HOME AND SCHOOL FACTORS AS DETERMINANTS OF PRE-SCHOOL CHILDREN'S COGNITIVE SKILL DEVELOPMENT IN ILORIN SOUTH LOCAL GOVERNMENT AREA,KWARA STATE

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A POSTFIELD REPORT SUBMITTED TO THE DEPARTMENT OF EARLY CHILDHOOD AND PRIMARY EDUCATION, FACULTY OF EDUCATION, KWARA STATE UNIVERSITY, MALETE IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER IN EDUCATION (M.ED) DEGREE IN EARLY CHILDHOOD EDUCATION

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NOVEMBER, 2020

DECLARATION

I hereby declare that this thesis titled "Home and School Factors as Determinant of Pre-school Children's Cognitive Skill Development in Ilorin South Local Government Area, Kwara State, Nigeria" in my own work and has not been submitted by me or any other person for any degree in this or any other tertiary institution. I also declare that as far as I am aware all cited works have been acknowledged and referenced.

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APPROVAL PAGE

This thesis titled 'Home and School Factors as Determinants of Pre-school Children's Cognitive Skill Development in Ilorin South Local Government, Area of Kwara State by **Kafayat Omolara OMOTOSHO** with Matriculation Number **17/27/MEE007**meets the regulations governing the award of Masters of Education (M.Ed.) Degree in Early Childhood Education, Kwara State University, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This thesis is dedicated to my beloved parents; Mr Omotosho Aliyu and Mrs Balikis Omotosho.

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ABSTRACT

Pre-school children's cognitive skill is increasingly recognized as one of the most important areas of early learning and development. The holistic development of children generally is knotted to the kind of care and education made available to them in their early years. Hence, this study investigated into the home and school factors as determinants of pre-school children's cognitive skills development in Ilorin South Local Government Area of Kwara State.

The design employed for the study was descriptive survey research design. The population comprisedof all the pre-school children, their teachers and parents from245private, 246 public schools in Ilorin South Local Government Area of Kwara State. The sample size consisted of 1,032 respondents, which included 491 pre-school children, 50 teachers, and491 parents from 25 private and 25 public pre-schools in the LGA, all were selected using purposive sampling technique. Threeresearch instruments were used for data collection in the study. These are: Teacher Classroom Behaviour Rating Scale(TCBRS); Cognitive Development Skill Test (CDST); andMothers child support Rating Scale (MCSRS). The reliability coefficient index ofthe TCBRS CDST and MCSRS were 0.81, 0.74 and 0.89 respectively.The data were analyzed using descriptive statistics of frequency counts, percentages and mean, as well as inferential statistics of t-test and one-way ANOVA were used to test the research hypothesis formulated.

The results revealed that pre-school children cognitive skills was high in (mean score = 75.48). Also, it was shown that there was a significant difference between male and female children level of cognitive development ($t = -2.25$; $df = 489$; $p<0.05$). It further showed that there was no significant influence of mother education qualification on children cognitive skills development($F_{(7, 483)} = 1.19$; $p>0.05$). There was no significant influence of mother support on children cognitive skills development($F_{(1, 489)} = 2.86$; $p>0.05$). In addition, there was a significant difference between urban and rural children's level of cognitive development ($t = 4.40$; $df = 489$; $p<0.05$). Similarly, there was a significant difference between public and private school children level of cognitive development ($t = 4.40$; $df = 489$; $p<0.05$).

On thebasis of these findings, the study has established thatattending pre-school aids children's cognitive development and policy makers and school proprietors should ensure that pre-school environments isequipped with all the necessary learning materials/facilities in a child friendly manner. Parents and teachers should create enabling environment that supports pre-school children, to acquire cognitive skillsin Ilorin South Local Government Area of Kwara State.

Keywords: Home, School, Pre-school, Cognitive Skills Development

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CHAPTER ONE

INTRODUCTION

Background to the Study

The foundation of education for a child is the pre-school education which forms an integral part of his or her early education. This level of education may be formal or informal, given in an educational institution or at home, to children from birth to 5+ prior to their entering the primary school (Carole,2017).The education level for the child provides for physical, motor, health, nutritional, intellectual, aesthetic, emotional and social development of children. Pre-primary education is the initial stage of organized instruction designed primarily to introduce very young children to a school type environment (Colbert, 2014). Pre-primary education is defined in the National Policy on Education (FRN**,** 2013**)** asaone year education given tochildren aged 5prior to entering primary school**.**

The objectives of Pre-Primary education in Nigeria as stated in the National Policy of Education (FRN, 2013) include: effect a smooth transmission from the home to school;prepare the child for the primary level of education; provide adequate care, supervision and security for the children while their parents are at work;inculcate social, moral norms and value; inculcate in the child the spirit of enquiry and creativity through the exploration of nature, the environment, art, music and the use of toys, e.t.c; develop a sense of co-operation and team-spirit;stimulate in the child good habits, including good health habits; teach the rudiments of numbers, letters, colors, shapes, forms e.t.c. through play.

According to Finnish government (2010), pre-primary education refers to systematic and goal oriented education, teaching, and care provided for children, where children's holistic development is considered and the role of pedagogy is of particular importance. In Finland, a child usually starts schooling at the age of seven. In the first and second grades (8 years olds)

pre-primary education and basic education must make up a consistent, unified whole. The special task of instruction in the lower grades is to develop pupil's capability for subsequent work and learning (Finland National Board of Education, 2004). In Finland nine-year basic schooling is free for all pupils. Basic education is publicly funded, funding is shared between the states (57%) and the local authorities (43%). Private schools, which are limited in number, have state funding and follow the regulations set down by the ministry of education. During the day, the child receives a free meal. If the child lives far away (over 5 km) or the route is difficult. He or she receives free transport. Children whose native language is something other than Finnish or Swedish will study Finnish or Swedish as a foreign language.

In the United States, early childhood education is wide, covering ages zero to eight, with a marked differentiation between preschool education (for three and four year olds) and kindergarten education (grade K in the K-12 education system) (Donovan, 2014).The United States National Association for the Education of Young Children (NAEYC, 2009) defines early childhood as the age before the age of eight. It is the period from birth to 8 years (UNESCO, 2010). Early childhood is usually the stage before the age of normal schooling which is five years in most countries and the foundation stage where children develop their potentialities for the future. Pre-schools (or nursery schools in US Census Bureau reports) include the range of programmes offered under public and private education or providing compensatory education under special legislation, and are largely half-day or cover the normal school day (usually about 6 hours,e.g. 9:00am - 3:00 pm).

In Ghana, early childhood education programme is the process or approach deliberately intended to effect developmental changes (physical, cognitive, social and emotional) for those below the age of 8 years, and the foundation stage where children develop their potentialitiesandcapabilities for the future (Ampadu & Ofosu, 2015). ECE is the type of formal education meant for those who are within the age group of 0-8 years where the formal

teaching and caring for young children is undertaken by people other than their families or in settings outside their homes. It is a period when child-centred interactive methods are used to help a child develop (Bredekamp, 2014). Research has shown that the development of intelligence, affective and social relation occurs in the early years of a person's life (Evans & Gruba, 2015). Abilities to think, speak, learn and reason are all rooted in the first three years of life (State of the World's Children Report, 2013). Consequently, the foundation for the development of personal values and social behaviour has been found to be dependent on the care given to children in their early years of pre-school education (Rutter, Giller & Hagell, 2014).

In this regard, pre-school education aims at helping children in the early childhood stage to develop skills especially using their hands in making things, thus unearthing and developing their hidden talents (Akinrotimi, 2016). This lays foundation for writing which is a fundamental skill they need in later years. Pre-school education teaches very important skills like hand washing to prevent diseases, teeth brushing after meal to prevent tooth decay and developing cavities, and also cleanliness in general because it promotes healthy life (Kathyanga, 2015). This is done in an interactive way through storytelling, reading books, and also through videos, drama and skit put together by the kids with their teacher's guidance (Donkor, 2014). More importantly, pre-school teaches children human relations. These include the importance of living together, working together, playing together giving and sharing, loving themselves and loving others (Mankoe, 2014). This teaches the children the importance of life, how precious it is and the need not to harm, neither kick nor hit anyone. Children are also taught how to show appreciation to their parents, teacher, friends, and how to say sorry if they offend their friends, parents, and teachers (Wrotham, 2014).

Barnett (2012) observed that research clearly shows high-quality pre-school education improves later school success, employment and earnings. It has lessened crime and

delinquencies and unhealthy behaviours like smoking and drug use. Although most centers provide care to children aged 3-5 years, some provide care for infants and toddlers (1-2 years of age) as well as those aged 3-5. Adedigba and Agarry (2013) submitted that neurologist believe that the time when the human brain develops the fastest is between 0-6 years old. It is considered the golden age of a child's development. Bloom also observed that in terms of mental development, 50 percent takes places between 0 to 4 years, 30 percent when a child is between 4 to 8 years while the remaining 20 percent are developed between 8 to 17years which could likely be ehnced through mothers' level of education.

Mothers' level of education is considered one of the most stable aspects of socio economic status because it is typically established at an early age and tends to remain the same over time (Sirin,2010). In this case, the higher the mothers' educational level, occupation, status and income and their household income, the higher would be the mother involvement in her child's education. As a result, the strength of mothers' involvement enables children to improve on cognitive skills in schools (Adeoye, 2013). In the view of Desmond (2014), time spent engaging in educational activities, such as reading, between the ages of three and five with mothers who are educated beyond the minimum school-leaving age, lead to an increase in verbal skills at age seven, He also acknowledged mothers educational level as one of the important indicators that determines parental involvement. The study also revealed that the higher the standard of the mother'seducational level, the higher would be the parents' academic aspirations for their children**.**The availability of learning materials in the home has also been found to be an important predictor of children's early cognitive development. Tomopoulos (2017) reported that number of books provided to children at home is related to their cognitive development and receptive language.

The importance of children's involvement in family activities has been extensively studied. For example enrichment experiences have been found to be an important aspect of the

home learning environment, which uniquely promotes children's literacy (Foster, Lambert, Abbott-shim, Mc Carty & Franze, 2014). Enrichment experiences are academically significant because they positively influence children's interest in learning and information processing. Activities such as visiting museum or a zoo, for example, promotes children's critical thinking and analytical skills (Marty,2014).Similarly,Davies (2010) opined that parents play important role in preparing their children for pre-school. They are essentially the first educators in a child's life, and can provide a supportive learning environment.

According to Davies (2010), supporting children at home, and encouraging learning before any formal education, is just one way that parents enhance learning.Omoniyi (2013) buttressed that when a child reaches pre-school age, parents select the early educational programme that will continue to prepare such child to succeed through providing thechildrenwith books and other materials that can help them to read. This is consistent with Bradley (2011) who established that the direct and most prominent explanation for the link between parents' education and their children academic achievement relies on the assumption that parents learn something during schooling, which influences the ways in which they interact with their children on learning activities. Akinleye, Roberts and Royal (2011) also explained the importance of the child's environment by stating that in an intellectual home where questions are answered and the child's curiosity stimulated, such a child will develop curiosity and thus become intelligent in life.

It is therefore on this basis that Copple (2006) postulated that pre-school classroom teachers are presumed to engage in practices that are geared towards developing cognitive skills of the children. He also stated that teachers, being the chief facilitators of children's learning and development, must effectively plan instruction. According to Green, Walker, Hoover-Dempsey and Sandler (2007), classroom practices that had been shown to be effective at promoting children's cognitive skills include reading aloud to children in an interactive style,

fostering children's understanding of print concepts, arranging the classroom environment so that the children can have opportunities to interact with books and other print materials, providing opportunities for children to experiment with writing, familiarizing children with lettersof the alphabet and their corresponding sounds, and involving children in activities that promotes children's phonological skill development.According to Vygosky, it is the responsibility of teachers to help children reach Zone of Proximal Development (ZPD). The zone of proximal development is the gap between what a learner has already mastered (the actual level of development) and what he or she can achieve when provided with educational support (potential development) (Saito, 2011).

According to the Ministry of Education**,** Science and Technology (MOEST, 2014), the training that teachers receive affects the way they teach at the pre-primary school level**.** Trained teachers have a positive relationship with the learners and they also socialize well with the learners, as they use the instructional material (Homes, 2013). There is need for pre-school teachers to undergo intensive training so that they can get equipped with knowledge and skills to cope well with the demanding nature of young children (Munyeki, 2012). The study further advocated that when pre-primary school teachers are trained, they are in a better position to provide learners with appropriate materials during instruction to improve the children cognitive skills.Talking about quality in relation to pre-school teachers, it is submitted on pre-school nation's website 2014 that quality begins with experience and high quality begins with experienced and highly qualified teachers. Research on child care quality have has often focused on teachers as cornerstone of the quality debate, suggesting that high quality teachers, those with educational background in early childhood or a related field, have classroom that rate higher with respect to overall classroom.

Some schools are provided with teaching materials only to be kept with the head teachers and never used (Odinko & Uzoeshi, 2014). The availability and non-availability of

facilities and their adequacy in schools has effect on the academic performance of the pupils (Ndakwu, 2002). This is in agreement with what is experienced in our day to day classroom interaction. In some schools, the large number of pupils in a class does not give enough room for teachers to properly implement the school programme (Odinko, 2016). Thus, the numbers of pupils in a class affect the quality, the kind of teaching methods used and the extent to which the teachers could bring in what they felt is the best practice to help the pre-school child learn. Other researchers were of the view that learners in small classes are more likely to interact actively with the teacher by initiating, responding and sustaining contact (Blatchford, Bassett & Brown, 2005).

In Nigeria, children of pre-school age who are enrolled in schools are exposed to curriculum contents, where they are taught how to categorise things. Categorization is taught under topics such as identification and sorting in different subject areas (Odinko, 2014). Children are exposed to content areas such as identification of colors, numbers, alphabets, as well as how to put them into categories (matching) such as matching numbers with objects, as well as matching letters with objects,among others. Categorization is the process in which ideas and objects are identified, differentiated, and understood (Cohen, & Lefebvre, 2005). Categorization may imply that objects are sorted into groups, usually for some specific purposes. Ideally, a category illuminates a relationship between the objects and the construct discussed.

To Frey, Gelhausen and Saake (2011), categorization is fundamental in language, science, research, decision making and in all kinds of environmental interaction. This indicates that exposing learners to learning activities, during which they are taught how to identify and sort and match objects could play a major role in learners understanding about relationships among people, events and objects around them.Wright (2013) explained that children in low quality care settings are exposed to, hazardous and un-stimulating environment, due to a lack

of teacher knowledge to be able to appropriately respond to children's emerging reading (Brewer, 2015). It could be said, therefore, that teacher knowledge of early childhood education and development is an important factor in determining the overall quality of a classroom and the impact it has on learning and development.Brewer (2015) further stated that, apart from the fact that the teachers should be professionally qualified, they should be given opportunities for constant training programmes that can develop their skills and knowledge further.

Inline with this, awell designed appropriate class size at the pre-primary level could likely leads to a rise in pupils' cognitive development. A class size of 18 pupils maximum per teacher is required to produce the greatest benefit (Gormley, 2015). Class size have little effect without enough classroom, well qualified teachers, professional development programmes for teacher and a detailed curriculum (Mimet, 2000). The class size varies widely in Nigeria depending on the school location, the proprietorship, type and quality of facilities, teahing staff and official policy(Ejieh, 2006); but the standard approved class size is a minimum of 25 pupils in a class (FRN 2004) some schools however set a teacher-pupils ratio of 1 to 20, 1-25, 1-30 or higher. The more congested the class, the more difficult it will be for pre-school pupils to learn (Evertsons& Harris 2010).

According to Ibia (2005), the educational materials supplied to schools, and school setting based on school type influences teaching and learning of the pupils, and hence the level of the pupils academic achievement. Thus, the specific type of school dictates what is taught, how it is taught and what materials are made available. Ibia further maintained that were educative materials are deprived asmost of the pupils suffer academic deterioration and mental imbalance. Also where the teacher relates positively with the pupils, the school becomes conducive and learners perform well in their academic achievement. Studies by Sexton (2001) on public and private schooling suggest that reform efforts and financial investment in the

educational system should promote public schools implementation of policies and management ability.

Pre-school cognitive development deals with studying a child's thinking and reasoning abilities. Many pre-school programmes do not regularly observe cognitive development unless a child is being evaluated for a learning delay (Segal, 2014). Watching children for signs of their cognitive development is important for the daily planning of classrooms. In order to present a challenging, yet developmentally appropriate curriculum for classrooms, it is necessary to observe not only children's interests, but their learning and reasoning abilities as well (Baillargeon, 2015).Cognitive skills development in children involves the progressive building of learning skills, such as attention, memory and thinking (Turbill,2009). These crucial skills enable children to process sensory information and eventually learn to evaluate, analyze, remember, make comparisons and understand cause and effect. Although some cognitive skills development such as thinking and learning skills can be improved with practice and the right training, those related to a child's genetic makeup, are learned (Uttal, 2010).

