease (El-Hazmi & Warsy (2011). Pre-marital Sickle Cell screening allows the genetic diagnosis of vulnerabilities to inherited diseases, and can also be used to determine a child's parentage or a person's ancestry. In addition, most of the results of genetic testing identify changes in chromosomes, and most times testing is used to find changes that are associated with inherited disorders. The result of a genetic disorder can be used to determine a person's chance of developing or passing on a genetic disorder. Pre-marital sickle cell screening creates an opportunity for people to take informed decision on the genetic predisposition of their unborn children.

Knowledge of pre-marital genetic screening allows a person to take steps to reduce his or her risk. The prospective control of SCD and other genetic diseases through premarital screening is vital to the identification of couple risk. (Al Arrayed, S. 2005). It helps an individual to get a clear awareness or explicit information about a situation or fact. Through having knowledge about an issue, several medical, psychosocial marital problems are solved because it provides opportunity for intending couples to respond accordingly in order to reduce the risk associated with the disease burden (Ferguson, 2010). Premarital interventions include counseling and testing before marriage. These have been found to be effective in a variety of ways, for example in decreasing the risk factors associated with SCD and later marital problems and increasing the quality of life for couples who stay together. Knowledge of pre-marital sickle cell screening in the context of this study is refers to degree in which adult students have low or high knowledge about premarital sickle cell screening which will help them make better choice of life partner. For these students to show they are knowledgeable about pre-marital sickle cell screening depends on their attitudes to practice it.

Attitude according to Ferguson (2010) can be defined as susceptibility to certain kinds of stimuli and readiness to respond in a given way, which are possible towards our world and parts of it which impinges upon ones. Gharaibe and Mater (2013) defined attitude as the totality of those states that lead to a point towards some particular activity of the organism. Attitude is therefore

the dynamic element and the motive of activity in human behaviour. In the context of this study, attitude to premarital Sickle cell screening is the favourable and unfavourable feelings and beliefs of students towards premarital sickle cell screening, which can either be positive attitude or negative attitude. Attitude can be negative or positive evaluation of people, objects, events, activities, and ideas; or just about anything in your environment. It can be seen as negative or positive views of a person, place or thing. Positive attitudes to sickle cell screening is all about people perceiving premarital sickle cell screening as important. It means thinking positively about all situations in a person's life, for example positive attitude towards premarital sickle cell screening will overlap with health success and make life more successful, more creative and help people to cope better with life (Gharaibe & Mater, 2013). Negative attitude towards premarital sickle cell screening will make the acceptance and practice of sickle cell screening difficult. Attitude can be formed through learning and can be changed as a function of experience. Dissonance - reduction theory by Carlsmith and Festinger (2007), states that when the components of an attitude (belief and behaviour) are at odds, an individual may adjust one to match the other. Attitude can be changed through persuasion.

There are some factors that may affect attitude like target characteristics, source characteristics and message characteristics. Additionally, Ferguson, (2010) states that a number of studies worldwide showed that attitude towards premarital sickle cell may be related to religious convictions. For instance, the report states that Muslim couples have been reported to refuse premarital sickle cell screening on the basis that it is against their religion. The low attitude of self-risk associated with non-premarital screening as reported by Lockock and Joe (2009) may be influenced by so many factors. This may influence their readiness to act not minding whether the action will benefit them or predispose them to disease. Such factors include belief/opinions; cultural diverse attitude, religious belief and loneliness make decision. Against this background therefore, the researchers sought to find out knowledge and attitude of Nnamdi Azikiwe University undergraduate students towards pre-marital sickle cells screening.

Statement of the Problem

Despite the current advances in diagnosis and the increasing campaigns through mass media and health professionals geared towards increasing peoples' knowledge about pre-marital sickle cell screening with a view to bringing about a drop in high risk marriages, sickle cell diseases

seem to have remained very common in Nigerian society. Although, pre-marital sickle cell screening has a high potential to reducing the incidence of sickle cell disease in adult population and preventing marriages among high risk couples, it appears that many undergraduate students in tertiary institutions in Nigeria, especially in Anambra State do not have adequate knowledge of pre-marital sickle cell screening and have poor attitude towards it. Therefore, this study was carried out to determine the knowledge and attitude of undergraduate students of Nnamdi Azikiwe University towards pre-marital sickle cell screening. This study is appropriate for undergraduate students since many of them are ripe for marriage and this information will help to get them prepared for better marriage.

Research Questions

The following research questions guided this study:

1. *What knowledge of pre-marital sickle cell screening do undergraduate students of Nnamdi Azikiwe University possess based on gender?*
2. *What attitude of pre-marital sickle cell screening do undergraduate students of Nnamdi Azikiwe University possess based on gender?*

Hypothesis

The following hypothesis guided the study at 0.05 level of significance.

H₀₁: There is no significant difference in the male and female undergraduate students of Nnamdi Azikiwe University on their knowledge towards premarital sickle cell screening

Method

This study examined the knowledge and attitude of undergraduate students of Nnamdi Azikiwe University towards premarital sickle cell screening in Awka, Anambra State. Two research questions and one hypothesis guided the study. The design of the study was descriptive survey design. The total population of this study comprised of all the 200 to 400 level 2018/2019 undergraduate students of Nnamdi Azikiwe University, Awka (NAU which is 13,700 students (Students Affairs of NAU, July 2019). Simple random sampling technique by balloting was used to select two faculties from the 13 faculties at Nnamdi Azikiwe University, Awka. Using simple random sampling technique, a sample size of 200 (100 for male and 100 for female undergraduate students) were selected. A structured 32 item questionnaire with two clusters and titled