Observing certain cognitive skills in pre-school classroom may require a bit of planning. An example of this would be counting and setting up a small group game where the children will have to count specific number of objects. For instance, using dice and beads to help teach proper grouping, using manipulative skills, so that they can physically move from one group to another as they count, roll only one dice on the table, help the children count the number of dots on the dice as well as pick a certain number of objects out of a large group may help in observing early cognitive skill development (Snowling, 2014). During the activity, the teacher is expected to take some time while playing these games with children, to write down his or her observations on each child. He or she should not rely on the memorybut should jot down few detailed notes, while being involved in the game (Ariel, 2015).

A useful technique for facilitating cognitive development in children, especially when there is a lot of information, is teaching content with rhymes or catchy sayings or putting content to music (Harper, Platt & Pelletier, 2011). For example, a common way to teach children the months of the year is through this rhyme:

'Thirty days hath September,
April, June, and November.
All the rest have thirty-one,
Excepting February alone,
And that has twenty-eight days clear,
And twenty-nine in each leap year.'
(Anonymous)

A memory aid like rhyme enables a child's brain to better organize and retain the content. The ability to think includes being able to reason out tasks and find solutions. This cognitive skill helps a child to know whether he's accomplishing what he set out to do or whether he needs to ask for help. For example, when a child reads a story, thinking skills allow him to determine for himself whether he understands what he's reading or whether he needs to go over the passage again, look for additional clues, study available pictures or ask for help in order to better grasp the intended meaning (Bauer, 2015).Children abilityto count from one through 10 is a core skill that all kids should have before moving beyond kindergarten. The ability to count that high is actually a relatively complex skill for kids in pre-school (Raney, 2015).

According to Bennett (2012), it requires them to be able to recognize each number in the appropriate order, and finally count those numbers without needing any sort of external help. Without this basic skill, it will be impossible for kids to progress in their numeracy as they move into more advanced grade level. There are also many activities that can be integrated into lessons when teacherswant to make counting fun; Christmas tree counting is one of such activity that pre-schoolers can participate in, and to make learning more enjoyable. In this game, pre-schoolers get into the holiday spirit by drawing Christmas trees, cutting them out,

and pasting numbered stars onto the trees. Preschoolers then decorate the tree with the same number of play-dough balls as those written on the star. This type of activity can help the children to identify numbers and count out the appropriate numbers using the play-dough (Bennett, 2012).

Early writing is a complex literacy task learned through adult-child interaction (Aram & Levin, 2010) that draws on children's knowledge about language, print and the relationship between the two. Identifying components skills that support pre-school children's ability to engage in writing tasks may provide insights into how children begin to map language to print. Studies indicate that there is some overlap in the skills that underline name writing and word spelling (Quellete & Senechal, 2016).Pre-school classrooms are expected to have access to literacy materials because young children need rich and diverse reading materials to acquire the complex set of attitudes, skills and behaviours associated with literacy development(Szinger, 2009).

In their submissions, Casey and Sheran (2004), and Szinger (2009), it was noted that materials like books, crayons, writing papers, posters, charts, and labels as well as literacy games among others should be available in children's classroom. These, according to Szinger (2009), will make the classrooms print-rich. Also, there should be a library corner where children can go to engage themselves in reading picture books of all kinds. Apart from this, there should be computers, television, and DVD players to show and play various songs, rhymes and letters as well as numbers to children. Szinger also says other materials like charts based on different themes, labels of various objects and children names and calendars should be available in the classroom. When these resources are available in the classroom, they contribute immensely to literacy skill and cognitive development of pre-school children (Casey & Sheran, 2004).

During the ages of 3-5, pre-schoolers thinking skills are undergoing tremendous change. Their ability to use representational thought and symbols to stand for objects, people and events, which began in toddlerhood, becomes even more complex (Abdulfattah,2015). He also postulated thatpre-schoolersbegin to use logic to think about how and why things work in the world around them. Teachers play important role in pre-schooler's cognitive development (Isenberg, 2014). By understanding their advances and limitations in thinking, teachers can best support pre-schoolers in their cognitive growth. One way for the teachers to engage preschoolers thinking skills, is through reading quality children books that promote aspects of cognition such as reasoning and problem solving, symbolic play, metacognitive, knowledge, memory and social cognition (Carlsson, 2014).

Statement of the Problem

High quality education does not happen by chance but a product of effective teaching and learning coupled with the effort of the teacher, the school, pupils, parents and their various home environments. Oftentimes, the blames on the poor performance in cognitive skills of pupils in schools are shifted on the teachers and school authorities. Most families in the society seem not to give adequate attention to the education of their children. It appears some of the parents have erroneous notion about the performance of their children, they do not know and do not fulfill their role of guidance and encouragement in the child's performance in schools. While some people have the notion that failure or success in schools could be traced back to the teachers and the school authorities, others sees socio-economic status of the family as an influence on the child's academic performance. Some research works have revealed that the performance of the pupils is a joint effort of both the school authorities and that of the parents in different home environment.

Pre-school children cognitive skills are considered as important factors in child development, especially, considering the importance of home and school factors. However, it

is observed that lack of support from parents, type of qualifications acquired by the teachers, class size, school location and type perhaps slowdown the pace of literacy and numeracy skills development of pre-school children in schools. The situation has become of great concern to researchers and scholars in the field of education. Consequently, parents and teachers are expected to play stimulating roles in ensuring that pre-school children have the requisite training that will enhance their cognitive skills.

Many studies such as: Espy, MolfeseandDiLalla (2001), Melhuish, Phan, Sylva, Sammons, Siraj-Blatchford and Taggart (2008), andNicole (2011) have investigated the effects of home and school factors with other variables across cultures. It is evident from these studies that there was lack of research that focused on home (mothers' level of education) and school factors (teachers' qualifications, class size, school location and type) as determinants of pre-school children's cognitive skills in kwara state. This creates a researchable gap in knowledge that stimulated the researcher to investigate home and school factors as determinants of pre-school children's cognitive skills in Ilorin South Local Government Area of Kwara State.

Purpose of the Study

The main purpose of this study was to investigate home and school factors as determing pre-school children's cognitive skills, in Ilorin South Local Government Area of Kwara State. In addition, the specific purposes are as follows:

1. Investigate the level of cognitive development on preschool children in Ilorin South Local Government Area of Kwara State;
2. Assess the significant difference in the level of children cognitive development base on gender;
3. Investigate the significant influence of mother's level of education on child's cognitive development;

4. Investigate the significant influence of mother child support on cognitive development of children;
5. Assess the significant difference of cognitive development on the children's based on school location;
6. Assess the significant difference in the level of cognitive development based on school type;
7. Find out the extent to which the home and school factors (Teachers qualification, class size, mother child support at home, teachers classroom behavior, mothers level of education, child's gender, school location, and school type) on children's cognitive development in Ilorin South Local Government Area of Kwara State;
8. Investigate the significant relative contribution of each variable to the prediction.

Research Questions

The following research questions were raised to guide the study:

1 What is the level of cognitive development of pre-school children in Ilorin South Local Government Area of Kwara State?

Research Hypotheses

Seven research hypotheses were formulated from the research objectives and tested in the study at 0.05 level of significance.

Ho1: There is no significant difference in the level of cognitive development based on gender.

Ho2: There is no significant influence of mother's level of education on child's cognitive development.

Ho3: There is no significant influence of mother child support on cognitive development of children.

Ho4: There is no significant difference in the cognitive skill development of children based on school location.

Ho5: There is no significant difference in the cognitive development of children based on school type.

Ho6: There is no significant influence of home and school factors (Teachers qualification, class size, mother child support at home, teachers classroom behaviour, mothers level of education, child's gender, school location, and school type) on children's cognitive development in Ilorin South Local Government Area of Kwara State.

Ho7: There is no significant relative influence of each variable to the prediction.

Significance of the Study

The findings of this study is expected to be of significant to parents, pre-school children and all stakeholders in the education sector such as, teachers, government, school management, policy makers as well as other researchers in the field of early childhood and primary education.To the parents, the findings of the study will be of great importance to them as information provided will enable parents to have better understandingon home factors dertermines the achievement ofpre-school children's cognitive skills development in Ilorin south local government area of kwara state.

Also, the study would be of great significance to classroom teachers as information provided on how teachers' qualification, class size, school location and type determine pre-school children cognitive skill development would enable them to be more enlighten on the appropriate methods of teaching and ways of engaging pre-school children in classroom activities to enhance their cognitive skill development. Similarly, it is hoped that the findings of this study will be significant to the pre-school children in Ilorin South Local Government Area of Kwara Stateby helping them todiscover the contributions of home and school factors as it derterimes their cognitive skills development.

In addition, the findings of this study will be of utmost benefit to government bygiving them insight on how to ensure that enabling environment to aid the implementation of the curriculum. Also, the school management will benefit from the findings of the study because it mightprovide them with necessary information on the type of teachers to be employed to implement curriculum especially at the pre-school level of educationin Ilorin south local government area of kwara state. Equally, the findings of the study will be useful for the policy makers by providing them on how to make policies that will improve pre-school children cognitive skills development.

The findings of the study will be of immense benefits to other researchers in the field of early childhood education, in the sense that information provided would be in the library and accessible online for use and for further researchers towards providing more information on home and school factors as it determined pre-school children's cognitive skill development, especially, at the pre-school level.

Delimitation of the Study

The study involved pre-school pupils, teachers and parents in Ilorin South Local Government Area of Kwara State, It focuses on mothers of the children, their level of education and how they help their children at home. Teachers' qualifications, class size, school location and type as well as how these factors determine children's cognitive skills development in literacy and numeracy were factors considered in the study.

Operational Definition of Terms

The following terms were operationally defined in the context in which they are used in the study**.**

Home factors: It is the mothers'level of education, mother child support and how mothers help the child at home to enhance pre-school children cognitive skills development.

School factors: It is the teachers' qualification, class size, school location and type.

Cognitive Skills: It is the literacy and numerical skills ability of pre-school children in Ilorin South Local Government Area of Kwara State.

Cognitive Skills Development: It is the literacy and numeracy skills development exhibited by the the pre-school children in Ilorin South Local Government Area of Kwara State.

Pre-school: it is the education given to young learners before the age of entering primary education.

Pre-school Children: It is the pupils in public and private pre-schools in Ilorin South Local Government Area of Kwara State.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter reviewed some related literature under the following subheadings:

Theoretical Review

Jean Piaget Theory of cognitive Development (1936)

Conceptual Review

Concept of Early Childhood Education

Pre-school Children and Pre-school Education

Aims and Objectives of Pre-school Education

Cognitive Skills Development of Children

Home Factors and Children's Cognitive Development

School Factors and Children Cognitive Development

Emperical Review

Empirical Studies on Home Factors and Pre-school Children Cognitive Development

Empirical Studies on School Factors and Preschool Children Cognitive Skills

Appraisal of literature reviewed

Theoretical Review

The study was guided by cognitive development theory which is presented by different opinions, views and arguments of scholars.

Jean Piaget Theory of cognitive Development

The study was based on cognitive development theory propounded by Piaget's (1936). The theory of cognitive development explains how a child constructs a mental model of the world. Also, the theory disagreed with the idea that intelligence was a fixed trait, and regarded cognitive development as a process which occurs due to biological maturation and interaction with the environment. The Piaget`s focused on development and learning theories. Development focus on the Piaget was employed at the Binet Institute in the 1920s, where his job was to develop French versions of questions on English intelligence tests who became intrigued with the reasons children gave for their wrong answers to the questions that required logical thinking. He believed that these incorrect answers revealed important differences between the thinking of adults and children. What Piaget wanted to do was not to measure how well children could count, spell or solve problems as a way of grading their I.Q. What he was more interested in was the way in which fundamental concepts like the very idea ofnumber, time, quantity, causality, and justice and so on emerged.

Leaner`s capabilities and the learning focuses on the realization of such capabilities and the education within the theory is extrinsic.The cognitive theory, the behavior reflects the emergence of various psychological structures, organized units or patterns of thinking that influence on how children interpret the information. In addition, the cognitive developmental theories explain the change in reasoning level of a child acquiring new ways of understanding their world. Piaget's theory of implication assumes that all children go through the same sequence of development, but they do so at different rates. Teachers must make a special effort to provide classroom activities for individuals and small groups, rather than for the total class

group. Assessment should be based on individual progress, rather than on the normal standards of same age peers. Individuals construct their own knowledge during the course of the interaction with the environment.

An important implication of Piaget's theory is adaptation of instruction to the learner's developmental level (Piaget, 1983). The content of instruction needs to be consistent with the developmental level of the learner. The teacher's role is to facilitate learning by providing a variety of experiences. Teacher should obviously provide opportunities for learners to explore and experience, by doing so is encouraging learner's new understandings. Piaget emphasizes the Opportunities that allow learners of different cognitive levels to work together and encourage less mature students to advance to create understanding. Piaget (1983) further postulated that the implication for instruction is the use of concrete hands on experiences to help learners learn additional suggestions. Piaget also emphasizes that teachers should allow opportunities to classify and group information to facilitate assimilating new information with previous knowledge. Present problems that require logical understanding.

Schemas - (The building block if knowledge)

The schema is actually the different sensory motor map that the learner constructs about their world on their knowledge development. Gradually as learner develops the ability to represent the outer world in the internal images and thoughts at this point the operations which are logical thoughts become possible for a learner to perform. According to Piaget, (1983), child schemas are constructed through the process of assimilation and accommodation. He futher explained that a schemas describes both the mental and physical actions involved in understanding and knowing. Schemas are categories of knowledge that help learners to interpret and understand the world. In Piaget's view; a schema includes both a category of knowledge and the process of obtaining that knowledge. As experiences happen, this new information is used to modify, add to, or change previously existing information or schemas.

Adaptation process that enable transition from one stage to another.

The adaptation process is the inborn tendency to adjust more attuned to conditions imposed by the environment. Piaget sees the learner as the actively engaged in an ongoing process of adaptation or transformation. Learners adapt by continually organizing and re organizing the information and experiences they get in their everyday life. The process creates the better fit between the world as the learner experiences it and the new information and the way he/she understand it .Learners are constantly challenged by the with the new information from their environment around them from infancy onwards, learners construct more complex cognitive structures of their world in their mind to organize, understand and adapt to it.

Equilibrium

Equilibrium is when the learner move towards more complex or effective way of organizing and dealing with the world. Equilibrium according to Piaget (1983) is regarded as the engine that drives the development of a learner. It is actually the cognitive structures that accommodate the familiar information instead of the new knowledge, we say the learner equilibrates. In the equilibrium the assimilation and accommodation interact continuously and accommodation opens up possibility of assimilation and vice versa in an ever expanding cycle (Bukatku&Daehler, 1995).The changes or expansions in learners mind have to be organized and kept in order and dynamic balance across the learner's cognitive structures. The cognitive conflicts occur when the learner is confronted with the information which he/she cannot deal with it in terms of the current cognitive structures.

The cognitive conflicts are actually the positive developmental experiences within a learner. It was indicated in the equilibrium aspect that the cognitive conflicts challenges the learners to modify the cognitive structures in order to equilibrate the learner reaches the key point in development when he /she can be able to solve the range of more complex problems than he/she was able to solve earlier. Then, Piaget (1983) described it as point constituted new

level of adaptation and the point where the learner's cognitive development `shifts up gear'. The child will use new gear/information but will continue to use the old gear/information also. The more learner use the new information the more the learner grow in the ability to adapt effectively to the situation.

Assimilation

Assimilation is the components of the adaptation when the information arises that can fit into the learner existing knowledge is added into the learners cognitive structures. This information adds to extend the learners mind structures or cognitive structures.It actually occur if the knowledge that learner is learning is not too dissimilar to learners existing knowledge; it can be assimilated or added to the existing cognitive structures. Then, the learner's cognitive structures are extended `meaning the new knowledge adds to what learners already know. For instance, Piaget's understanding was that assimilation and accommodation cannot exist without the other. They are two sides of a coin. To assimilate an object into an existing mental schema, one must first needs to take into account or accommodate to the particularities of this object to a certain extent. For instance, to recognize (assimilate) an apple as an apple, one must first focus (accommodate) on the contour of this object. To do this, one needs to roughly recognize the size of object. Development increases the balance, or equilibrium, between these two functions. When in balance with each other, assimilation and accommodation generate mental schemas of the operative intelligence. When one function dominates over the other, they generate representations which belong to figurative intelligence.Another example: A 2-year-old child sees a man who is bald on top of his head and has long frizzy hair on the sides. To his father's horror, the toddler shouts "Clown, clown" (Siegler, 2003).

Accommodation

The accommodation is the component of the adaptation and is actually when the new information arises that contradicts or conflicts with the learners cognitive structures .in

accommodation learner have to adjust and reshape his/her cognitive structures so that the new information can be fitted or accommodated in learners mind.It actually occur if the new knowledge is very dissimilar to the existing knowledge and it cannot be linked with the existing knowledge ,the disequilibrium occur meaning the learners cognitive structures is modified or changed in order to accommodate the new knowledge. According to Piaget (1983), assimilation is the first attempt of understanding new information and experiences, with accommodation adding another solution if the above is insufficient. In accommodation, you try to modify your existing schemas and ideas, with the process giving you a new experience or knowledge and often resulting in the birth of new schemas. For example, you might see French fries, but after biting into them realise they are made from sweet potato. You therefore, accommodate your existing schema (not everything that looks like French fries is potato) and add or create a new schema (you can use sweet potato to make French fries). You are changing the existing structures or the knowledge you have to fit the environment around you

Generally, accommodation is a result of a failure of the schema. The existing knowledge you have simply doesn't work in the situation you are in the French fries just don't taste like potato, no matter how hard you try. Therefore, to overcome this obstacle, you change, add and modify your strategy or schema. If you think about the example of the child and the clown, the child's parent might explain how the man is not a clown, but that the hairstyle was just something he has and it isn't there for laughs. Now the child would need to change the schema of clown to include other things (making people laugh, red nose, funny costume) in order for it to work.

Stages of Development

Piaget (1983) identified four primary stages of development: sensorimotor, preoperational, concrete operational, and formal operational.According to Piaget (1983), all children progress through four stages and they do so in the same order. Bukatku and Daehler

(1995) affirmed that during each stage of cognitive development there is unique level of analysis, internal organization and the understanding of the environmental information and events. Piaget`s theory shows clearly that the child`s understanding is only dependent on the stage that he/she has reached and teachers ought to take this into account as they teach learners at different levels of intellectual development (Bukatku&Daehler, 1995). The stages of development identified by Piaget were discussed below:

Sensorimotor Stage Birth to 2 years (infancy)

Lazarus(2010) posited that the first stage in the growth and development of a child .children have the basic structure of organizing and adapting to their environment and their behavior tend to be circular and also develop an elementary understanding of the things around. It is the stage where child acquire language, which enhances their social and intellectual development This stage is actually the form of thought or intelligence as observed in the child`s actions. The child`s schema is simple and limited to what the child can explore through the body and senses. The stage last from birth of a child to the age of about two years. Kendra (2014*)* indicated that child's inherent tendency to organize its world as it develops. Some methods of classifying objects and experiences, although basics take shape as a result ofsecondary circular reactions. The object permanence develops at this stage whereby child understand the objects, whether is hidden or visible. It is also at this stage that children only look at the world through their own perspective. The child, has the physical interaction with his or her environment, builds a reality and how it works.

Preoperational stage two to about seven years

Lazarus (2010) indicated that the child on this stage is able to reason and give logical train of thoughts. The child use the objects and symbols to represent something which exist in a concrete form for example: child play with a car as if it is a real car. At this stage the child is not yet able to conceptualize abstractly and needs concrete physical situations. It is also the

development of semiotic functions which develop the language. During this stage the child language, thinking, imagination and problem solving develop faster as child can be able to work with images and symbols. The child can recognize the properties of the object even if they might be changed around and look different. The child at this stage finds it too difficult not to accept the evidence in their eyes. Children's vocabulary increases and their sentences progress from one and two word phrases to complete full sentences. Children can take in other points of view, and take into account more than one perspective. The pre-operational stage child can be characterized by the, animism, egocentrism, transductive reasoning, syncretism, lack of decentring, lack of classification, lack of seriation and conservation skills and the rapid acquisition of language.

Concrete Operational Stage: From Seven to Eleven Years

Lazarus (2010) posited that a child is capable of using logical processes of reasoning on the basis of concrete evidence. Children who attain formal operations are said to reason in terms of theories and abstractions, as well as concrete realities. It is in this stage that problem solving and reasoning is powerful enough to last the rest of life. Child is capable of creating logical structures that explain his or her physical experiences and Abstract problem solving is also possible at this stage. For example, arithmetic equations can be solved with numbers, not just with objects at this stage the child becomes capable of engaging in a logical thinking on the basis of the past experience and concrete evidence. During this stage the child is able to successfully perform task relating to the conservation of matter, the transitive form of reasoning and classification of objects.

Two other important processes in the concrete operational stage are logic and the elimination of egocentrism. Egocentrism is the inability to consider or understand a perspective other than one's own. It is the phase where the thought and morality of the child is completely self-focused.During this stage, the child acquires the ability to view things from another

individual's perspective, even if they think that perspective is incorrect. For instance, the child is showed a comic in which Jane puts a doll under a box, leaves the room, and then Melissa moves the doll to a drawer, and Jane comes back. A child in the concrete operations stage will say that Jane will still think it's under the box even though the child knows it is in the drawer.Children in this stage can, however, only solve problems that apply to actual (concrete) objects or events, and not abstract concepts or hypothetical tasks. Understanding and knowing how to use full common sense has not yet been completely adapted

Piaget determined that children in the concrete operational stage were able to incorporate inductive logic. On the other hand, children at this age have difficulty using deductive logic, which involves using a general principle to predict the outcome of a specific event. This includes mental reversibility. An example of this is being able to reverse the order of relationships between mental categories. For example, a child might be able to recognize that his or her dog is a Labrador, that a Labrador is a dog, and that a dog is an animal, and draw conclusions from the information available, as well as apply all these processes to hypothetical situations.

Formal operation stage: from eleven years upwards.

According to Lazarus (2010), thinking is not only abstract but also logical. The reasoning engaged in is not driven necessarily by the presence of the concrete objects. Children’s can now generate the potential solutions to the problems in a systematic fashion. The social context is more important in this stage. Lazarus (2010) averred that the concrete examples are required to help child understand the abstract relationships. The stage occur during early adolescence and at this stage the child engage in more abstract thin thinking By this point, the child's cognitive structures are like those of an adult and include conceptual reasoning. This is the highest level of thinking stage and child is capable of going beyond the concrete evidence. The learner at this stage is able to concentrate their thoughts on things that

have no existence. The child can now perform the variety of task involving use of hypothesis. The learner's thoughts can be fostered by placing learner in a situation where they have to solve problems.

Relevance of Piaget's Theory to This Study

The cognitive development theory propounded by Piaget's (1936)is relevant to this study because it could be linked with the dependent variable which is home and school factors and dependent variables covered in this study. The theory stipulated that that every child learns differently based on what they are taught. Also, some of the fundamental assumptions of the Piaget's theory focused on cognitive development construction which has to do with the process of making parent and teachers be more patient and understand that not all children learn and grow at the same speed. The application of the Piaget's theory ofdevelopmentalstages would enablebothe parents and teachers understand the cognitive development of the child as theyplan stage-appropriate activities to keep the children active.

Piaget's theory is one of the most influential cognitive development theories out there. Despite being conducted and challenged, the findings have been used in a number of different contexts. Based on Piaget's observations, the ideas have been applied in classrooms, dealing with young children. But the ideas and concept at play can also tell a lot about training and development in more general. He believed children to require a certain level of maturity before they can be taught a specific concept. Until the child is mature enough to think of other people's feelings, it can be difficult to make them understand how other children might not find teddy bears cuddly.Piaget also thought assimilation and accommodation to be active learning experiences. To him, problem solving is not a skill to be taught, but to be discovered. Therefore, children and other learners must be active participants of the training or education, not just passive participants. Therefore, many classrooms use active discovery learning as the basis, in

which the teacher simply facilitates learning instead of directing. The child essentially gets to make his or her own experiments while learning.

Conceptual Review

Concept of Early Childhood Education

Early childhood generally refers to the period from birth through age 5. A child's cognitive development during early childhood, which includes building skills such as pre-reading, language, vocabulary, and numeracy, begins from the moment a child is born. Developmental scientists have found that the brain acquire a tremendous amount of information about language in the first year of life even before infants can speak (Barsade, 2014). Barsadefurther stated that by the time babies utter or understand their first words, they know which particular sounds their language uses, what sounds can be combined to create words, and the tempo and rhythm of words and phrases. There is a strong connection between the development a child undergoes early in life and the level of success that the child undergoes early in life and the level of success that the child will experience later in life. For example, infants who are better at distinguishing the building blocks of speech at 6months are better at other more complex language skill at 2 and 3 years of age and better at acquiring the skills for learning to read at 4 and 5 years of age. Not surprisingly, a child's knowledge of the alphabet in kindergarten is one of the most significant predictors of what that child's tenth grade reading ability will be (Hechter, 2013).

Early child development (ECD) encompasses physical, socio emotional, cognitive and motor development between 0-8 years of age. Neuro-scientific evidence is rapidly evolving and in 2016, updated evidence became available on the burden of children at risk of sub-optimal development, effective interventions, affordability of their delivery, and cost of inaction (Maphoso, 2014).When young children are provided in an environment rich in language and literacy interactions and full of opportunities to listen to and use language constantly, they can

begin to acquire the essential building blocks for learning how to read(Moon, 2012). Moon also says a child who enters school without these skills runs a significant risk of starting behind and staying behind. The early years are critical, because this is the period in life when the brain develops most rapidly and has a high capacity for change, and the foundation is laid for health and well-being throughout life(Sooter, 2013). Sooter also says nurturing care defined as care that is provided in a stable environment, that is provided in a stable environment, that is sensitive to children's health and nutrition needs, with protection from threats, opportunities for early learning, and interactions that are responsive, emotionally supportive and developmentally stimulating-is the heart of children's potential to develop.

Early years are so important to children's later development because the emotional, social and physical development of young children has a direct effect on their overall development and on the adult they will become (Allen, 2014). That is why understanding the need to invest in young children is so important, so as to maximize their future well-being Adenike (2016). Early childhood education is beneficial for children age 3,4 and 5 Blyth (2013). It's also often referred to as preschool, pre-kindergarten, daycare, nursery school or early education Bonoli (2012). No matter the name, each serves the same purpose: to prepare young children for their transition into elementary school. Preschool teachers play an important role in building a child's success in their first years of school, they also facilitate arts and craft project throughout the day as well as provide structure and help children grow in their reading and writing skills, teach science and help children understand themselves (Brennan 2012). In Addition, Bettye (2014) stated that play is important in early years, it allows children to use their creativity while developing their imagination, dexterity, and physical, cognitive, and emotional strength. Play is important to healthy brain development. Bettye also says it is through play that children at a very early age engage and interact in the world around them.

Rushton (2014) opined that a brain-based research shows that the early years play a key role in children's brain development. The first five years of a child's life are fundamentally important. They are foundation that shapes children's future health, happiness, growth, development and learning achievement at school, in the family and community, and in life in general. Several studies carried out on early childhood education that confirms that the first five years are particularly important for the development of the child's brain, and the first three years are the most critical in shaping the child's brain architecture (Lewis, 2016). Early experiences provide the base for the brains organizational development and functioning throughout life. They have a direct impact on how children develop learning skills as well as social and emotional abilities (Ejieh, 2016). Children learn more quickly during their early years than at any other time in life because they need love and nurturing to develop a sense of trust and security that turns into confidence as they grow(Iyobhene, 2015).

The purpose of early years is to set a foundation for every other education that is to come. It therefore helps children in all developmental areas of life such as physical, intellectual, language, emotional and social (Goodman&Sian-esi, 2005). Gooman also found that investment in early childhood education before the age of 5 appear to have had long-lasting and positive effects on the children Akpporiherle(2013). It encourages learning, facilitate the ongoing learning process, and promote independent thought and problem solving. Besides literacy and numeracy, it also develops life skills, for example self-help skills to eradicate poverty. Studies by the World Bank show that just four years of education help people to increase the productivity of their agricultural smallholdings (Sule, 2013). Basic education is the prerequisite for developing populations' creative and productive capacities.

Pre-school Children and Pre-school Education

Pre-primary education is to provide a learning environment, which will guide children's curiosity, interest and learning motivation and give them opportunities for play, other activities

as well as for rest and silence (Akinrotimi&Olowe, 2016). He also says the essential factors of the learning environment include interaction between the teacher and each child and that between the children, different operating methods and learning assignments. Accodrding to Kolawole (2016), pre-primary education is considered by many societies and individuals to be beneficial to young children for their educational development from school entry age. This type of education was given official recognition by the federal government of Nigeria in the national policy on education.Kolawolefurther stated that in the policy document, provision is made for a policy on pre-primary education stating its objectives and the measures to be taken by government to facilitate the achievement of the policy objectives.

By the age of 2 to 5 years, most children have developed the skills to focus attention for extended periods, recognize previously encountered information, recall old information, and reconstruct it in the present. For example, a 4 year-old can remember what she did at Christmas and tell her friend about it when she returns to pre-school after the holiday. Between the ages of 2 and 5, long term memory also begins to form, which is why most people cannot remember anything in their childhood prior to age 2 or 3(Okewole,Iluezi-Ogbedu& Osinowo,2015).Between the ages of 5 and 7, children learn how to focus and use their cognitive abilities for specific purpose. For example, children can learn to pay attention to and memorize lists of words or facts. This skill is obviously crucial for children starting school who need to learn new information, retain it and produce it for test and other academic activities (Britto, 2012).

Part of long-term memory involves storing information about the sequence of events during familiar situations as scripts. Scripts help children understand, interpret, and predict what will happen in future scenerios. For example, children understand that a visit to the grocery store involves a specific sequence of steps: dad walks into the store, gets a grocery cart, selects items from the shelves, waits in the check-out line, pays for the groceries, and then

loads them into the car. Children ages 2 through 5 also start to recognize that are often multiple ways to solve a problem and can brainstorm different (through sometimes primitive) solutions (Dagunduro, Viatonu& Usman-Abdulqadri2011). Children between the ages of 2 and 5 have also developed a larger overall capacity to process information. This expanding information processing capacity allows young children to make connections between old and new information. For example, children can use their knowledge of the alphabet and letter sounds (phonics) to start sounding out and reading words. During this age, children's knowledge base also continues to grow and become better organized (Davis, 2013).

According Elliot and Drummond (2014), metacognition, the ability to think aboutthinking, is another important cognitive skill that develops during early childhood.He also says between ages 2 and 5 years, young children realize that they use their brains to think. However, their understanding of how a brain works is rather simplistic, a brain is a simply a container (much like a toy box) where thoughts and memories are stored. By ages 5 to 7 years, children realize they can actively control their brains, and influence their ability to process and to accomplish mental tasks. For example, first graders learn to use a number line (or counting on their fingers) when they realize that they forgot the answer to an addition or subtraction problem. Similarly, children who are learning to read can start to identify words (sight words) that cannot be sounded out using phonics (connecting sounds with letters), and must be memorized.

Aims and Objectives of Pre-school Education

The Operational objectives of Pre-Primary education as stated in the National Policy of Education (FRN2013) include:

i. Effect a smooth transmission from the home to school

ii. Prepare the child for the primary level of education

iii. Provide adequate care, supervision and security for the children while their parents are at work.

iv. Inculcate social, moral norms and values

v. Inculcate in the child the spirit of enquiry and creativity through the exploration of nature, the environment, art, music and the use of toys, e.t.c.

vi. Develop a sense of co-operation and team-spirit

vii. Stimulate in the child good habits, including good health habits.

viii. Teach the rudiments of numbers, letters, colors, shapes forms e.t.c. through play

The pre-primary education is aimed at making the child independent, creating a positive and well-balanced self-image and developing intellectual abilities. It also has a few other objectives that are discussed below (Ban, 2012).

Foster Socializing Skills

Pre-primary education aims to develop friendships among children belonging to the same age group. it provide the kids with an environment that encourages interaction with other kids, builds strong friendships, and also helps them come out of their comfort zones. As a result, a child can overcome his/her shyness and mingle with others thus promoting social development.

Develop an enthusiasm for Learning

As kids learn their initial lessons through different play and structured activities, it lays the foundation for learning and also develops their imagination power. The thirst to acquire more knowledge and not rest until the satisfactory answers have been obtained is built at this very stage.

Promotes Holistic Development

Education in early years guarantees all round development of the child. The environment in such schools lays the foundation for a kid's physical, social, emotional and mental development which are crucial factors for later stages in life. As a kid gets an environment where he/she can freely express ideas and feeling, it helps to identify the weak areas of the child and also determine what steps must be taken or what support should be given to overcome those weakness.

Teaches the kids to respect

The kids often try to emulate the behavior they observe. When they observe positive and respective relationships between their parents or different teachers and the caretakers at school, they will simply try to follow the same.

Develop sharing and team work Attitude

Pre-primary education ensures that the child learns to co-operate and share his/her belongings with others. It might happen that a child does not share toys with his/her siblings at home and just fiercely opposes the idea at school during the first few days. Though it might get difficult to convince a stubborn child, it is essential that he/she learns the art of sharing at an early stage.