“Knowledge and Attitude of Undergraduate Students on Pre-Marital Sickle Cell Screening (KAUSPMSCS) was used for collection of data. The instrument was validated by three experts, two from the Department of Human Kinetics and Health Education and one expert from Measurement and Evaluation Unit of Educational Foundation Department both in Faculty of Education, Nnamdi Azikiwe University, Awka. The reliability of the instrument was established using the Cronbach’s Alpha Reliability Coefficient and the reliability obtained on cluster bases were 0.86 and 0.79 respectively. The overall reliability obtained was 0.82. In research question one, to determining the knowledge of undergraduate students on pre-marital Sickle Cell screening, a four point likert scale of Strongly Agree =4 points, Agree =3 points, Disagree =2 points and Strongly Disagree =1 point was adopted. In research question two, to determine the attitude of undergraduate students on pre-marital Sickle Cell screening, simple percentage was used.

Data was analyzed using simple percentage for research question one. The bench mark for **True** is 50%. Any item with a mean % cut off of below 50% shows **False**. For research question two, the no of frequency responses ranging from 17%-52% will indicate **Negative Attitude** and range between 53%-above will indicate **Positive Attitude**. T-test was used to test the hypothesis at 0.05 level of significance. When the calculated t-test is higher than the critical value the null hypothesis is rejected and when the calculated t- test is less than the critical value, the null hypothesis is Accepted.

Results

Research Question 1: What knowledge of pre-marital sickle cell screening do undergraduate students of Nnamdi Azikiwe University possess based on gender?

Table 1: Mean ratings of undergraduate students on knowledge of pre-marital sickle cell screening

| S/N | Item Statements | Male | | Female | |
|-----|---|--------------|--------------|--------------|--------------|
| | | True | False | True | False |
| 1 | pre-marital screening is a test done after marriage to rule out any abnormality in the blood | 75(75%) | 25(25%) | 82(82%) | 18(18%) |
| 2 | pre-marital screening is not a test that reveals the level of malaria parasite in an individual | 89(89%) | 11(11%) | 74(74%) | 26(26%) |
| 3 | pre-marital screening is a test done before marriage to rule out sickle cell disorder | 86(86%) | 14(14%) | 88(88%) | 12(12%) |
| 4 | pre-marital screening decrease the chance of giving birth to a child with sickle cell | 73(73%) | 27(27%) | 89(89%) | 11(11%) |
| 5 | pre-marital sickle screening should be done before marriage or during courtship | 70(70%) | 30(30%) | 80(80%) | 20(20%) |
| 6 | pre-marital sickle cell screening should not be done when a couple give birth to a sickler | 94(94%) | 6(6%) | 60(60%) | 40(40%) |
| 7 | pre-marital sickle cell screening helps to detect abnormalities in couples early before marriage | 74(74%) | 26(26%) | 72(72%) | 28(28%) |
| 8 | pre-marital sickle cell screening helps to expose the genetics status of an individual to the public before marriage | 69(69%) | 31(31%) | 82(82%) | 18(18%) |
| 9 | the major consequences of not practicing pre-marital sickle cell screening is giving birth to child living with sickle cell disease | 78(78%) | 22(22%) | 69(69%) | 31(31%) |
| 10 | pre-marital sickle cell screening should be done immediately after delivery | 82(82%) | 18(18%) | 76(76%) | 24(24%) |
| 11 | pre-marital sickle cell screening should be done after marriage | 68(68%) | 32(32%) | 81(81%) | 19(19%) |
| 12 | pre-marital sickle cell screening has no benefit | 18(18%) | 82(82%) | 31(31%) | 69 (69%) |
| 13 | the major consequences of not practicing pre-marital sickle cell screening is separation/divorce of couples | 98(98%) | 02(2%) | 88(88%) | 12(12%) |
| 14 | the major consequences of not practicing pre-marital sickle cell screening is excessive financial expenditure on the management of the sick child | 88(88%) | 12(12%) | 90(90%) | 10(10%) |
| 15 | the major consequences of not practicing pre-marital sickle cell screening is high infant mortality | 93(93%) | 7(7%) | 90(90%) | 10(10%) |
| 16 | the major consequences of not practicing pre-marital sickle cell screening is disharmony and conflict in the family | 95(95%) | 5(5%) | 91(91.5%) | 9(9%) |
| | Grand Mean | 77.8% | 21.8% | 72.1% | 21.6% |

Table 1 above revealed the mean responses of male and female undergraduate students. Items 1,2,3,4,5,6,7,8,9,10,13,14,15,16, which are above the bench mark of 50% shows that they have knowledge of premarital sickle cell screening. Such responses as; pre-marital screening is a test done before marriage to rule out any abnormality in the blood, pre-marital screening decrease the chance of giving birth to a child with sickle cell, among others and their low % mean responses in items11 and 12 with questions such as pre-marital sickle cell screening has no benefit and premarital sickle cell screening should be done after giving birth indicates that they have knowledge of pre-marital sickle cell screening and what are involved that is why they responded false to such questions . From the cluster mean % responses of 77.8% for (males) and 72.1% for (female) who said True are above the bench mark of 50 % and this shows that they both agreed they have good knowledge of premarital sickle cell screening.

Research Question 2: What attitude of pre-marital sickle cell screening do undergraduate students of Nnamdi Azikiwe University possess based on gender?

Table 2: Responses of male and female undergraduate students on their Attitudes towards pre-marital sickle cell screening.

| Responses on Attitude towards the practice of premarital sickle cell screening | | N (N =100 males and 100 females) | % of response s | Remarks |
|--|------------|----------------------------------|-----------------|-------------------|
| Male | 53 – Above | 25 | 25% | Positive attitude |
| | 17 – 52 | 75 | 75% | Negative attitude |
| Female | 53 – Above | 33 | 33% | Positive attitude |
| | 17 – 52 | 67 | 67% | Negative attitude |

Table 2 revealed that both male and female undergraduate students of the university have negative attitude to premarital sickle cell screening. This could be seen in the number of respondents (Male and Female) that responded negatively and those that responded positively. 25 males (25%) out of 100 male respondents and 33 females (33%) out of 100 female respondents have positive attitude to premarital sickle cell screening. While 75 (75%) males and 67 (67%) females out of 100 each responded within 17-52 and this indicates negative attitude to premarital sickle cell screening. This therefore shows that male and female students undergraduate students have negative attitude to premarital sickle cell screening.

Table 3: T-test analysis on knowledge of male and female undergraduate student of Nnamdi Azikiwe University towards premarital test screening.

| Sources of variation | population | X | SD | DF | Cal-t | Crit-t | P>0.05 | Dec. |
|----------------------|------------|------|------|-----|-------|--------|--------|----------|
| Male | 100 | 2.91 | 0.71 | 198 | 1.89 | 1.96 | 5.35 | Accepted |
| Female | 100 | 2.71 | 0.79 | | | | | |

Table 3 above shows that the calculated t-value of 1.89 is less than critical t-value of 1.96 at 0.05 level of significance. Thus the null hypothesis is accepted. The decision therefore, is that *there is no significant difference in the knowledge of male and female undergraduate students of Nnamdi Azikiwe University towards premarital sickle cell screening*

Discussions

From table 1 the finding on the knowledge of male and female students of university towards pre-marital sickle screening revealed that the undergraduate students of university have good knowledge of premarital sickle cell screening. They see it as the test carried out before embarking on marriage in order to determine the predisposition to disease by the couples. The knowledge of premarital sickle cell screening will help to reduce infant mortality, disharmony at home, exposes the genetic diagnosis of vulnerabilities to inherited diseases. This finding shows that undergraduate students being knowledgeable about sickle cell premarital screening reflects the ideas of Jadan, Al baali, Siddiqui, Naeem, Al Rashdi Al Mahrouqi and Al Hinai (2018), and Naeem, Al Rashdi Al Mahrouqi and Al Hinai (2018), who posits that pre-marital sickle cell screening is needed to control the huge burden of morbidity and mortality. The findings also revealed that the ignorance of not having premarital sickle cell screening will cause more harm than good. This reflects the earlier findings of Al -Arayed (2005), who posits that knowledge of pre-marital genetic screening allows a person to take steps to reduce his or her risk. The prospective control of SCD and other genetic diseases through premarital screening is vital to the identification of couple risk. It helps an individual to get a clear awareness or explicit information about a situation or fact. The finding is contrary to earlier findings of Olaraenwaju (2013) who reported that knowledge of sickle cell disease was found to be low despite good awareness among respondents. This may be because of technology which has exposed people to different knowledge

on different issues including health issues or as a result of level of education of the respondents. This present study is for undergraduates of university while that of Olaraenwaju was for secondary school students who may have low knowledge due to their level of education. The finding also revealed that there *is no significant difference in the knowledge of male and female undergraduate students of Nnamdi Azikiwe University towards premarital sickle cell screening.*

The findings in table 2 which centers on the attitude of male and female students on premarital sickle cell screening revealed that the students both male and female have Negative Attitude to premarital sickle cell screening. This negative attitude shows that though the undergraduate students have knowledge of pre-marital sickle cell screening but they have negative attitude to it. This will result to refusal to practice it. This finding is in line with that of Locklock (2009) who reported that the low attitude of self-risk associated with non-premarital screening may be influenced by so many factors. This may influence their readiness to act not minding whether the action will benefit them or predispose them to disease. Additionally, Ferguson, (2010), states that a number of studies worldwide showed that attitude towards premarital sickle cell may be related to religious convictions. For instance, the report states that Muslim couples have been reported to refuse premarital sickle cell screening on the basis that it is against their religion, this undergraduate students Negative Attitude to premarital sickle cell screening may be as a result of ego, to protect themselves from discovering that they have the disease or fear of losing out the loved partner. This is an indication that there is still much to be done in terms of creating awareness among the youths for change of attitude towards it. There is no significant difference in the knowledge of both male and female students on premarital sickle cell screening.

Conclusion

Sickle cell disease is one of the blood diseases that has been ravaging mankind from time past. This study carried out among the undergraduate students of university has helped to expose the high knowledge and negative attitude they have towards premarital sickle cell screening. This has exposed the fact that though they have good knowledge of the test but are not willing to practice it before marriage. The researchers therefore concluded that for sickle cell disease to be a thing of the past, there is need for more emphasis on health education through programs promoting sickle cell screening .in addition provision of genetic counselling to all sickle cell patients will promote

the capacity of the intending couples to take informed decision and be aware of the outcome of such decisions.

Recommendations

The following recommendations were made:

1. Government should sustain the public enlightenment programme on sickle cell disease with special focus on how to change the negative attitude of youths towards sickle cell screening.
2. Higher institutions should include a course that will teach more of sickle cell in their general course to enable undergraduate students in other disciplines to have good knowledge of the disease and how to develop positive attitude towards it.
3. Government should enact a policy to ensure easily accessible community wide sickle cell screening and premarital counselling to achieve the desired reduction in delivery of SCD babies.