Cognitive Skills Development of Children

Literacy Skills Development

Children's language development and literacy development are central to each other. The developments are of language and literacy includes knowledge and skills in such areas as vocabulary, syntax, grammar, phonological awareness, writing, reading, comprehension, and discourse skills (Obidike, 2013).Language skills build in a developmental progression over time as children increase their vocabulary, average sentence length, complexity and

sophistication of sentence structure and grammar, and ability to express new ideas through words (Kipping,Campbell, MacArthur, Gunnell, Hickman,2013). Similarly, Catts and kamhi (2013) define five features of language that both work independently and interact as children develop language skills: Phonology (speech sounds of language), semantics (meanings of words and words and phrases), morphology (meaningful parts of words and word tenses), syntax (rules for combining and ordering words in phrases), and pragmatics(appropriate use of language in context). The first three parameters combined (phonology, semantics, and morphology) enable listening and speaking vocabulary to develop, and they also contribute to the ability to read individual words.

According to Connor (2014), all the five features of language identified could contribute to the ability of the children to understand sentences, whether heard or read. Thus, children development of listening and speaking abilities are important in their own right, oral language development also contributes to reading skills. In this sense, developing oral communication skills are closely linked to the interactions and social bonds between adults and children (Scarborough, 2012). He further says comprehension that begins with pragmatics the social aspects of language that include facial and body language as well as words, such that infants recognize positive (and negative) interactions. Semantics (understanding meaning of words and clusters of words that are related) soon follows, in which toddler's link objects and their attributes to words. Between the ages of 2 and 4, most children show dramatic growth in language, particularly in understanding the meanings of words, their interrelationships, and grammatical forms (Scarborough, 2012).

One of the best documented methods of improving children's vocabularies is interactive storybook reading between children's vocabularies is interactive story book reading between children and their caregivers (Connor, 2014). In the view of Hindman, Miller, Froyen andSkibbe (2012), conversations as stories are read improve children's vocabulary, especially

when children are encouraged to build on the possibilities of storybooks by following their interests (Whitehurst,2013). Book reading stimulates conversation outside the immediate context for example, children ask questions about the illustrations that may or may not be central to the story. This introduces new words, which children attach to the features of the illustrations they point out and incorporate into book centered conversations.

Conversation around story's content and emphasis on specific words in the text(the phonological and print features of words alongside their meanings) have long term effects (Zucker,Heitzeg, Villafuerte& Weiland,2014) found that teachers intentional talk during reading had a longer lasting effect on the children's language skills than the frequency of the teachers reading to the children. Moreover, the effect of the teachers talk during reading was not moderated by the children's initial vocabulary or literacy abilities. The long term effect of high quality teacher child book centered interactions in preschool lasted through the end of first grade.

Numeracy Skills Development

The foundation for children's numeracy is established in the earliest year. Numeracy learning builds curiosity and enthusiasm of children naturally from their experience. Numeracy at early years, if appropriately connected to a child's world is more than getting ready for school or accelerating them into elementary arithmetic. National Council of Teachers of Mathematics (NCTM, 2000) posited that appropriate mathematical experience challenges young children to explore ideas relate to pattern, shape, numbers and space with increasing sophistication. Numeracy is a particular way of thinking and all children everywhere do it quiet naturally. Children explore the abstraction of numeration parcel to the development of language skills and are the development of concept related to basic area of numeracy. The basic numeracy concepts are pattern, sequence, serration spatial relationship, object permanence, sorting, comparing, classifying and one to one correspondent (Davis, 2013).

According to Lynn (2001), early numeracy in pre-primary schools builds on children's desire to make sense of their world and helps them develop and demonstrate their mathematical understanding. Brenda, Edward, Iram, Kathy, Mai, Pam, Phan, Sylva, Sammon, Siraj, Taggart (2008) opined that children use Mathematics intuitively and develop their understanding of Mathematics through their individual approaches to learning. Children need to be given learning experiences that are within the range of things they can do with and without guidance (that is, in their zone of proximal development).Through active participation in Mathematics investigation, including problem solving and discussions, children develop their ability to use mathematics as a way of making sense of their daily experiences. Educators introduce Mathematics in preschool through active, hands-on, child-centre, and problem-based exploration in various learning centres. Concrete materials provide children with tactile experiences to help them explore and describe mathematical problems and solutions (Edward &Alldred, 2008).

Department of Education, Employment and Workplace Relation (DEEWR, 2009) posited that numeracy is about more than just counting. Recognizing pattern, sorting, and categorizing objects, talking about time and the patterns of the day, measuring and calculating amounts, arranging objects in space and identifying shapes are all examples of mathematical thinking that contribute to numeracy. Materials and resources that allow children to solve problem and explore the world mathematically are therefore key elements in the development of numeracy (Deewr, 2009).

Similarly, Aubrey, Dahl and Godfrey (2006) posited that children think mathematically long before they start school, there is a substantial growth in numeric skills during preschool. Such informal knowledge about numbers is often referred to as number sense in many everyday problem-solving situations involving numbers and measurement. Children informally build these skills in their interaction with careers and with other children, and they can be encouraged

to develop their understanding in play situations. In fact, investigation in developmental cognitive psychology has found that children enter school with a wide range of early numeric skills but they vary greatly in how they acquire, and how quickly they acquire different concepts (Hedges, Huttenlocher, klibanoff, Levine &Vaileva, 2006). Children's informal number sense when they enter school provides a foundation for their school Mathematics achievement and strongly predicts their Mathematics competence later in school (Geary, 2011).

Home Factors and Children's Cognitive Skills Development

Mother's Level of Education

The home environment provides the foundation for learning and is an element of pupils' life that can affect grades, according to the Arkansas state parental information and resource centers center for effective parenting. Providing opportunities to learn outside of school helps facilitate pupils success in the school environment, as reported by the university of Minnesota extension education success was positively impacted by home learning opportunities such as parents reading to their children, trips to the library, and resources encouraging play with letters and numbers. Mothers are responsible for ensuring that their children are well-fed, well-rested, happy and calm. According toNicole (2011), parental information and resource center create a positive physical and mental atmosphere in the home helps prepare pupils to be ready and able to learn. This thus implies that parent child relationship is characterized by nurturing, acceptance and encouragement, as well as parents' responsiveness to the child's needs, correlates with positive academic performance. Hence, parental over protectiveness, authoritarianism, disapproval and punishment often have a negative correlation with pupils learning.

According to Willey,Jones and Sievert (2009), mothers education can determined child growth and health, besides that, low education level also affect mothers ability to take care of their child in appropriate way Obemeata (2012) and Ayodele(2012) supported the effect of

social class on children's reading capacity.They discover that children from low-economic background have problems in reading, while those of middle or high social class read proficiently due to the parents, education, occupation and various sorts of educative materials they are being exposed to.Psacharopuolos&Woodhall (2000) indicated that the mothers' education, occupation and income level determines children access to school. Children of educated women are much more likely to go to school and the more schooling women have received. The higher the chances their children will from their education (UNICEF 2004). Educated mother will be a role model to their children from an early stage. They will encourage their children to develop interest in schooling unlike uneducated parents who may have less influence on the education of their children.

Mother's Child Support

Home environment has been identified as a strong index towards better academic achievement of children (Nwosu, 2013). Several researches carried out stressed the correlation between learners' home environment and better achievement in various school subject (Awosolu, 2013). For instance, Adelusi(2008) discovered a positive effect of home environment on pupils' performance in English language. With thesefindings, reading proficiency of learners would not be an exception. In the view ofEpstein (2007), motherscanbegintodevelopchild'sliteracysimplyby reading with their child at home. A home read-aloud ideally looks like a conversation between the mother and the child about the book. These conversations allow the child to gain new vocabulary and explore new sounds building a child phonological awareness (Hirsh-pasek,Golinkoff, Berk& Singer 2009).During reading, a child may ask question, share a personal story, and identify objects in the pictures, for example mother can welcome these interjections as an excellent way to gauge how well the child understands the story (Hendrick&Weissman 2007).

Honig, Diamond andGutlohn (2013) indicated that though if a child does not seem to be following the story, the mother can use several strategies to clarify the story. For example, the mother might back up and reread the text or direct the child to use pictures as context cues to build understanding.Mothercan read a picture book with their child. You might suggest a picture book that connects to the child's interest(National Research Council 2000). The best picture bookhas vivid illustrations (Honigetal, 2013). Hence, a child becomes an active reader when the parent asks what is happening in a picture, parents begin to build predictive skills by asking the child what will happen next in the story (Hendrick et al 2007). A recent study about mother academic beliefs illustrated the importance of parents' active support. The study of Weigel Martin and Bennett (2006) found that mothers who believed they played an active role in building their pre-school children's knowledge actually created a more literacy-rich home. Their children developed greater interest in reading and develop with their child at home and give tips and guidelines for success.Provide several types of books(pictures books, alphabet books, and developmentally appropriate nonfiction books) for mother and child to do together. Award books as door prizes, or give a book to each family in attendance(Singer & Maul, 2009).

Patall, Harris and Jorgianne (2008) study also found that some types of mother training were more effective than others. In his study, he found positive effects when mothers were trained to improve the home learning environment, help pupils improve homework habits, and supervise the homework process. This finding was similar to those of Sheldon and Epstein,Bang andBotvin (2007) study, which found that evening workshops and providing teacher-designed interactive homework and numeracy materials for families and pupils to use at home were more effective than other parent involvement activities. Nwosu (2013) in their study classified home environment into seven process variables relating to educational achievement. These are language models in the home, intellectuality in the home, achievement press, academic guidance, activeness of the family, work habits in the family and development

of values. According to their classification, some of the variables are seen as a workforce for proficiency in reading. Some of these process variables were reviewed in relation to reading proficiency the quality of language used at home contributes immensely to the process of reading proficiency.

Ayodele (1985) in his findings asserted that the language/linguistic background of learners goes a long way to affect virtually all areas of the child's performance in language skills. Similarly, the findings of Dickinson and Tabors (2012) and Snow (2011) confirmed that rich home, linguistic background of a child enhance the effortless process of reading proficiency of the child.So in a home where children are given boundless opportunities in language use through conversation, asking and answering question, such children will tread the path of proficiency in reading. In the Nigerian context, children are to be seen and not heard. Little wonder that majority of Nigerian children are poor readers (Ballis, 2012).Nwosu (2013) stress the significance of these to the educational achievement of children. Even in enhancing reading proficiency of children, the nature and quality of educational materials made available to them, the parental academic attainment and availability of guidance on matters pertaining to school work are of great importance with this classification, and this present research incorporated parental occupation or social class into this group to make a complete variable.

This classification of Nwosu and Maduewesi (1980) is summed up by this researcher as parental/older adults' involvement. The involvement may take various dimensions such as engaging children in active and worthwhile discussions in books, story-telling, purchase of story books for children, as gifts, minimizing the hours children spend in watching television and other pattern of interaction with the child, All these have been identified to contribute immensely to children's reading proficiency (White&Dewitz 1996,NAEP 1996). In fact, in Sheridans (1981) study, she discovers japan to have the highest literacy rates in the world. She states that Japanese parents set aside a weekly hour in which every member of a family reads

a book of his/her choice. Besides, Japanese mothers spend at least twenty minutes a day, listening to their children's reading. As a result of this practice, she further reveals that only about 1% of all children in Japan suffer reading problems.

School Factors and Children Cognitive Development

Teachers Qualification/ Training

Education is critical to national development. Every responsible nation invests heavily in education and strictly monitors the implementation of the curriculum and the outcome of investment in education. Education as a worthwhile activity is devoted to the development of human beings. Whatever a nation is or becomes is predicated on her educated system. It thus follows that for those who want to engage in educational enterprise, there must be prescribed standard s legally binding, thoroughly supervised by dedicated honest educationist (Okoro 2006). Nigeria is aware and responsive to the needs of the education sector. The country consequently realizes long ago the fact that the supply of teachers in adequate quantity and quality is key for the success of the education system in any country of the world. She therefore gave a prime of place to teacher education in section 8 of the National Policy on Education(FME) where the goals of and the various institutions for teacher education are discussed.

The quality of any education system is tied to the quality of the teachers. It is a known fact to many therefore, that no education system can rise above the quality of its teachers. The Nigerian government noted in its National policy on Education (FME, 2004) that teacher education will continue to be given a major emphasis in the entire nations educational planning.Teachers are builders of bridges between known and the unknown. Successful teachers are the one who possess skill to support learner at the right time rapidly and well. According to Miller (1990), teachers, in order to teach well require technical competency (the knowledge and skill on how to teach), professional competency (knowledge of instructional

how to teach), professional competency (knowledge of instructional planning, execution and evaluation) and personal competency (personal characteristics and behaviours that impact the teaching-learning process).

Teaching practice refers to the social actions and activities performed by a teacher in order to facilitate learning. Teachers' skills and competences in planning teacher actions and activities are developed through teacher training pre -service and in-service teacher education (Shulman, 2004, Ruiz-primo &Furtak, 2006, Smith, Polloway, Patton &Dowdu 2008, &Makuwa, 2011). Teachers practices are linked to teacher knowledge and skills about how to interprete the curriculum, prepare a lesson and how to teach pre-service teacher training equips teachers with in-depth understanding of the school subject they are required to teach and the pedagogical skills necessary to support learning at different grade level in school (Makuwa, 2011). Teachers' practices involve activities related to different teaching methods, lesson preparation, and assessment of children's achievements relations about the teaching process and strategies to facilitate learning in classroom (Howard &Aleman, 2008).

Teacher education has been described in various ways by different authorities. Akinbote (2006) refer to teacher education as the planned programme of specialized education for producing teachers with the skill and competence of teaching in schools. This definition reveals that because of the importance of teachers, they are given an education which is more detail in content than the general education received by others. Their profession, competence, creativity and dedication are central to the success of the learners in the education system.

Class size

In the only experimental study of early childhood setting, Ruopp, Travers, Glantz and Coelen, (1979) randomly assigned 3- and 4- years old children to preschool classrooms with different child teacher ratios and different class size were compared no less than 1:7, no larger

than 14, no less than 1;8, no larger than 18, and less than 1;9 but larger than 1:8. Children assigned to classrooms of smaller size and ratios achieved greater gains on measures of receptive language, general knowledge, cooperative behavior and verbal initiations and exhibited less hostility and conflict when compared with groups with larger class sizes and ratios.Children in classes larger than 18 with ratios smaller than 1:9 showed the smallest gains on these outcomes. As aresult, Ruoppetal.assigned the greatest significance to the difference to the differences in class size, acknowledging that ratio is a related construct. Confirming a theoretical model of ECE, this study has served as the primary empirical evidence of the benefits of small classes in the field of ECE for decades.

Perhaps the most well-known study of class size was conducted in Tennessees early elementary schools in the 1980s, the STAR class experiment this experimental evaluation found that small kindergarten classes (of 13-17 children) had small positive impacts on a variety of numeracy and literacy skills relative to larger classes with correspondingly lower child-teacher ratios(Mosteller,1995). Understanding whether class size and child-teacher ratio are associated with child outcomes in center-based early childhood classroom, and if so, whether the association is uniform across the range of class size and child-teacher ratios is important, as changes in class size and child-teacher ratio are expensive to implement. Estimates of the size of the relationships that have been found in the past have been modest.Some researchers have argued that as smaller class size and lower child-teacher ratios have generally been found to have very small effects in studies of elementary schools, the magnitude of effects of other interventions, such as increased investment in teachers, may be greater and easier to implement. Such efforts carry less risk effects, such asmight result from the hiring of poorly trained teachers, also associated with efforts to reduce class sizes(Chingos,2013,&Cho, Glewwe&Whitler, 2012).

School Location

Akindele (2012) asserted that access to early child education remain low. He opined that only small portion of children age 0-12 years and 2-5 years attend crèche and nursery schools respectively. Also, 79% of pre-school centers in Nigeria are urban based with only 20.2% located in rural areas (Akindele, 2012). The reasons for this could be that the urban areas have more workers who can afford the cost. In the North-Eastern part of Nigeria, insecurity as a result of insurgency further depleted attendance in schools generally and particularly nursery schools. Similarly, a major issue in the ECE in Nigeria is inadequate and weak infrastructural facilities in the crèches, kindergarten, and nursery schools most especially in rural areas.

Despite research support on the important influence of physical environment on the education and development of children, many ECE centres in rural areas, Osakwe, (2011) reported that the physical/learning environment is poorly designed, without ample space, furniture, exploration, and simulation. Today some, especially private schools operate in car garages, place of worship, smaller classrooms which are not adequately ventilated etc. owners of such schools sometimes operate from rented residential buildings which are dilapidated, uncompleted due to cost consideration (Akindele, 2012). Ejiembi (2016) reported that in September 2014, an Islamic primary and nursery school in Bukuru, Jos South Local Government Area of Plateau State Collapsed may be due to structural defects. Thus, the safety of pre-school children in schools with defective infrastructures is being compromised and must be taken seriously.

In the study of Akinrotimi and Olowe (2016), it was reported that Nigerian ECE is ridiculously underfunded in thatmany states starve the local government education authority of funds to take care of the public schools. It was further revealed that the situation have adverse effect on the provision of stimulating materials and resources at the pre-school. Also, spending on essentials such as textbooks, instructional materials, in-service training, operations and maintenance was inadequate and facilities expected to play significant role in allowing

conducive learning environment for children in some public pre-schools are grossly inadequate. Similarly, Akindele(2012) revealed that poor funding of ECE by government has given room for private sector to take over that level of education from government.