REFERENCES

- Abioye-Kuteyi, E. A., Oyegbade, O., Bello, I. & Osakwe, C. (2014). Sickle cell knowledge, premarital screening and marital decisions among local government workers in Ile-Ife, Nigeria. *African Journal of Primary Health Care for Family Medicine* 1(1), 022-033.
- Alkindi, M. Salha .A.R., & AL-kend, M. (2012). Knowledge and attitude of University Students towards Premarital Sickle Cell Screening Program. *Coman Medical journal*, 27 (4), 291-296.
- Carlsmith, J.M. & Festinger, L. (2017). The origins of Cognitive Dissonance: Evidence from Children and Monkeys. *Psychological Sciences*, 18, 978-983.
- El-Hazmi, A.F & Warsy, A.S. (2011). The path to premarital screening for haemoglobinopathies in Saudi population. Retrieved from www.faculty.ksu.edu.sa/52876/poster%20library
- Ferguson, T.J. (2010). Attitude accessibility as a moderator of attitude: behavior Relation. *Journal of personality and social psychology*, 51(5), 505-514.
- George, I. O. & Frank-Biggs, A. I. (2011). Stroke in Nigerian children with sickle cell anaemia. *Journal of Public Health and Epidemiology*, 3(9), 407-409.
- Gharaibe, H. & Mater, F.K., (2013). Young Adults Knowledge and attitude to Premarital Testing. *Journal of Maternal and Child Health*, 56 (4), 450-500.

- Jadan, Al baali, Siddiqui, Naeem, Al Rashdi Al Mahrouqi and Al Hinai (2018). Knowledge and attitude of undergraduates of Ekiti State University towards sickle cell disease and genetic counseling before marriage. *Sky Journal of Medicine and Medical Sciences*, 1(7), 29-35.
- Littleton & Engebretson (2010). Knowledge and health beliefs of sickle cell disease and sickle cell trait: The influence on acceptance of genetic screening for sickle cell trait, University of Minnesota. Dissertation.
- Lockock, J.A. & Joe, V.M. (2009). Abnormal human hemoglobin. II. The chymotrypsin digestion of the trypsin-resistant core of hemoglobin A and S. *Biochemical et Biophysical Acta-Molecular Basis of Disease.*, 1958 28(3): 546-9.
- Maakaron, J. E. & Taher, A. T. (2019). What is the global prevalence of sickle cell disease (SCD)? Retrieved from: www.faculty.ksu.edu.sa/52876/poster%20library.
- Miller, R. E. (2009). Sickle Cell disease. Retrieved from: <https://kidshealth.org/en/teens/sickle-cell-anemia.html>
- Nworgu, B. G. (2015). *Educational research: Basic issues and methodology*. Owerri: Wisdom Publishers
- Al-Arrayed,S. (2005). Campaign to control genetic blood diseases in Bahrain Community Gent. 8:52-55(Public Medicine, Google Scholar).
- Olarawaju,S.U. Enwerem,K. Adebimpe,W.O & Olugbenga-Bello,A. (2013). Knowledge and attitude of secondary school students in Jos,Nigeria on Sickle cell disease. *The Pan African Medical Journal*,15 ,127. doi 1011604/pamj.2013.15.127.2712
- Omuemu, O. & Ogboghodo J. (2013). Awareness of sickle cell among people of reproductive age: Dominicans and African Americans in Northern Manhattan. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*. doi: 10.1007/s11524-011-9618-x 2011
- Rees, D. C., Williams, T. N., Gladwin, M. T. (December, 2010). Sickle-cell disease. *Lancet*, 376 (9757). doi:[10.1016/s0140-6736\(10\)61029-x](https://doi.org/10.1016/s0140-6736(10)61029-x).
- WHO, (2011): Attitudes and Beliefs of African-Americans Toward Genetics, testing for cancer risk among ethnic minority groups: A systematic review. Retrieved from: <http://www.scdcoalition.org/priorities/global.html>
- World Health Organization (2019). World sickle cell day: Global issues. Retrieved from: <http://www.scdcoalition.org/priorities/global.html>

PERCEIVED INFLUENCE OF MEMORIZATION AND SELF-INSTRUCTIONAL LEARNING STRATEGIES ON PRIMARY SCHOOL PUPILS ACADEMIC PERFORMANCE IN ENGLISH STUDIES IN IDEMILI NORTH LGA, ANAMBRA STATE

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Abstract

The study was designed to determine the perceived influence of memorization and self-instructional learning strategies on primary school pupils' academic performance in English studies in Idemili North Local Government Area of Anambra State. Two research questions guided the study. Descriptive survey research design was adopted. The population of the study comprised of 428 primary school teachers in 70 public primary schools in Idemili North Local Government Area of Anambra State. Simple random sampling technique was used to select a sample of 80 primary school teachers from 10 public primary schools out of the 70 public primary schools. The researcher developed a questionnaire titled "Perceived Influence of Memorization and Self-Instructional Learning Strategy on Pupils Academic Performance (PIMSLS-PAP)". The instrument was validated by three experts two from Department of Early Childhood and Primary education and one from Measurement and Evaluation, Department of Educational Foundations all from the Faculty of Education, Nnamdi Azikiwe University, Awka. Cronbach alpha was used to test the reliability of the instrument and reliability coefficient of 0.83 and 0.76 was obtained with an overall reliability coefficient of 0.80 was obtained. Mean and standard deviation were used to analyze the data collected. Findings of the study revealed that primary school teachers agreed that memorization strategy enhances the reading culture of pupils, reduces tensions among pupils' when studying English studies and is easy and quick for teaching pupils among others. The study disclosed that primary school teachers perceived that self-instructional strategy improves pupils' reading, speaking, writing and pronunciation skills among others. It was recommended among others that English studies teachers in primary school should create an atmosphere that is conducive for pupils to memorize and use self instructional learning strategy in order to instil reading culture and improve their proficiency in English studies.