School Type

It is important to note that two decades have been seen as increasing number of private pre-schools entering the education arena both urban and rural these range from schools in one-room tenement to impressive pre-school equipped with the latest equipment and staffed by qualified professionals. Recent research by Sood and Singh (2014) indicated that a proliferation of low-free private schools and pre-schools penetrating at a phenomenal pace even into the remotest rural and urban areas as providers of pre-school and primary education. In addition, the rising educational segregation that results from young children from better-off families being sent to private pre-school and the resulting social inequity is an area of increasing concern. Analysing data collected in Madhya Pradesh and Chhattisgarh, CREATE (2010) highlighted that there was considerable variation in access to preschool, with children, belonging to marginalized groups, particularly girls, depending on government pre-primary schools where boys and those belonging to higher-socio-economic groups were more likely to be attending private schools.

Many of these private schools carry the tag English medium. Streuli (2011) post that the promise of private school providers that children will be rapidly initiated into English medium learning and teaching. Though, the kindergarten levels have been especially attractive to aspiring parents, although not always delivered in practice once they have enrolled their children, while a large number of studies of children from developed countries have highlighted the longterm effect of pre-school education, limited studies have looked at these outcomes on the basis of pre-school type. Barnett (2008) concluded that in the USA programmes across the public and private sectors have produced similar results when operating with the same pre-

kindergarten programme. A recent study related to disadvantaged children in the USA (Coleya,2016) stated that after adjusting for differential selection into early education centres (Early childhood education) through propensity score weighting, low-income and children who attended private Early childhood education should higher mathematics, reading, centres also showing heightened mathematics and reading skills in comparison to children experiencing only parent care.

No differences were found in children's behavioural skills at the age of 5 in relation to the type of early education centre Penn (2011) found that in the UK, the for-profit sector has been the main vehicle for implementing government policy and that it was particularly problematic. She highlighted that another study, conducted to investigate differences in the provision of private and public early childhood centres in Kenya (Citati, 2016), concluded there were no significant differences in the provision of classrooms and furniture between the government and private early childoodcentres, however, significant differences existed in the provision of water and sanitation and prevalence of play, in favour of the government Early childhoodcentres Li, Lv&Huntsinger, 2016).

Examining Chinese preschools, found that early childhood education quality was higher in urban than in rural areas, in government than in private kindergartens, and in programmes containing children whose parents had high level of education than in those where parents were less well educated, although quality was relatively low overall. On the otherhand, Ahmad (2013) gave analysis of government and private pre-school in Pakistan, concluded that in private pre-schools infrastructure was much better and more individual attention was paid to children and the situation was worse in public pre-school. It is evident thatresults are mixed and differences exist regarding the provision of services by government and private pre-schools depending on the context.

Empirical Review

Mothers Level of Education and Child's Cognitive Development

Early studies on pre-school programs emphasized on mother child supports on the basis of its benefit for preschool children's cognitive development. Bronfenbrenner (1974), in a review paper based on nine empirical studies examining mother-child intervention programs, asserted that intervention programs encouraging mother involvement led to substantial cognitive development of toddler and pre-school children. Bronfenbrenner also highlighted the importance of mother intervention program when children are very young by showing that gains in childrens IQ from the effects of mother intervention programs were highest when the children were one or two years of age, while the effect were weak if children were as old as five years.

In a similar vein, Madden (1976) showed significant cognitive development of pre-school children from low-income families after two years of their mothers' engagement in a verbal interaction modeling program. Specifically, through this intervention mothers were taught to interact verbally while playing with their children to promote children intellectual Seltzer(1985) also found that preschoolers whose mothers participated in a similar parents education program(parent as teacher) showed, at the end of the program, significantly higher intelligence, language ability and social development in comparison with national norms. Mothers in the program learned how to facilitate the cognitive, social, linguistic, and physical development of their children from the time of prenatal development to the age of three.

The child development process depends on the mothers child care time, goods brought for the child and the amount of time the child spends in non-parental child care and expenditure for the child, are considered to be the endogeneity and the simultaneity of all the mothers choices, and to identify the contributions of both maternal child care for the cognitive development of the child.

There have been several studies assessing the effects of maternal employment or non-parental child care use on the subsequent cognitive development of children but only Bernal(2008) reported that one year of maternal employment and non-parental child care reduces the child's test scores by 1.8 percent, suggesting a substantial negative effect of both choices. However, the author does not consider the third choice the mother can make regarding her time allocation but within the child and leisure and instead assumes that am others time out of work is entirely spent by the mother with the child. Indeed employed mothers may allocate their time out of work in such a ways as to give priority to the time spent with the child(Bianchi 2000, Hoffert&Sandberg, 2001).

A research done by UNESCO in 2000 indicated that illiteracy level is very high in Kenya and Africa at large where 142million adults are illiterate. This has negatively influenced access to education programmes especially the early childhood education. A study done in Tarbay division in wajir district in 2010 indicated that illiterate mother denied their children access to ECE to stay at home with their siblings as they went to fetch water (Saada,2010).Mother with professional qualifications ensures their children enroll and remain in school. Mothers with low level of education have negative attitude towards because they do not see immediate feedback (MOEST, 2012) they are also not able to help their children in areas of academic difficulties which discourage learners making them to dropout. Education of the mother is considered to one of the greatest determinants of enrollment in pre-schools. Mothers' education leads to sustained increase in education attainment from one generation to the next. It's the education level of the mother that determines whether and for how long children access schooling. It education level of the mothers that determines the child's employment decision (Ersado, 2005).

Home environment have been found to be positively related to the early emergence of literacy(Kastler, Roser, &Hoffman 1988). In line with this, it was also found that parental

economic and educational background have possible effects on their perceptions, dispositions and attitude towards the education of their children, and would possibly affect their disposition to early childhood education. Researchers have revealed that there is relationship between early schooling and parental education and income Huang (2016). Moreover, Smith, Fagan and Ulvund(2012) asserted that significant predictor of intellectual performance at age of 8 years included parental socio-economic status.

Mothers' Child Support and Cognitive Development

Early childhood educators know that parents are child first teachers. We need their support and involvement to enhance a child's cognitive development. Cognitive development encompasses a wide range of skills, including thinking and language. As children learn words to name objects, tell stories, and engage in conversation, they are taking the first steps to literacy, loosely defined as the ability to read and write. Just as developing cognitive skills leads to early reading and writing, early reading and writing also enriches the organization and dynamics of children's thought (Seifert, 2004). Mothers with lower literacy levels may attribute less importance to children's literacy development, or they may feel a sense of helplessness in fostering that development, and/ or they may actually be less able to foster that development (Morgan, 2012). Parents with higher literacy levels on the other hand, may have experienced the satisfactions often associated with literacy, such as attainment of higher job level, among others.as a result, they may also feel capable of providing literacy experiences for their children (Edith, 2014).

It is clearly evident that early-year experiences have a significant influence on the all-round development and the later lives of any child. The influence, which may be either positive or negative, has been emphasized across inter-disciplinary research (US Early Childhood Head-Start task force, 2002). It alerts us to consider the quality of education in the early childhood years seriously. Hill, Castelino, Lansford, Nowlin, Dodge,Bates and Pettit (2014)

attested that the status of parents does not only affect the academic performance of pupils, but also make it impossible for children from low socio-economic background to compete well with their counterparts from high socio-economic background under the same environment. The family is the first, the smallest and the most important unit responsible for the development of child's physical, mental and moral dispositions. Asikhia (2013) agreed that the family educational background and socio-economic status play pivotal roles in the learning process of the child.

Atanda and jaiyeoba (2014) noted that some of the factors responsible for the low performance of pupils in pre-primary school are low socio-economic status of parents. Children's literacy development can only be promoted when their parents place high value on their literacy achievement as well as provide the necessary instructional material for academic purpose which will go a long way in enhancing their academic performance.Chen (2014) stressed that because children from low socio economic status have relatively poor skills they are prone to leave school early and less likely to gain admission. Udida, Ukway and Ogodo (2014) also agreed those family characteristics are major source of disparity in pupils' educational outcomes. They stressed further that pupils' academic performance is influenced by the socio-economic background of their parents, as parents that earn high income can take absolute responsibilities of their children's education compared with parents that earn meager salaries. Indeed there is a large correlation between the education level of parents and their children'seducation (Bjorklund&Salvanes, 2014).

A number of factors contribute to pupils achievement, fore-most among them is early intervention (Aubrey, Dahl & Godfrey, 2006, & Chard, Baker, Clarke, Jungiohann, Davis &Smolkowski, 2008) although a number of early childhood math programs have been developed over the past 15years, the majority of these numeracy interventions were school-based teacher or researcher- delivered comprehensive curricula (Clements 2007& Sarama &

Clements, 2008) or supplemental activities on numeracy. When considering the numeracy-learning environment at home, unfortunately and too often, parents and pre-primary caregivers charged with this task lack an understanding of the types of numeracy experiences needed by their preschool children (Muir, 2012). Consequently, children who do not receive at-home numeracy experiences enter school, noticeably behind their peers and are highly susceptible to not only mathematics difficulties, but also a spiral of mathematics failure and frustration in successive grades (Baroody, Lai& Mix, 2016).

This lack of early numeracy training is more prevalent in families in which mothers have low levels of education. Though the higher mother education predicts better pupils' numeracy performance, it is speculative to conclude that this phenomenon is due to any difference in mother educational values and their commitment to their child's school activities(Aunio&Niemivirta, 2010). Researchers (Aunio&Niemivirta, 2010, Tan& Goldberg, 2009, & Hill, Castelino, Lansford, Nowlin, Dodge, Bates& Pettit, 2014) have agreed that it may relate to the complex interplay of parental involvement and other extraneous variables that need to be explicity addressed in future studies. One way to disentangle such complex interactions and other influencing factors might be to engage in specific interventions that systematically investigate the different ways mothers could support their children's numeracy learning (Aunio&Niemivirta, 2010). In line with the above assertion, Hill (2015) had argued that socio-economic status of parent do not only affect the possibility of their access to quality and timely education.

Empirical studies on school factors and pre-school children cognitive skills.

Effect of teacher Qualification & Child Cognitive Development

Professional training of early childhood teachers can be quite variable, ranging from little more than a high school education to advanced degree in early childhood (Early, 2006 & Magburn, 2008) although additional teachers may have added importance in early childhood

classrooms due to the child directed nature of activities, potential benefits to child outcomes might not be realized if individual teacher vary greatly with which they supervise and interact with young children.Teaching involves the use of knowledge about the subject being taught (Anho, 2011). Akinpelu in Akinbote (2006) defined teaching as the conscious and deliberate efforts by a mature or experienced person to impact information. Knowledge, skills, attitudes and values to an immature or less experienced person. The implication of the above definition is that there must be a person who is consciously and deliberately doing the teaching. The next thing is that there must be another person being taught and then should be some content or material, information, knowledge or principle that is being taught.

Given the important position teachers occupy in the education sector, there is need for proper teacher training/education. Teacher in early childhood education need upgrading or changing of their knowledge, skills and abilities to meet up current challenges in the field. The outcome of teacher education would be to increase knowledge, enhance skills change behaviours, strengthen and sustain organizations, enhance-local/ national resources and develop local materials (Sofoluwe, Akinsolu & Kayode, 2013). The fact that the quality of education is dependent on the quality of quantity of the available teachers (FME 2009, Mohammed 2008) has been appreciated by the government of Nigeria even in her National Policy on Education (2004). Teacher preparation has been taken seriously in various programmes for the various levels of education system. Anho (2011) opined that teacher education is often divided into three stages namely:

a. Initial training
b. The induction process involving training and supports of the trainees during the first few years of teaching or the first year in particular school
c. Teacher development or continuing performing development and intensive process for practicing teachers.

This training arrangement is quite different from the teacher training of the colonial period. The current three stages of teacher education identified above by Anho (2011) can be further categorized into pre-service or in-service teacher education. The pre-service teacher education includes all the stages of education and training that precede the teachers' entry to paid employment in a school. It could be a Grade II, NCE, M.ED or even Ph.D. the in-service teacher education on the other hand is the education and training that the teacher receives after beginning his career. Both type of teacher education are statutorily provided by:

I. Colleges of Education

II. University Faculties of Education

III. Institute of Education

IV. National Teachers Institute

V. Schools of Education in the polytechnics

VI. National Institute for Nigeria Languages (NINLAN)

VII. National Mathematical Centre (NM)

Teachers' practices are linked to teacher initial preparation and teacher professional development (Brown, 2011, Morewood, 2007) in the US the question is how to prepare teachers who would teach all children equitably (Brown, 2010). This calls for teacher capacity building with a focus on developing the teachers' practices. Knowledge of content means teacher will need to be trained in the content they will later teach, whereas knowledge of pedagogy is about how teachers will deliver the content as prescribed in the curriculum (Morewood, 2007, Shulman 1986). Other countries like Finland have resolved the relation between curriculum and teaching methods by deciding their teacher will do research to determine which teaching method is appropriate to which group of children (Eklund, 2015, Jakku-Sihvoneo & Niemi 2006). In Finland teacher education has been linked to university education since the 1970s in calling for teachers to be researchers of their own teaching

(Chambuhla, 2013, & Eklund, 2015). It can be said that what is to be taught and how to teach forms teachers practices and is an international Agenda.

According to Rajani (2003), the issue of teacher education is connected to educational plans that do not take on-board disability issues in education. What teachers do in the classroom seems to reveal a gap between initial teacher training and adequate classroom practices in schools enrolling children. Student teachers in teacher training colleges are not taught how to facilitate learning inclusive education practices is given little attention in schools. Regular teachers do not available teaching and learning resources which could promote the learning of children. The change in teaching practices in schools depends on the possibility to change the tradition of rote learning that exist in school in order to make learners more active (Mahenge, 2004). One of the ways to change teaching practices is to embrace school-based professional development using action research where teachers are facilitated to analyse their teaching challenges and to develop plans which address those action taking (Catts &Kemmis, 1986, Cardno, 2006, & Argyropoolos & Nikolaraizi, 2009). Action research is regarded as systematic school-based professional development as it takes place in an authentic context, the school and classroom, and as it allows teachers to plan, act and evaluate as the continuously engage in activities which improve their practices (Foulger, Burke, Kim, Williams, Waker, Hansen & Slykhuis, 2013).

School based actionresearches are believed to influence teachers' classroom practices and the school as a social system (Elliot, 1993, Elliot, 1991, James 2006). Action research as school development has been carried out in many countries, in many western countries, inlow income countries like Tanzania the strategy is not well-known findings from Lloyd (2002) indicate that developed countries like Germany Belgium, France and Luxembourge use school-based professional development for 2 to 3 years in addition to undergraduate studies are satisfied with their teacher preparation and well viewed as well-prepared compared to

traditional residential teacher training (Andrew& Schwab, 1995, Darling-Hammond, 2000, Elliot 2007, Walker 2009). In Africa, in countries like Uganda and Guinea Bissau the use of classroom-based teacher professional development strategies as in-service training of teachers has shown positive results in changing school teaching practice (Verspoor, 2008).

Effect of Class Size and Children Cognitive Development

Although early childhood education pedagogy may differ across programs, many theoretical models of early learning place interactions between children and their teachers as well as peers, at the center of the learning process (Burchinal 2008, National scientific council on the Developing child, 2004). For this reason, having both smaller classes and lower child-teacher ratios are thought to improve classroom environments and increase ECE effectiveness in promoting early learning. Smaller classes and lower child teacher ratios may enable teachers to spend more time interacting with each individual child, which may in turn provide greater opportunities to understand each child's development, tailors activities to children's interests and abilities, and scaffolds children's learning Smaller class sizes and lower child-teacher ratios have also been related reduced behavior problems and teacher time spent on classroom (Blatchford, Bassett, &Brown 2011). Though highly related, child teacher ratios and class sizes may also make distinct contributions to classroom experiences and quality. Although these issues have been studied more extensively in elementary education setting, with conclusions suggesting small positive effects of smaller class sizes, the difference between elementary school classrooms as well as developmental differences among younger and older children, make it difficult to generalize these findings downward to pre-school classroom settings.

In early education classrooms, existing data suggest about a third of children's time is spent in free choice activities and another third is spent in routine activities such as meals (Early 2010). For this reason, lower child teacher ratios, whether due to more teachers or smaller class sizes, may make it easier for teachers to interact individually with every pupils and monitor the

classroom activity. even in a large class an additional teacher may make it easier for teachers to work together to observe all activities, facilitate teacher intervention or support when necessary, and provide more opportunities for one or two teachers to work individually with children, while another supervises the classroom.