Keywords: education, primary education, memorization, self-instructional learning strategy and academic performance

Introduction

Education is universally recognized as an instrument for social, political, scientific and technological development. This is the reason why developing nations like Nigeria cannot afford to toy with the education of its citizens as this could result in slow development (Azikiwe, 2010). This implies that, education also has an overriding influence on the dynamics of a society. A comprehensive look into the Nigerian educational system shows that, it is categorized into pre-primary, primary, secondary and tertiary education (Ementa & Onokpaunu, 2019). Primary education is a spring board from which other levels of education take off. In 2008, the Federal Government of Nigeria, through the Nigerian Educational

Research and Development Council (NERDC) developed and introduced the 9-Year Basic Education Curriculum by realigning the primary and junior secondary school together.

The 9 Year Basic Education Curricula in Nigeria is categorized into Lower Basic (Primary 1 to Primary 3), Middle Basic (Primary 4–6), and Upper Basic (Junior Primary School, 1-3). In the process of review, efforts were made to further reduce content overload, repetition or duplications within and across subjects. The structure of the nine-year Basic Education Curriculum is made up of ten (10) core compulsory subjects and three electives for the Lower and Middle Basic Education Curriculum and four electives for Upper Basic Education Curriculum. One of the core compulsory subjects is English studies. English studies or language is the foundation of all learning in schools.

English study serves as a foundation for excellent performance not only for effective usage in oral and for written communication but as a means of learning other subjects in schools. Thus, its functional role is simply multi-faceted that no subject area or even business escapes its application. In Nigeria educational system, English Study has always been treated as a compulsory subject. It is used as the medium of instruction after the first three years in primary schools Federal Republic of Nigeria (FRN, 2013) while at the primary level it is studied as a core subject. In view of its importance, Nwachukwu–Agbada (2012) posited that it is the central role the subject plays that makes it a compulsory subject at all levels of education and a requisite for employment in most modern organization operating in the country. The purpose of teaching and learning English studies is to satisfy the set objectives of the subject with the aim of improving pupils' academic performance.

Academic performance is the outcome of pupils' determination and hard work in an academic setting. Academic performance is defined as the scholastic standing of a pupil at a given moment (Akanbi, 2010). This scholastic standing could be explained in terms of the grades obtained in a course or groups of courses. Academic performance is the quality and quantity of knowledge, skills, techniques and positive attitudes, behaviour and philosophy that pupils achieve or acquire (Mwiigi, 2014). For the purpose of this study, academic performance is the knowledge and skills acquired by pupil which is usually access through test and examination. The academic performance of primary school pupils in English Language, in particular do not appear to be as good as they are expected to be as shown in the analysis and statistics of school records (Igbinedion & Omodolor, 2016). In Nigeria, researches have shown that pupils' academic performance is declining at a disturbing rate (Tenibaje, 2009). Some of the reasons that have been identified for such decline are personal factors such as individual pupil's

intelligence, achievement motivation, anxiety, self-esteem, locus of control and socio-demographic variables teaching strategy as well as learning strategies (Akinleke, 2012). Learning strategies are suggested ways or procedures used by pupils to learn so as to achieve the goals of education. A good learning strategy can arouse pupil's interest in learning and improve their academic performance in any given subject (English studies).

Learning strategies refer to ways and procedures used by pupils to acquire knowledge and skills that will be used achieving the goals of education. According to Kafadar (2013), Learning strategies are the total effort that the students need to process, understand and adopt the information introduced in learning-teaching processes. Cohen in Khamees (2016) states that learning strategies are those processes which are consciously selected by the learners and which may result in action taken to enhance the learning of second or foreign language, through the storage, retention, recall, and application of information about the language.

In the context of this paper, the researchers are concerned about memorization and self-instructional learning strategies. Richards and Schmidt (2013) posited that memorization, sometimes called rehearsal is a learning strategy that involves saying or writing something over and over until the learner is able to reproduce the material automatically. According to Richards and Schmidt, memorization usually refers to the conscious process of establishing information in memory. This means that this strategy is a conscious process, which includes some mental activities intentionally carried out by learners (Ozcan & Kesen, 2008). In their own view, Li and Chun (2012) asserted that memorization as a strategy help pupils to improve the development of their language skills. Strategies such as memorization has the power to affect the language learning process by increasing attention and retrieval of information and also enhancing rehearsal, integration and encoding of language material.

The fact that memorization learning strategy does not lead to the development of comprehension skills among pupils necessitated the advent of deep learning strategies in the teaching and learning of primary school subjects. Hence, Adprima (2010) stated that certain learning strategy such as activity-based learning strategy, peer tutoring, think-per share and self-instructional strategy among others should be employed by teachers in teaching and learning processes in primary schools. Self-instructional learning strategy is a self-regulation strategy that pupils can use to manage themselves as learners and direct their own behaviour while learning (Adani, Eskay & Onu, 2012). It is a strategy by which pupils self-tutor and self-monitor themselves. This is quite different from the conventional teacher-dominated strategy of teaching, where the teacher dishes out learning content and the learner merely struggles to

learn and understand (Steadly, 2009). In the conventional strategy, the teacher directs the activities of learning, but self-instructional strategy is learner-directed, where the student takes charge of the learning activity, while the teacher merely guides.