Smaller classes in early education setting, even those with higher child-teacher ratios, limit the total number of children with whom teachers and pupils interact, potentially making it easier for positive relationships to be built and maintained with every pupils. The smaller number of pupils also reduces the workload involved in tracking pupils progress, may increase the likelihood of effective individualization of instruction, and may make each individual more visible and connected, creating greater social and academic engagement(Finn 2003), furthermore, smaller classes may be quieter, with fewer children to contribute to the overall actively levels, potentially making behavior management easier and increasing the likelihood that children have freedom to engage in self-selected, developmentally appropriate activities and cooperative play (Howes, Phillips & whiebook, 1992) in sum, although child-teacher ratios and class size are interrelated, they are likely to shape child outcomes in different ways, and it is important to understand the independent impact of each characteristic.

Effect of School Location on Children's Cognitive Development

Locationis a particular position, situation or geographical area. By school location therefore it means urban or rural school settings and this classification has influenced educational development. Educational opportunities vary from one location to another. While some places are known to have enough schools with facilities and teachers, other does not. In the study of Abidogun (2006), it was revealed that rural areas as peculiar socio-economic and institutional structures of the rural areas. Anyaegbu (2003) found that lack of zeal and interest by teachers due to poor and delayed salaries and poor conditions of work, and frequent strike actions by teachers are some of the challenges observed to affect cognitive skills development

of children. Based on these, Abidogun (2006) showed that many teachers therefore reject posting into the rural areas while those that do, treat their presence in such area as part time assignment. This situation creates differences in pupils' achievement.

Similarly, Ezeugwu (2011) study found that difference in school location (urban, semi-urban, rural), differences in method of teaching, differences in number and qualities of the teacher, differences in study habit adopted by the pupils increased the differences in achievements of pupils in various subject areas including literacy and numeracy. There have been different research reports in the literature that pupil's achievement in relation to school location is crucial to educationist. However, a study carried out in Enugu State by Onah (2011) showed that location is a significant factor in pupils' achievement in Agriculture science. In contrast, studies conducted by Uzoegwu (2004) and Bosede (2010) showed that location is not a significant factor in pupils achievement.

Effect of School Type on Children Cognitive Development

Better understanding of the effect of school characteristics on learning is important because public policy can influence the characteristics of public schools, as well as the cost of private schools through vouchers and scholarship.In the study conducted by Ibia (2015), it was revealed that to educational materials supplied to schools, the settling based on school type also influences teaching and learning of the pupils and hence the level of the pupils academic performance. Ibia (2015) further showed that the specific type of school dictates what is taught, how it is taught and what materials are available. In addition, Ibia also revealed that where educative materials are deprived, pupils suffer from academic deterioration and mental imbalance, and where the teacher relates positively with the pupils, the school becomes conducive and learners perform well in their academic endeavors.

Also, Alimi, Ehinola and Alabi (2012) investigated the influence of school types and facilities on pupils' cognitive skills in Ondo State. It was designed to find out whether facilities

and pupils'cognitive skills are related in private and public primary schools respectively. Descriptive survey design was used. Proportionate random sampling technique was used to select 50 schools in Ondo State. Two sets of research instruments: School Facility Descriptive and pupils cognitive skills Questionnaire (SFDCSQ) for headmasters; and school Facility Descriptive Questionnaire (SFDQ) for the teachers were used for the study. T-test was used to analyze the data. All hypotheses were tested at a significant level of 0.05. The study revealed a significant difference in facilities available in public and private schools in Ondo State. The study also revealed that there is a significant difference in the facilities available between public and private primary school. It however revealed no significant difference in pupils' cognitive skills of pupils in the two types of schools.

Pre-school learning materials are arranged to invite purposeful play and thus facilitate learning. Galinsky (2012) found that provision of materials to pre-schools helped children acquire symbolic knowledge, and allow them to represent their experiences through a variety of age-appropriate media, such as drawing, painting, construction of models, dramatic play, and verbal and written descriptions.In the study of Dodge (2012), it was revealed that private schools provide opportunities for children to broaden and strengthen their knowledge through a variety of firsthand developmentally appropriate learning experiences.

Appraisal of Literature Reviewed

The study investigated home and school factors as determinants of pre-school children's cognitive skill development in Ilorin South Local Government Area, Kwara State.The study was based on cognitive development theory propounded by Piaget's (1936). The theory of cognitive development explains how a child constructs a mental model of the world. The cognitive theory, the behavior reflects the emergence of various psychological structures, organized units or patterns of thinking that influence on how children interpret the information. Kendra (2014) postulated that the cognitive developmental theories explained the

change in reasoning level of a child acquiring new ways of understanding their world. Theresearcher disussed the relevance of the theory to the study as it emphasized the importance of the child's environment in improving his cognitive development. The implications of Piaget's theory to the study assumed that all children go through the same sequence of development, but they do so at different rates. Hence, teachers must make special effort to provide classroom activities for individuals and small groups, rather than for the total class group. Also, assessment should be based on individual progress, rather than on the normal standards of same age peers. Individuals construct their own knowledge during the course of the interaction with the environment.

Home and school factors were discussed in the study. Based on different findings by researchers, it was revealed that the home environment provides the foundation for learning and is an element of pupils' life that can affect grade. Also, parental information and resource centers center for effective parenting. Providing opportunities to learn outside of school helps facilitate pupils success in the school environment as children success was positively impacted by home learning opportunities such as parents assisting their children, trips to the library, and resources encouraging play with letters and numbers.Mothers are responsible for ensuring that their children are well-fed, well-rested, happy and calm. Willey, Jones and Sievert (2009) found that mothers' education determined child growth and health, besides that, low education level also affect mothers ability to take care of their child in appropriate way. Obemeata (2012) and Ayodele (2012) supported the effect of social class on children's reading capacity.They discovered that children from low-economic background have problems in reading, while those of middle or high social class read proficiently due to the parents, education, occupation and various sorts of educative materials they are being exposed to. Psacharopuolos & Woodhall (2000) indicated that the mothers' education, occupation and income level determines children

access to school. Children of educated women are much more likely to go to school and the more schooling women have received.

Based on the findings on home and school factors, the researcher discovered that many of the studies carried-out were done in foreign educational settings as well Nigerian context respectively, but none was done in Ilorin South Local Government Area of Kwara State. In addition, series of research on cognitive skills development was discussed. Alimi, Ehinola and Alabi (2012) found that there is no significant difference in pupils' cognitive skills of pupils in public and private schools in in Ondo State.Ezeugwu (2011) study found that difference in school location (urban, semi-urban, rural), differences in method of teaching, differences in number and qualities of the teacher, differences in study habit adopted by the pupils increased the differences in achievements of pupils in various subject areas including literacy and numeracy. Anyaegbu (2003) found that lack of zeal and interest by teachers due to poor and delayed salaries and poor conditions of work, and frequent strike actions by teachers are some of the challenges observed to affect cognitive skills development of children. Based on these, Abidogun (2006) showed that many teachers therefore reject posting into the rural areas while those that do, treat their presence in such area as part time assignment.

Based on the above, different studies have been conducted on home and school factors with other variables, in which, they failed to address the issue of teachers' qualifications, class size, school, locations, and type. Inaddtion, a reaserch gap was created on how these factors determine pre-school children's cognitive skils development in literacy and numeracy, specifically, in Ilorin South Local Government Area of Kwara State. This forms the basis for which the research is conducted.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter focused on the methodology that was used for the study. The chapter is presented under the following sub-headings: Research design, population of the study, sample and sampling techniques, research instruments, validity of the instruments, reliability of the instruments, procedure for data collection and method of data analysis

Research Design

The research design adopted for the study is descriptive survey design. According to Adewumi (2002), descriptive research design simply looks with intense accuracy at the phenomenon of the moment and describes precisely what the researcher sees. In addition, Aggarwal (2008) avvered that descriptive research is devoted to the gathering of information about prevailing conditions or situations for the purpose of description, making proper analyses, tabulating facts, identification of trends and relationships that existed between variables. Therefore, this design was used by the reserahcer to examine home and school factors as the determinants of pre-school children cognitive skills development in Ilorin South Local Government Area of Kwara State.

Population of the Study

The population comprised all the pre-school teachers and children in Ilorin South Local Government Area of Kwara State. According to the Kwara State Annual School Census (2015/2016), there are 53 public, 229 private pre-schools, 574 pre-school teachers and 6,885 pre-school children in Ilorin South Local Government Area of Kwara State. The target population is all the nursery two pre-school in Ilorin South Local Government Area of Kwara State.

Sample and SamplingTechnique

The sample size for this study is 1,032 which comprised of 491 pre-school children, 50 teachers and 491 parents in Ilorin south Local Government Area. Purposive sampling was used to select Ilorin south Local Government Area out of the 16 LGAs in Kwara State that has both urban and rural characteristics. From this Local Government Area, 50 pre-schools (25 private and 25 public) From each selected schools, one pre-school classroom with children aged 4-5 years old(Nursery 2) was used.

In all, 50 teachers whose qualifications ranged from (NCE, B.ED, PGDE, M.ED and others were selected), all the childen (491-304 males and 187 females in 246 public and 245 private schools with 245 schools in urban locations and 246 in rural locations) and all the 491 parents (mother) participated in the study.

Research Instruments

The instruments that were used for this study were the (Teacher Classroom Behavior Rating Scale (TCBRS), Cognitive Development Skill Test (CDST), and Mothers Child Support Rating Scale (MCSRS).

(i) Teacher Classroom Behaviour Rating Scale (TCBRS)

The TCBRS was constructed by the researcher to solicit information on classroom behaviourof pre-school teachers. It consisted of section A and B. Section A were usedtocollect demographic information of teachers, while section B consisted of 5 parts(A-E)in order to collect information on how teachers interact with children in the classroom. Part A focused on teachers activities, B on Reinforcement teacher uses, C on teacher ask question, D on teaching methods, while E focused on children response.

(ii) Cognitive Development Skill Test(CDST)

The CDST was constructed by the researcher to solicit information on pre-school children cognitive skills development in two subject areas of literacy and numeracy skills. It consisted of sections divided into A and B. Section A contained pupils' demographic information, while section B contained 9 items to collect information on pre-school children literacy and numeracy skills. Areasthatweretested include identification of letters, reading of letters, writing of letter a-e, matching of numbers with objects, identification of numbers, reading of numbers, writing of numbers 1-10, identification of colours and identification of objects.

(iii) Mothers Child Support Rating Scale (MCSRS)

The MCSRS was constructed by the researcher to generate information on mother-child's support at home. It was divided into sections A and B. Section Awas used to elecit information on the demographic informationofmothers, while section B consisted of 15 items to collect information on mother-child's support at home.

Validity of the Instrument

To ensure the validity of the TCBRS, CDST, and MCSRS, the initial drafted copies were given to fourexperts in the Department of Early Childhood and Primary Education for for their observations,vetting, and necessary inputs.This was done in line with Cresswell(2014) who posited that validity of the instrument is the extent to which the instrument measures what it is intended to measured. Thereafter, the TCBRS, CDST,and MCSRSwere showed to the researcher's supervisors for necessary comments, suggestions, amendments and corrections. Afterwhich, modifications were made and later incorporated in the final draft of the TCBRS, CDST, and MCSRSby the researcher before it was administered on the respondents.

Reliability of the Instrument

Reliability means the extent to which an instrument gives a consistent result over repeated trials. This was buttressed by Arthur (2010) who posited that the reliability of an instrument has to do with accuracy, stability and consistency of a measuring instrument. In order to establish the reliability of the TCBRS, CDST, and MCSRS, the researcher used test-re-test method which wasconducted within an interval of two weeks to pre-school children aged 4-5years who are not part of the study sample used in the study. Thereafter, Pearsons Product Moment Correlation (PPMC) was used to determine the reliability coefficient of the TCBRS, CDST, and MCSRS. The TCBRS had a reliability coefficient of 0.81, CDST had 0.74, and MCSRShad 0.89 respectively, which was considered reliable to be use for this study.

Procedure for Data Collection

To ensure efficient and effective data collection process, the researcher collected a letter of introduction from the Head of Department, Early childhood and Primary Education, Kwara State University, Malete. This was done to introduce and enable the researcher gained formal accessto the school. Thereafter, the researcher visited each of the sampled schools with two research assitatnts that were trained on how to work with children during the administration of theTCBRS, CDST, and MCSRS.The data collection lasted for a period of seven weeks. The first week was the training of the two research assistants. The second week to sixth week was for the classroom behavior rating, mother child support rating and cognitive development skill test. Researcher monitored the research assistants properly to ensure smooth and effective data collection in the field.

Method of Data Analysis

Data collected were analyzed using both descriptive and inferential statistics. Descriptive statistics offrequency counts, percentages,andmean scores were used to analyse the demographic characteristics of the respondents and research question 1. In addition, inferential statistics of t-test were used to test research hypotheses 2, 5, and 6, while, ANOVAwas used to test research hypotheses 3, 4, 7, and 8 respectively.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

This study is concerned with data analysis and result of the study. Data collected were subjected to both descriptive and inferential statistics.The demographic characteristics of the respondents and answer research question 1 were analyse using descriptive statistics of frequency counts, percentages, and mean scores. In addition, inferential statistics of t-test were used to test research hypotheses 2 and 5, while, ANOVA was used to test research hypotheses 3, 4, 7, and 8 respectively.

Section A: Demographic Analysis

Table 1:Distribution of Teachers by School Type

School Type	Frequency	Percentage
Public	25	50
Private	25	50
Total	**50**	**100**

Table 1 data shows that there were 25 public school teachers which accounted for 50% and 25private school teachers which accounted for 50% of the sampled population.

Table 2: Distribution of Teachers by School Location

School Location	Frequency	Percentage
Urban	25	50
Rural	25	50
Total	**50**	**100**

Data in table 2 shows that there are 25 teachers in urban area which accounted for 50% and another 25 teachers in rural area which also accounted for 50% of the sampled population.

Table 3: Distribution of Teachers by Qualification

Qualification	Frequency	Percentage
NCE	24	48
B.ED	16	32
PGDE	3	8
MED	2	4
OTHERS	5	10
Total	**50**	**100**

Table 3 data shows that there were 24 teachers with NCE certificate which accounted for 48%, 16 teachers with B.ED certificate which accounted for 32%, 3 teachers with PGDE certificate which accounted for 8%, 2 teachers with M.ED certificate which accounted for 4%, 5 teachers with other certificates which accounted for 10% of the sampled population.

Table 4: Distribution of Children by School Type

School Type	Frequency	Percentage
Public	246	50.1
Private	245	49.9
Total	**491**	**100**

Data in tables 4 shows that there were 246 children in public schools which accounted for 50.1% and 245 children in private schools which accounted for 49.9% of the sampled population.

Table 5: Distribution of Children by School Location

School Location	Frequency	Percentage
Urban	245	49.9
Rural	246	50.1
Total	**491**	**100**

Table 5 data shows that were 245 sampled children in urban areas which accounted for 49.9% and 246 children in rural area which accounted for 50.1% of the sampled population.

Table 6: Distribution of Children by Gender

Gender	Frequency	Percentage
Male	304	61.9
Female	187	38.1
Total	**491**	**100**

The data in table 6 shows that there were 304 male children accounting for 61.9% and 187 ones female which accounted for 38.1% of the sampled population.

Table 7: Distribution of Parent by Educational Qualifications

Qualification	Frequency	Percentage
School certificate	130	26.5
SSS	145	29.5
NCE/OND	103	21
FIRST DEGREE	61	12.4
MASTERS	42	8.6
PHD	8	1.6
OTHERS	2	0.4
Total	**491**	**100**

Table 7 data shows that there were 130 parents with primary school certificate accounting for 26.5%, 145 parents with senior school certificate which accounted for 29.5%, 103 parents with NCE/OND which accounted for 21%, 61 parents with first degree which accounted for 12.4%, 42 parents with masters degree which accounted for 8.6%, 8 parents with Phd which accounted for 1.6% and 2 parents with other certificates which accounted for 0.4% of the sampled population.

Answering the Research Questions

Research Question One: What is the level of cognitive development of preschool children in Ilorin South Local Government Area of Kwara State?

Table 8: Preschool Children's Level of Cognitive Development in Ilorin South Local Government Area of Kwara State

Actual Score	Aggregate	Frequency	%	Mean Score	Std.D	Remark
0-30	0-39%	0	0			Poor
31-45	40-59%	0	0			Fair
46-53	60-69%	0	0	75.48	2.9118	Good
54-77	70% and above	491	100			Excellent
Total	**100**	**491**	**100**			

Excellent/Very high (54 -77), Good/High (46-53), Fair/ Moderate (31-45), Poor/Low (0-30)

Table 8 shows that the level of cognitive development of preschool children in Ilorin South Local Government Area of Kwara State was very high (mean score = 75.48). All the 491 children that participated in this study had score of 54 and above which is an excellent performance.

Testing of Hypotheses

In this study, seven research hypotheses formulated were tested at 0.05 level of significance.

Hypothesis One: There is no significant difference in the level of children cognitive development based on gender.