For self-instructional learning to occur, two conditions must be satisfied; firstly, the learner must take care of his learning by making decisions concerning all aspects of learning including determining the objective, defining progressions, selecting techniques used and evaluating what has been acquired (Anyichie & Onyedike, 2012). To do this, the learner is trained in certain learning strategies like planning and organizing, evaluating, practicing, timed practicing, developing and using memory aids, getting help, asking for correction and peer-learning. Secondly, there must be a learning structure in which the learner can exercise control over the learning process. Therefore, for learners to succeed in self-instruction, they must have the skills to manage their own learning (Nasrollahi-Mouziraji & Nasrollahi-Mouziraji 2015).

With this in mind, Montague (2008) noted that self-instructional learning involves the use of self-regulation strategies like self-instruction, self-questioning, self-evaluation, self-monitoring and self-reinforcement which help learners in gaining access to cognitive processes that facilitate learning, guide learners as they apply the processes within and across domains, and regulate their application and overall performance task. Self-instructional learning strategy helps pupils internalize the cognitive processes and metacognitive strategies in order to use them automatically while handling problems in English studies. As a learning strategy, self-instructional learning strategy breakdown learning into bits, which makes it easier for learners to comprehend more effectively.

Literature abounds on memorization and self-instructional learning strategies but there seems to be paucity of empirical investigations on teachers' perception on the influence of memorization and self-instructional learning strategies on primary school pupils' and poor academic performance of pupils in English studies in Anambra State. It is against this backdrop that the researchers were motivated to determine the perceived influence of memorization and self-instructional learning strategies on primary school pupils' academic performance in English studies in Idemili North Local Government Area of Anambra State.

Statement of the Problem

Despite the importance of English studies in primary schools in Nigeria, the objectives of teaching and learning English studies seem not to have been achieved. Marjah (2010) asserted that English language learners demonstrate narrow range of ability in the English studies. The Basic Education Certificate Examination analysis released for 2014 and 2015 academic year show that pupils from Anambra State have 40 percent average in English language. In 2016, 2017 and 2018, the results were worse, as pupils have 30 percent average in English language (Basic Education Certificate Examination Chief Examiners report, 2018).

The poor performance of pupils in English studies in both internal and external examinations has been of serious concerns to all stakeholders in the education sector in Nigeria. This may be attributed to several factors among which is the use of the conventional teaching Method that dominates classrooms and makes teaching and learning of English studies uninteresting and pupils' achievement in the subject very low. Most importantly, primary school pupils find it extremely difficult to recollect basic facts needed to enhance their performance in English studies. To redress this situation, however, there is need to find instructional strategies that will address the poor academic performance associated with English studies in primary schools. This is the worry of the researchers hence, the determination to examine teachers' perception on the influence of memorization and self-instructional learning strategies on primary school pupils' academic performance in English studies in Idemili North Local Government Area of Anambra State is not clearly known due to limited research works. In order to fill this gap, this study was carried out.

Purpose of the Study

The main purpose of this study is to determine the perceived influence of memorization and self-instructional strategies on primary school pupils' academic performance in English studies in Idemili North Local Government Area of Anambra State. Specifically, the study sought to:

1. Determine teachers' perception on the influence of memorization learning strategy on primary school pupils' academic performance in English studies in Idemili North Local Government Area of Anambra State.
2. Determine teachers' perception on the influence of self-instructional learning strategy on primary school pupils' academic performance in English studies in Idemili North Local Government Area of Anambra State.

Research Questions

The following research questions were raised for the study;

1. What are teachers' perceptions on the influence of memorization learning strategy on primary school pupils' academic performance in English studies in Idemili North Local Government Area of Anambra State?
2. What are teachers' perceptions on the influence of self-instructional learning strategy on primary school pupils' academic performance in English studies in Idemili North Local Government Area of Anambra State?

Method

The study was designed to determine the perceived influence of memorization and self-instructional learning strategies on primary school pupils' academic performance in English studies in Idemili North Local Government Area of Anambra State. Two research questions were raised for the study. Descriptive survey research design was adopted. The population of the study comprised of four hundred and twenty-eight (428) public primary school teachers from the 70 public primary school in Idemili North Local Government Area. Simple random sampling techniques was used to sample 80 primary school teachers selected from 10 public primary schools sampled from the 70 public primary schools. The researcher developed an instrument title "Perceived Influence of Memorization and Self-Instructional Learning Strategy on Pupils Academic Performance (PIMSLS-PAP)" Questionnaire. The questionnaire contained 20 items from the two clusters on a 4-point rating scale of Strongly Agree (SA-4 points), Agree (A-3 points), Disagree (D-2 points) and Strongly Disagree (SD-1 point). Face validity of the instrument was determined by three experts; two in the Department of Early Childhood and Primary Education and one in Measurement and Evaluation in the Department of Educational Foundation all in the Faculty of Education, Nnamdi Azikiwe University, Awka. Cronbach alpha was used to obtain reliability coefficients of 0.85 and 0.76 with an overall coefficient of 0.80 for the two clusters of the instrument. The data collected were analyzed using mean (\bar{x}) mean to answer the research questions and standard deviation to determine the homogeneity or otherwise of the respondents' views. In analyzing the mean, value of 2.50 and above was regarded as agreed and value below 2.50 was regarded as disagreed.

Results

Research Question 1: What are teachers’ perceptions on the influence of memorization learning strategy on primary school pupils’ academic performance in English studies in Idemili North Local Government Area of Anambra State?

Table 1: Respondents Mean Ratings on the teacher’s perceived influence of memorization learning strategy on pupils’ academic performance in primary schools (N = 80)

| S/N | Perceived influence of memorization learning strategy on pupils’ academic performance | \bar{X} | SD | Remarks |
|---------------------|--|-------------|-------------|--------------|
| 1 | Memorization strategy improves pupils’ speaking skills | 3.22 | 0.51 | Agree |
| 2 | Memorization strategy improves pupils’ writing skills | 3.31 | 0.30 | Agree |
| 3 | Memorization strategy improves pupils’ reading skills | 3.18 | 0.73 | Agree |
| 4 | Memorization strategy improves pupils’ pronunciation skills | 3.40 | 0.46 | Agree |
| 5 | Memorization strategy improves pupils’ grammatical skills | 3.11 | 0.25 | Agree |
| 6 | Memorization strategy help pupils’ learn new words from their English studies textbook | 3.03 | 0.62 | Agree |
| 7 | Memorization strategy enhances the reading culture of pupils | 3.77 | 0.37 | Agree |
| 8 | Memorization strategy promotes study habits among pupils | 2.84 | 0.59 | Agree |
| 9 | Memorization strategy reduces tensions among pupils’ when studying English studies | 3.69 | 0.28 | Agree |
| 10 | Memorization strategy is easy and quick for teaching pupils | 3.95 | 0.64 | Agree |
| Cluster mean | | 3.35 | 0.48 | Agree |

Data in Table 1 show that all the 10 items with mean scores ranging from 2.84 and 3.95 were agreed by the respondents as the influence of memorization learning strategy on primary school pupils’ academic performance in English studies in Idemili North Local Government Area of Anambra State. The cluster means score shows 3.35 and the standard deviations for all the items are within the same range which shows that the respondents were homogeneous in their opinions.

Research Question 2: What are Teachers’ perceptions on the influence of self-instructional learning strategy on primary school pupils’ academic performance in English studies in Idemili North Local Government Area of Anambra State?

Table 2: Respondents Mean Ratings on teacher’s perceived influence of self-instructional learning strategy on pupils’ academic performance in primary schools (N = 80)

| S/N | Perceived influence of self-instructional learning strategy on pupils’ academic performance | \bar{X} | SD | Remarks |
|---------------------|--|-------------|-------------|--------------|
| 11 | Self-instructional strategy improves pupils’ speaking skills | 2.64 | 0.61 | Agree |
| 12 | Self-instructional strategy improves pupils’ writing skills | 3.00 | 0.42 | Agree |
| 13 | Self-instructional strategy improves pupils’ reading skills | 2.55 | 0.70 | Agree |
| 14 | Self-instructional strategy improves pupils’ pronunciation skills | 3.17 | 0.43 | Agree |
| 15 | Self-instructional strategy improves pupils’ grammatical skills | 2.88 | 0.26 | Agree |
| 16 | Self-instructional strategy help pupils’ learn new words from their English studies textbook | 2.95 | 0.80 | Agree |
| 17 | Self-instructional strategy enhances the reading culture of pupils | 2.73 | 0.58 | Agree |
| 18 | Self-instructional strategy promotes study habits among pupils | 3.22 | 0.65 | Agree |
| 19 | Self-instructional strategy reduces tensions among pupils’ when studying English studies | 3.31 | 0.49 | Agree |
| 20 | Self-instructional strategy is easy and quick for teaching pupils | 3.46 | 0.53 | Agree |
| Cluster mean | | 2.99 | 0.55 | Agree |

Data in Table 2 shows that the 10 items listed on the influence of self-instructional learning strategy on primary school pupils’ academic performance in English studies were agree by respondents with mean ratings ranging from 2.64 to 3.46. The cluster mean score of 2.99 implies that primary school teachers agree that the listed items are the influence of self-instruction learning strategy on primary school pupils’ academic performance in English studies in Idemili North Local Government Area of Anambra State. The standard deviations for all the items are within the same range which shows that the respondents were homogeneous in their opinions.

Discussion

Findings of the study in table 1 revealed that primary school teachers perceived that memorization learning strategy influences primary school pupils’ academic performance in English studies in Idemili North Local Government Area of Anambra State. The study showed that primary school teachers strongly agreed that memorization strategy enhances the reading

culture of pupils, reduces tensions among pupils' when studying English studies and is easy and quick for teaching pupils. The study also revealed that primary school teachers agreed that memorization strategy improves pupils' speaking; writing reading, pronunciation and grammatical skills among others. This finding is in line with Hummel and French (2010) who posits that memorization learning strategy is an effective learning strategy in learning English language among pupils. This finding supports, Ikuo (2013) who states that memorization learning strategy helps learners get familiar with the content and quickly instil reading culture with the ability to find the correct answers to the English language questions without tension. This finding tally with the study of Wen-Chin, Min-Chuan and Kuan-Ming (2016) which posits that memorization learning strategy not only improved pupils' listening, speaking and reading skills, but also increased their knowledge of vocabulary and sentence structures.

More so, findings of study in table 2 revealed that primary school teachers perceived that self-instruction learning strategy influences primary school pupils' academic performance in English studies in Idemili North Local Government Area of Anambra State. The study revealed that self-instructional strategy improves pupils' reading, speaking, writing and pronunciation skills among others. The results showed that teachers believed that engaging learners in self-learning made them more responsible in learning English language. The study also disclosed that self-instructional learning strategy help pupils learn new words from their English studies textbook, enhances the reading culture and study habits among pupils among others. In agreement with the above findings, Chia and Ellis (2003), who posits that self-instructional learning strategy improves English language skills. The findings correspond with that of Laila (2011), who posits that self-instructional learning strategy improve learner's attitude toward learning and improved their proficiency in English language.