Table 9: Independent Sample T-test showing the Difference between Male and Female Children in Cognitive Development

Group	N	Mean	Std.D	T	df	Sig.	Remark
Male	304	75.250	3.1555				
				-2.247	489	0.000	Significant
Female	187	75.856	2.4265				

Table 9 shows that there is a significant difference between male and female children level of cognitive development ($t = -2.25$; $df = 489$; $p<0.05$). Therefore, hypothesis one is rejected because the significant value is not greater than 0.05.

Hypothesis Two: There is no significant influence of mother's level of education on child's cognitive development.

Table 10: One way ANOVA showing the Influence of Mother's Level of Education on Child's Cognitive Development

Mother Level of Education	**N**	**Mean**	**Std.D**	**Df**	**F**	**Sig**	**Remark**
SCHOOLCERT	130	75.85	2.252				
SSCE	145	75.64	2.674				
NCE/OND	103	74.91	3.721				Not
1ST DEGREE	61	75.53	2.913	7,483	1.19	0.308	Significant
MASTERS	42	75.33	3.129				
PhD	8	75.25	2.493				
OTHERS	2	73.00	5.657				
Total	**491**	**75.48**	**2.912**				

Table 10 data shows that there was no significant influence of independent variable (mother educational qualification) on the dependent variable (children's cognitive development) ($F_{(7, 483)} = 1.19$; $p>0.05$). Therefore, hypothesis two is not rejected because the significant value is greater than 0.05.

Hypothesis Three: There is no significant influence of mother child support on cognitive development of children.

Table 11: ANOVA showing the Influence of Mother Child Support on Cognitive Development of Children

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	**Regression**	6.260	1	6.260	.738	.391[b]
	Residual	4148.306	489	8.483		
	Total	4154.566	490			

R = 0.04 R^2 = 0.00 Adjusted R^2 = -0.00

a. Dependent Variable: cognitive development

Data in table 11 shows that there was no significant influence of independent variable (mother child support) on the dependent variable (children's cognitive development) (R = 0.04). This led to the fact that the mother child support accounted for 0.1% of the total variance in children's cognitive development (Adjusted R^2 = 0.00). This composite contribution is shown not to be significant ($F_{(1, 489)}$ = 2.86; p>0.05). Therefore, hypothesis three is not rejected because the significant value is greater than 0.05.

Hypothesis Four: There is no significant difference in thecognitive development of children based on school location.

Table 12: Independent Sample T-test showing the Difference between Urban and Rural Areas on Children's Cognitive Development

Group	N	Mean	Std.D	T	df	Sig.	Remark
Urban	245	76.05	2.00				
				4.40	489	0.000	Significant
Rural	246	74.92	3.51				

Table 12 shows data shows that there was a significant difference between urban and rural children's level of cognitive development ($t = 4.40$; $df = 489$; $p<0.05$). This shows that children in urban area had higher cognitive development with a mean score of 76.05 than children in rural area (mean = 74.92). This difference in their mean score is statistically significant. Therefore, hypothesis four is rejected because the significant value is not greater than 0.05.

Hypothesis Five: There is no significant difference in the cognitive development of children based on school type.

Table 13: Independent Sample T-test showing the Difference between Public and Private Schools on Children's Cognitive Development

Group	N	Mean	Std.D	T	df	Sig.	Remark
Public	246	74.92	3.51				
				4.40	489	0.000	Significant
Private	245	76.05	2.00				

Data in table 13 shows that there was a significant difference between public and private school children level of cognitive development ($t = 4.40$; $df = 489$; $p<0.05$). The results shows that children in private schools had higher cognitive development level with a (mean = 76.05) than children in public schools (mean = 74.92). This difference in their mean score is statistically significant. Therefore, hypothesis five is rejected because the significant value is not greater than 0.05.

Hypothesis Six: There is no significant influence of home and school factors (Teachers qualification, class size, mother child support at home, teachers classroom behavior, mothers level of education, child's gender, school location, and school type) on children's cognitive development in Ilorin South Local Government Area of Kwara State?

Table 14: ANOVA showing the Composite Influence of Home and School Factors on Cognitive Development of Children

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.176	6	2.696	2.420	.042[b]
	Residual	47.904	43	1.114		
	Total	64.080	49			

$R = 0.50$ $R^2 = 0.25$ Adjusted $R^2 = 0.15$

a. Dependent Variable: cognitiveScore

b. Predictors: (Constant), MCS, TeacherQual, NumberPupils, Gender, ClassroomBeha, MotherEduQual, schoolType, schooLocation

Table 14 datashows that there is a join influence between the independent variables, of home and school factors (teachers qualification, class size, mother child support at home, teachers classroom behavior, mothers level of education, child's gender, school location, and school type) on the dependent variable (cognitive development) (R = 0.50). The result showed that the independent variables accounted for 14.8% of the total variance in children's cognitive development (Adjusted $R^2 = 0.148$). This joint influence is shown to be significant ($F_{(6, 43)} = 2.42$; $p<0.05$). Therefore, hypothesis six is rejected because the significant value is not greater than 0.05.

Hypothesis Seven: There is no significant relative influenceof each variable to the prediction

Table 15:ANOVA showing the Relative Influence of Home and School Factors on Cognitive Development of Children

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	70.947	1.833		38.696	.000
	Gender	.156	.318	.068	.492	.625
	MotherEduQual	-.038	.183	-.031	-.210	.835
	TeacherQual	.142	.126	.161	1.123	.268

NumberPupils	.103	.049	.303	2.115	.040
ClassroomBeha	-.054	.331	-.023	-.163	.871
MCS	.129	.042	.463	3.093	.003
schoolType	.154	.311	.058	.415	.613
schoolLocation	.242	.226	.168	1.033	.205

a. Dependent Variable: cognitive development

Table 15 data shows that the Number of pupils (β = 0.30; t =2.12; p<0.05) and mother child support (β = 0.46; t =3.09; p<0.05 were the only independent variables with significant relative contribution on cognitive development. Others, Gender (β = 0.07; t =0.49; p>0.05), mother education (β = -0.03; t = -0.21; p>0.05), teacher qualification (β = 0.16; t =1.12; p>0.05), classroom behavior (β = -0.02; t = -0.16; p>0.05), school type (β = 0.06; t =0.42; p>0.05), school location (β = 0.17; t =1.03; p>0.05) were not statistically significant.

Summary of Findings

1. The level of cognitive development of preschool children in Ilorin South Local Government Area of Kwara State is very high
2. There is a significant difference between male and female children in their cognitive development

3. There is no significant influence of independent variable (mother educational qualification) on the dependent variable (children's cognitive development)
4. There is no significant influence of independent variable (mother child support) on the dependent variable (children's cognitive development)
5. There is a significant difference between urban and rural children in their cognitive development
6. There is a significant difference between public and private children in their cognitive development
7. There is a significant joint influence of home and school factors on cognitive development of children.
8. Number of pupils and mother child support are the only independent variableswith significant relative contribution on cognitive development.

Summary of Findings

1. The level of cognitive development of preschool children in Ilorin South Local Government Area of Kwara State is very high
2. There was a significant difference between male and female children in their cognitive development

3. There was no significant influence of independent variable (mother educational qualification) on the dependent variable (children's cognitive development)
4. There was no significant influence of independent variable (mother child support) on the dependent variable (children's cognitive development)
5. There was a significant difference between urban and rural children's level of cognitive development
6. There was a significant difference between public and private children's level of cognitive development
7. There was a significant joint influence of home and school factors on cognitive development of children.
8. Number of pupils and mother child support were the only independent variables with significant relative contribution on cognitive development.

CHAPTER FIVE

DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

This chapter focused on discussions, conclusion and recommendations of the study. The purpose of this study was to investigate home and school factors as determinant of pre-school children cognitive skills in Ilorin south local government area of kwara state. Based on the discussions, conclusion was drawn and recommendations were also made, while suggestions for further studies were made.

Discussion of the Findings

The findings of the study revealed that the level of cognitive development of pre-School children in Ilorin South Local Government Area of Kwara State was very high. This finding is in agreement with the study Akinrotimi (2016) who found that pre-school education aims at helping children in the early childhood stage to develop their skills, especially, using their hands in making things, thus unearthing and developing their hidden talents. Also, the finding of this study validates the finding of Brenda, Edward, Kathy, Mai, Pam, Iram and Brenda (2008) who revealed that students in early primary schools had a high level of cognitive development. The result of this study confirmed the finding of Blatchford, Bassett and Brown (2011) who revealed that teachers-pupils interaction enhanced their high level of cognitive development skills both at the primary and secondary school level of education.

The finding of the study also unfolded that there was a significant difference between male and female children in their cognitive development. The finding of the study corroborated the findings of Alicia and Soyeon (2011) who revealed that there was a significant difference between male and female cognitive development in University of Kentucky, Lexington. Also, the finding corroborated that of Isaacs (2012) that found gender differences favour girls in cognitive development skills than their male counterpart during early childhood. The

differences in cognitive development domains across the two treatment groups demonstrated that girls have higher scores compared to boys in all cognitive development domains in a consistent manner within both treatment groups. However, the finding is contrary to the finding of Sonia, Ifitkhar and Ashiq (2019) who compare the perception of male and female students about cognitive development in private and public sector colleges and found that there was no significant difference between the perception of female students and male students regarding cognitive development skills in private sector colleges.

Another finding revealed that there was no significant influence of independent variable (mother educational qualification) on the dependent variable (children's cognitive development). This finding is not in agreement with Sirin (2010) who found that mothers' level of education is considered one of the most stable aspects of socio-economic status because it is typically established at an early age and tends to remain the same over time. In this case, the higher the mothers educational level occupation, status and income and their household income, the higher would be the mother involvement in her child's education. The finding is also in contrast with the finding of Adeoye (2013) who revealed that the strength of mothers' involvement and educational qualification enables their children to improve their cognitive skills in school.

Furthermore, the finding of the study showed that there was no significant influence of independent variable (mother child support) on the dependent variable (children's cognitive development). This finding is not in agreement with the finding of Davies (2010) who found that parents play not only an important part in preparing their children for pre-school but are essentially the first educators in a child's life, and provide a supportive learning environment. According to him, supporting children at home, and encouraging learning before any formal education, is just one way that parents enhance learning. When a child reaches pre-school age parents selects the early education programme that will continue to prepare such child to

succeed (Omoniyi, 2013) and provide them with books and others materials that can help them to read. This is consistent with Bradley (2011) who established that the direct and most prominent explanation for the link between parents' education and their children academic achievement relies on the assumption that parent learn something during schooling that influences the ways in which they interact with their children around learning activities.

Also, the finding showed that there was a significant difference between urban and rural children in their cognitive development. This finding agrees with the finding of Rashid, Sanaullah and Iqbal (2013) which found out that the achievement scores of primary school pupils in urban area were better in Mathematics, English Language, and Science as compared to their counterparts in urban areas. Also, the finding of this study supports the finding of Bibi and Ali (2012) who revealed that there was a significant difference between pre-school attendance and academic performance as more pupils who attended pre-school had better academic performance compared to those who did not. This finding also, conform to the finding from the study of Ejeh (2016) who found that very few pre-school in rural areas lack patronage, while the few that existed in the rural areas are likely to be unregistered and that their services were sub-standard in terms of facilities,equipments and quality of teachers. Such rural pre-primary schools usually make their charges relatively low in the effort to make their service affordable to interested parents unlike their couterparts situated in the urban area. Akindele (2012) asserted that access to ECE remain low. He opined that only a small portion of children age 0-1 years and 2-5 years attend crèche and nursery schools respectively.Also 79% of pre-school centers in Nigeria are urban based with only 20.2% located in rural areas (Akindele, 2012).

The finding also revealed that there was a significant difference between public and private children in their cognitive development.This finding is inline with the finding of Braun, Jenkins and Grigg (2006) which revealed that pupils in the private primary schools performed

better than their counterparts in the public schools which of course attributed to a number of factors in terms of increase in children's cognitive development, quality of staff, conditions of school buildings and provision of instructional materials. Also, the finding is in agreement with Ezeugwu (2011) who differences in school type (public and private), differences in method of teaching, differences in number and qualities of the teacher, differences in study habit adopted by the pupils increased the differences in their cognitive development in various subject areas including literacy and numeracy. The findi g agrees with the finding of Onah (2011) who revealed that school type is a significant factor in literacy and cognitive development, especially at the pre-primary level of education. The finding is in contrast, studies conducted by Uzoegwu (2004) and Bosede (2010) showed that school type is not a significant factor in pupil's cognitive development.

The finding showed that there was a significant joint influence of home and school factors on cognitive development of children. The finding of the study corroborated the findings of Brenda, Edward, Kathy, Mai, Pam, Iram and Brenda (2008) which discovered that home learning environment and pre-school center experience influences children literacy and numeracy development in early primary schools. Similarly, the finding is in agreement with Psacharopulos & Woodhall (2000) which found that the mothers' education, occupation and income level determines children access to school. The finding supports the report of UNICEF (2004)which indicated that children of educated women are much more likely to go to school and the more schooling women have received, the higher the chances their children will from their education. Also, educated mothers are role models to their children from an early stage as they encourage their children to develop interest in schooling unlike uneducated parents who may have less influence on the education of their children.The finding also, corroborates the finding of Howard and Aleman (2008) who revealed those teachers' practices which involve activities related to different teaching methods like lesson preparation, assessment of children's

achievements, relations about the teaching process and strategies to facilitate learning in classroom.

Finally,the findings of the study revealed that number of pupils and mother child support are the only independent variables with significant relative contribution on cognitive development. This finding is in agreement with the finding of Ruopp (1979) who randomly assigned 3 and 4 years old children to pre-school classrooms with different child teacher ratios and different class size were compared with no less than 1:7, no larger than 14, no less than 1;8 no larger than 18, and less than 19 but larger than 1:8 children assigned to classroom of smaller size ratios achieved greater gains on measures of receptive language, general knowledge, cooperative behavior and verbal initiations and exhibited less hostility and conflict when compared with groups with larger class sizes and ratios.

Conclusion

This study examined home and school factors as determinants of pre-school children's cognitive skill development in Ilorin South Local Government Area of Kwara State. The study also showed that the pre-school children cognitive skills development in Ilorin South Local Government Area of Kwara State was very high. In addition to that, the observed pre-school education environment of teachers' qualifications, mothers educational qualification, mother child support were all found to have significant influence on children cognitive skills development. Based upon the findings of this study, it was established that home and school factors were critical to the development of pre-school children's cognitive skills.

Recommendations

Based on the findings of the study the following recommendations were made:

1. Teachers working with children should be trained in early childhood care and education through attendance of in-service training, seminars and workshop. This would help to

improve the pre-school children cognitive skills in Ilorin South Local Government Area of Kwara State.

2. Teachers should try to improve themselves on daily basis on the methods of teaching that would enhance cognitive skill development of male and female pre-school children. The school should also educate parents, on their role through Parents Teacher Association (P.T.A) forum on how to encourage their children to read and write by providing a conducive environment for them.The teachers and educators should encourage the pupils to speak good English always.
3. Parents are advice to give boundless opportunities in English language use at home, through conversation, asking and answering questions and also provide appropriate reading materials, numeracy materials and also helping the children in their routine to include time to both play and read. If this is done, it would enhance cognitive skills development of their children.
4. Parent are encouraged to give prompt support to their children by providing them with basic school needs in order to enhance their cognitive skills development.
5. Children at the rural areas are required to be motivatedby both their parents and teachers like their couterparts in the urban areas to improve their cognitive skills development.
6. There is a need for classroom teachers and all other stakeholders to make necessary provision for those in public schools in a bid to improve their cognitive skills development.
7. Government should try to engage qualified teachers to teach at pre-school level and regularly organize workshops and seminars for the teachers in service to equip and update their knowledge on how to teach in the classroom.
8. Government should come up with guidelines requiring pre-schools proprietors to adopt and implement measures to ensure that children learn in a conducieve environment to

encourage developmentally appropriate practice and optimal development among pre-school children.

Limitation of the Study

Although this research was carefully prepared, the researcher is still aware of its limitations and shortcomings. First of all, the time only allowed the researcher to work on a single local Government Area instead of the entire Kwara Central Senatorial Zone. The data gathered would have been more robust and factual if the entire pre-schools in Kwara State were incorporated into the study population. Secondly, only cognitive skills development was examined, it will be more comprehensive if all the aspects of development are looked into.

Suggestion for further studies

The following suggestions for further research were made:

1 A similar study should be carried out in other Local Government of Kwara State to enrich the existing literature in the topic

2 Other areas of development like physical, socio-emotional development can also be studied in future research.

REFERENCES

Abdulfattah, M. (2015). Realizing a progressive pedagogy: a comparative case study of two Reggio Emilia preschool in San Francisco. *Universal Journal of Educational Research*, 3(12), 1074-1086.

Abidogun, S. W. (2006). *Education sector reforms and childhood education for development in Nigeria.* Edo: Ress publishers.

Adedigba, O. &Agary, O. (2013). Preparing early childhood practitioners to enhance high quality for global competitiveness. *International Journal of Innovative Educative Education Research,* 1(3), 49-54.