Conclusion

The primary purpose of teaching and learning at any level of education is to bring a fundamental change in learners. In order to facilitate qualitative academic performance among primary school pupils, teachers must apply appropriate teaching and learning strategies that best suit the achievement of objectives of subject matters. Based on the findings of the study, it was concluded that the use of memorization and self-instructional learning strategies by primary school teachers would internalize the phonetic, grammatical, lexical abilities among pupils with which to read comprehension passages and make exemplary sentences in English language.

Recommendations

Based on the findings, the following recommendations were made:

1. English studies teachers in primary schools should provide a conducive environment where pupils can memorize by providing the necessary reading materials in order for them to understand the concept better and reduce tension in reading.
2. English studies teachers in primary school should create a conducive environment for pupils to use self -instructional learning strategy by allowing pupils to take the full responsibility of their learning in order to be more responsible in learning English studies

REFERENCES

- Adani, A., Eskay, M., & Onu, V. (2012). Effect of self-instruction strategy on the achievement in algebra of pupils with learning difficulty in mathematics. *US-China Education Review*, 12 (2012) 1006-1021
- Adprima, L. (2010). *Educational information for new and future teachers*. New York: Teachers College Press.
- Akanbi, S.T. (2010). Test anxiety as a correlate of academic achievement among senior primary school in Ogbomoso Area of Oyo State. *African Journal of Educational Research*, 14(1&2), 89-97.
- Akinleke, W.O. (2012). The effects of background characteristics and school factors on college pupils' performance and satisfaction. *Journal of Education and practice*, 3(8), 251 – 257
- Anyichie, A.C., & Onyedike, C.C (2012). Effects of self-instructional learning strategy on primary schools pupils' academic achievement in solving mathematical word problems in Nigeria. *An International Multidisciplinary Journal*, 6(4), 302-323
- Azikiwe, V. C. (2010). The state of Nigerian education. *The Tribute*, p24.
- Basic Education Certificate Examination (2018). Chief external examiners' report on junior primary school basic certificate English language, examination. Ministry of Education, Anambra State.
- Chia, C. S. C., & Ellis, M. (2003). PRC pupils' experience with independent learning At the National Institute of Education, Singapore. Proceedings of the Independent Learning Conference 2003. Retrieved from: http://independentlearning.org/ILA/ila03/ila03_chia_and_ellis.pdf
- Ementa, N.C., & Onokpaunu, M.O. (2019). Appraisal of business education pupils' performance trends in computer related courses: Implications for lecturers' instructional design. *Nigerian Journal of Business Education*, 6(1), 397 – 405

Federal Republic of Nigeria (2013). *National Policy on Education*. Lagos: NERDC Publishers

Hummel, K.M. & French, L.M. (2010). Phonological memory, and implications for the second language classroom. *The Canadian Modern Language Review*, 66(3), 371-391.

Igbinedion, J.O. & Omodolor, P.K. (2016). Managing school records in primary schools. *UNIZIK Journal of Educational Management and Policy*, 1(1), 138-145

Ikuo, K. (2013). Effect of English short sentences memorization on the speaking skill and the e-learning of English. *Elsevier*, 103(26), 348-351

Kafadar, T. (2013). Examination of multiple variables of learning strategies used by students in social studies lesson. *Unpublished Master Dissertation*, Ahi Evran University, Kirsehir, Turkey.

Khamees, K. (2016). An evaluative study of memorization as a strategy for learning English. *International Journal of English Linguistics*, 6(4), 248-259.

Laila, M.A.S. (2011). *The impact of self-learning strategy on the learners' achievement in public primary schools from the English teachers' perspective in Tulkarm Governorate*. *Unpublished Master Thesis*, Faculty of Graduate Studies, An-Najah National University, Nablus, Palestine.

Li, J., & Chun, C. K. (2012). Effects of learning strategies on student reading literacy performance. *The Reading Matrix*, 12(1), 30-38

Marjah, R. R. (2010). *The effect of cooperative learning method on pupils' achievement in reading comprehension*. *Unpublished doctoral dissertation*, Department of Arts Education, University of Nigeria, Nsukka.

Montague, M. (2008). Self-regulation strategies to improve Mathematical problem solving for pupils with learning disabilities. *Learning disabilities Quarterly*, Winter, 37-44

Mwiigi, J.W. (2014). *The effect of gender differences on student's academic performance in primary schools in Ndumberi division, Kiambu County, Kenya in science subjects and languages*. *Unpublished Postgraduate Diploma in education*, School of Education, University of Nairobi.

Nasrollahi-Mouziraji, A., & Nasrollahi-Mouziraji, A. (2015). Memorization makes progress. *Theory and Practice in Language Studies*, 5(4), 870-874.

Nwachukwu-Agbada, J. O. J. (2012). English language education in Nigeria: History, efforts and outcomes. In U. M. O. Ivowi & B. B. Akpan (Eds) *Education in Nigeria from the Beginning to the Future*. Lagos: Foremost Educational Services Ltd

Ozcan, Y., & Kesen, A. (2008). Memorization in EFL Learning. *Academia*, 35(3), 58-71.

Richards, J., & Schmidt, R. (2013). *Longman dictionary of language teaching and applied*. Routledge: Great Britain. Linguistics. Essex: Longman

Steadly, M. M. (2009). Hanging without a rope. *American Ethnologist*, 23(1), 197-198

Tenibaje, D.J. (2009). Influence of family size and family birth order an academic performance of adolescents in higher institution. *Pakistan Journal of Social Sciences*, 6(3), 110 – 114

Wen-Chin, C., Min-Chuan, Y., & Kuan-Ming, L. (2016). A study of applying memorization method to enhance primary school pupils' English oral ability. *Journal of Economics, Business and Management*, 4(11), 627 – 631