Adeleye, S. (2016). *Introduction to language development (2nd Edition)*. United States: Thomson Delmer Learning.

Adelusi, E. (2008). *Learning disabled in the classroom.* In Abosi, C. (ed) development of special education in Nigeria. Ibadan, Foundation Books.

Adenike, A. A. & Peter K. O. (2016). Challenges in implementation of early childhood education in Nigeria: The way forward. *Journal of Education and Practice,* 7(7), 33-38.

Adeoye, A. O. (2013).The moderating effect of home setting and religion affiliation on the effectiveness of contingency management and cognitive self-instruction on bullying behaviour of secondary students in Nigeria. *IFE Psychology IA: An International Journal,* 21(2,1), 250-257.

Ahmad, R.N. (2013).Early childhood education in Pakistan: Issues and challenges. I*nternational Journal of Science and Research, 4(3), 413-15.*

Akinbote, O. (2006). *Childhood education in traditional African societies. Lagos, National Open University of Nigeria.*

Akindele, I. (2012). Poverty early childhood care, development and education: The Nigeria case*. International Journal of Early Childhood Education Research, 1(3), 26-37.*

Akinleye, I., Roberts, J. S., Royal, C. D. M. (2011). Differences between African American and White Research Volunteers in Their Attitudes, Beliefs and Knowledge Regarding Genetic Testing for Alzheimer's Disease. *Journal of Genet Counsel*20, 650–659.

Akinrotimi, A. A. & Olowe, P. K. (2016). Challenges in implementation of early childhood education in Nigeria: The way forward. *Journal of Education and Practice,* 7(7), 71-85.

Akinrotimi, A. A. (2016). Challenges of early childhood education in Nigeria: The way forward. *Journal of Education and Practice, 7(7), 33-38.*

Akpporiherle, F. (2013). Universal basic education and English language in national development in Nigeria. *Journal of Language and Culture,* 5(2), 354.

Alicia L. F. &Soyeon, A. (2011). The Effects of Physical Activity and Physical Fitness on Children's Achievement and Cognitive Outcomes. *Research Quarterly for Exercise and Sport,* 82(3), 521-535.

Alimi, O. S. Ehinola, G. B. &Alabi, F. O. (2012). School types, facilities and academic performance of students in senior secondary schools in Ondo State, Nigeria. *International Education Studies*, 5(3), 44-48.

Allen, G. (2014). *Early intervention: The next steps*. An Independent Report to HM Government, London: The Stationery Office.

Amapdu, C. &Ofosu, S. (2015). *Principles and methods of early childhood education.* Kumasi: Cita Printing Press Ltd.

Andrew, M. & Schwab, R. L. (1995). Has reform in teacher education influenced teacher performance? An outcome assessment of graduates of eleven teacher education programs.*Action in Teacher Education*, 17, 43–53.

Anho, R. O. (2011). The role of educational administrators in Nigeria secondary schools. *African Journal of Education and Technology,* 1(1), 39-44.

Anyaegbu, R. C. (2003). The challenges of rural education in Nigeria: Potential lessons from china. *Educational Journal Teaching Learning in Diverse Settings*, 1(2), 160-174.

Aram, D. & Levin, I. (2010). The role of maternal mediation of writing to kindergartners in promoting literacy in school: *A* longitudinal perspective reading and writing. *An Interdisciplinary Journal, 17(4), 387-409*

Argyropoulous, V. &Nikolaraizi, M. (2009). Developing inclusive practices through collaborative action research. *European Journal of special needs Education,* 24(2), 139-153.

Ariel, S. (2015). *Children's Imaginative Play*. Wesport, CT: Praeger

Ashikhia, O. A. (2013). Students and teachers perception of the causes of poor academic performance in Ogun State secondary schools, Nigeria: Implication for counseling for national development. *European Journal of Social Science, 13(2), 229-249.*

Atanda, A. I. &Jaiyeoba, A. O. (2014). Effect of school-based quality factors on primary school pupils' achievement in English Language in South-West and North-Central, Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS),* 2(2), 93-99.

Aubrey, C., Dahl, S. Godfrey, R (2006). Early mathematics development and later achievement: Further evidence. *Education Research Journal*, 18-27.

Audrey, C. (1997). Early mathematics development and later achievement: Further evidence. *Education Research Journal,* 18-27.

Aunio, P. &Niemivirta, M. (2010). Predicting children's mathematical performance in gradeone by early numeracy skills.*Learning and Individual Differences,*20, 427–435.

Awosolu, E. A. (2013). Effects of *types of home assignment on students' achievement in social studies*. Unpublished M.A ED. Dissertation, Obafemi Awolowo University, Ile-Ife.

Ayodele S. O. (1985). Nigerian teachers' perception of learners' rate of failure in English language .*Journal of Research Curriculum,* 3, 46-5.

Ayodele, J. B. (2012). Teacher's utilization as correlate of students' academic performance in senior secondary schools in Ondo state, Nigeria. *European Journal of Educational Studies,* 4(2), 281-87.

Ayodele, K. O. & Bello, A. A. (2008) Reduction of bullying behavioural tendencies among secondary school students: A multiple regression analysis. *International Journal of Multidisciplinary Research,* 1, 1, 146-151.

Baillargeon T. J. (2015) Teachers investigate their work: An introduction to the methods of action research. London: Rotledge.

BallIs, D. (2012). *Mind the Gap: Education inequality across EU regions, an independent report authored for the European commission by the NESSE network of experts.* European Union.

Ban, K. (2012). Global education first initiative. https:www.unicef.org/education/bege-65956.html.

Barnett, W. S. (2008). Pre-school education and its lasting effects: Research and policy implications, policy brief, Boulder, CO and Tempe, AZ; Education and the public Interest Center and Education Policy Research unit.

Barnnett, W.S. (2012). Exploring school children's out of school mathematics. In Ubuz, B. (Ed.). *proceedings of the 35th conference of the international group for the psychology of mathematics education,* 2, (pp. 177-184), Ankara, Turkey: PME.

Basade, S.G. (2014). The ripple effect: Emotional contagion and its influence on group behaviour. *Administrative Science Quarterly,* 47(4),644-675.

Baroody, A., Lai, M. & Mix, K. (2016). The *development of young children's early number andoperation sense and its implications for early childhood education.* I B. Spodek&O.Saracho, (Eds.), Handbook of Research on the Education of Young Children (2nd ed.) (187–221). Mahwah, NJ: Lawrence Erlbaum.

Basade, S. G. (2014). The ripple effect: Emotional contagion and its influence on group behaviour. *Administrative Science Quarterly,* 47(4), 644-675.

Bernal, R. (2008). The effect of maternal employment and child care on children's cognitive development. *International Economic Review,* 49(4), 1173–1209.

Bettye, A. (2014). Play is an essential part of the early childhood: The case of public funding with private provision. *Economic Journal, 126(28).*

Bianchi, S. M. (2000). Maternal employment and time with children: Dramatic change or surprising continuity? *Demography,* 37, 401 – 414.

Bjorklund, A. &Salvanes, K. G. (2014). *Education and family background: Mechanisms and policies*. In Iza Discussion papers 5002, Institute for the Study of Labor (IZA). http://www.jobm.edu.

Blatchford, P. Bassett, A. & Brown, B. (2011). Examining the effect of class size on classroom engagement and teacher-pupil interaction; Differences in relation to pupil prior attainment and primary vs. secondary schools. *Learning and instruction,* 21, 715-730.

Blyth, M. (2013). Austerity: The history of a dangerous idea. Oxford: Oxford University Press.

Bonoli, G. (2012). *The politics of the new welfare state.* Oxford: Oxford University Press.

Bosede, A. F. (2010). Influence of sex and location on relationship between students problems and academic performance. *The Social Science,* 5 (4), 340-345.

Both-de-Vries& Bus, A. G. (2014). Name writing: A first step to phonetic writing? Does the name have a special role in understanding the symbolic function of writing? *Literacy teaching and learning,* 12(2), 37-55

Bowman, D. & Moore, E. K. (2015). *School readiness and socio-emotional development: Perspectives on cultural diversity.*Washington, DC: National Black Child.

Bukatku, D. & Daehler, W. (1995). Child development: A thematic approach. (2nd edition) New Jersey. houghtonmiffin Company. Lazarus, S. (2010). Educational Psychology: in social context.4th edition. Cape town. Oxford University Press.

Bredekamp, S. (2014). *Developmentally appropriate practice in early childhood programmes serving children from birth through age 8*. Washington DC: National Association for the Education of Young Children.

Brenda, T., Edward, C., Kathy, S., Mai, B. P., Pam, S., Iram, S., & Brenda, T. (2008). Effects of the home learning environment and preschool center experience upon literacy and numeracy development in early primary school. *A Journal for the Society for Psychological Study of Social Sciences,* 64(1), 95-114.

Brennan, D. (2012). *The marketisation of care: Rationales and co.* A Survey of Childcare and Work Decisions among Families with Children, London: DWP

Brewer, J. A. (2015). *Introduction to early childhood education preschool through primary grades.* Sixth Edition: Pearson Education Inc. USA.

Britto, P. R. (2012). Global Status of Early Learning and Development Standards. *International Encyclopedia of Education,* (2), 138-143.

Britto, P. R. (2015). *Why Early Childhood Environment is the Foundation for Sustainable Development.*UNICEF.https://blogs.unicef.org.blog/why-childhood-development-is-

Brooks, M. (2010). Are individual difference in numeracy general mental ability? A close look at a common measure of numeracy and individual differences in research. http://www.troyrecord.com/

Bronfenbrenner, U. (1974). Developmental research, public policy, and the ecology of childhood. *Child Development,* 45, 1–5.

Brown, S. (2010). From VLEs to learning webs: The implication of Web 2.0 for learning and teaching. *Interactive Learning Environments,* 18(1) 1-10.

Brown, G. (2011). *The efficacy of professional development schools in developing countries: panama.* Paper presented at the Washington consortium for comparative and International Education and training. The George Washington University, April 2nd.

Burchinal, M. (2008). Predicting child outcomes at the end of kindergarten teacher-child interactions and instruction. *Applied Developmental science,* 12, 140-153.

Burton, L. (2011). Research mathematicians as learners: And what mathematics education can learn from them. *British Educational Research Journal,* 27(5), 589–599.

Carlsson, Paige, N. (2014). Joint Attention and Early Language. *Child Development,* 57(6), 271-281.

Cardno, C. (2006). Leading change from within: Action research to strengthen curriculum leadership in a primary school. *School Leadership and Management,* 26(5), 453-471.

Carole, S. (2017).*Getting constructive play with math.*http://www.ascoeducational.co.uk.

Casey, A. &Sheram, C. (2004). *Early literacy skills development.* National Association of School Psychologists, East West Hwy, Bethesda. http://www.ws.k12.ny.us/Downloads/EarlyLit.pdf.

Carr, W. &Kemmis, S. (1986).*Becoming critical: Education, knowledge and action research.*Falmer, London.

Catts, H. W., &Kamhi, A. G. (2013). Causes of reading disabilities. *Language and reading disabilities,* 95-127.

Chambuhla, A. (2013). *Effective preschool education.* Final report. London: Department for Education and Skills/London Institute of Education.

Chard, D., Baker, S. K., Clarke, B., Jungiohann, K., Davis, K. L. S., &Smolkowski, K. (2008). Preventing early mathematics difficulties: The feasibility of a rigorous kindergarten mathematics curriculum. *Learning Disability Quarterly,* 31, 11-20.

Chen, Q. (2014). *Family background, ability and pupils' achievement in rural chinaidentifying the effects of unobservable ability using feminine-generated instruments.*http://www.iiste.org.

Chingos, M. M. (2013). Class size and student outcomes: Research and policy implications. *Journal of Policy Analysis and Management,* 32(2), 411-438.

Cho, H., Glewwe, P. &Whitler, M. (2012). Do reductions in class size raise students' test scores? Evidence from population variation in Minnesota's elementary schools. *Economics of Education Review, 31*(3), 77-95.

Clements, D. H., &Sarama, J. (2007). Effects of a preschool mathematics curriculum: Summative research on the Building Blocks project. *Journal for Research in Mathematics Education,* 38, 136-163.

Cohen, H. & Lefebvre, C. (2005). *Handbook of categorization in cognitive science*. Oxford, UK: Elsevier.

Colbert, J. O. (2014). New forms of an old art- children's storytelling and ICT. https://www.google.rs/search?q=ec_folio_10_colbert_ict_and_children_s_storytelling&rl.

Coleya, R. L. (2016). Comparing public, private, and informal preschool programs in national sample of low-income children. *Early Childhood Research Quarterly,* 36(3), 91-105.

Connor, C. M. (2014). Behavioural engagement and reading achievement in elementary school-age children: A longitudinal cross-lagged analysis. *Journal of Educational Psychology,* 107(2), 332-347.

Conn-Power, M. (2010). *All children ready for school: Approaches to learning: The early childhood briefing paper series.* Bloomington, IN: Indian University.

Copple, C. &Bredekamp, S. (2006). Developmentally Appropriate Practice in Early Childhood Programs. Washington DC: NAEYC.

Copple, C., &Bredekamp, S. (2006). *Basics of developmentally appropriate practice*. Washington, DC: NAEYC.

Costa, A. (2001). *Habits of mind: A developmental series.*ALexandria, VA: Association for Supervision and Curriculum Development.

CREATE, (2010). Pre-primary education in India policy brief 1, Brighton: Consortium for Research on Education Access, Transitions and Equity.

Cummn, J. (2012). *Language power and pedagogy: Bilingual children in the crossfire clevedon.* England. Multilingual Matters.

Dagunduro, O. M., Viatonu, O. A. & Usman-Abdulqadri, T. (2011).An Assessment of Implementation Strategies of Integrated Early Childcare and Development (IECD) in Epe Local Government Area of Lagos State. *African Research Review,* 5(4), 501-510.

Darling-Hammon, L. (2010). *The right to learn: A blue print for creating schools that work*. San Francisco: Jossey-Bass.

Davies, A. (2010). Evolution of home-schooling. *Distance learning* 8(2), 29-35.

Davis, J. (2013). *Early childhood environment education: Making it mainstream*. Canberra: Early Childhood Australia.

Department of Education, Employment and workplace Relation (DEEWR, 2009). The early years learning frame work for Australia Canberra, ACT DEEWR.

Desmond, A. M. (2014). *The double bind for non-traditional families in post-primary settings; to tell or not to tell their family identity.* PhD Thesis, University College Cork.

Dickinson, D. K. & Tabors, P. O. (2012). Beginning Literacy with Language: Young Children Learning at Home and School. Baltimore, MD: Brookes Publishing.

Dickinson, D. K. (2012). *Beginning literacy with language: Young children learning at home and school.* Baltimore: Paul H. Brookes Publishing Co.

Dietze, D. & Diane, A. (2011). *Leveraging diversity to benefit children's socio-emotional development and school readiness.* In School Readiness and Social-Emotional Development: Perspectives on Cultural Diversity.

Disney, M. (2012). *A journey into constructivism*, http://dougiamas.com/writing/constructivism.

Dodge, D. T. (2012). *The creative curriculum for pre-school (4thEd)*.Washington, DC: Teaching Strategies.

Donkor, S. (2014). Israel Collaborates with Ghana to promote early childhood education. *Daily Graphic*, 12-13.

Donovan, M. (2014). *Eager to learn: Educating our pre-schoolers*. Washington, DC: National Academy Press.

Dougiamas, M. (1998). *A journey into constructivism.*

http://dougiamas.com/writing/constructivism.html.s

Drew, W. F., James, C., James E. J., Alice M. M. & Marcia, L. N. (2008). Constructive play: A value-added strategy for meeting early learning standards. *Young Children*, 38-40.

Drew, W. F., James, C., James, E. J., Alice, M. M. & Marcia, L. N. (2012). Constructive Play: A Value-added strategy for meeting early learning standards. *Young Children*, 38-40

Duncan, G. J. (2015). School readiness and later achievement. *Developmental Psychology*, 43(6), 1428.

Early Childhood–Head Start Task Force. (2002). Teaching our youngest: A guide for preschool teachers and child-care and family providers. Washington, DC: U.S. Department of Education and U.S. Department of Health and Human Services.

Early, D. (2006). *Work/family balance.*WestEd Policy Perspectives. San Francisco, California: WestEd.

Early, D. (2010). How do pre-kindergarteners spend their time, gender, ethnicity, and income as predictors of experiences in pre-kindergarten classrooms.*Early childhood Research Quarterly,* 25, 177-193.

Edith, E. A. (2014). Literacy as an Outcome of Language Development and its Impact on Children's socio-emotional skills. *Journal of Abnormal Child Psychology*, 43(8), 15-30.

Edwards, R. &Alldred, P. (2008). A typology of parental involvement in education centering on children and young people: Negotiating familiarisation, institutionalisation and individualisation. *British Journal of sociology of Education*, 21(3), 99-126.

Eisenband, B. &Pappas, K. (2016). *The essence of early childhood mathematics education and the professional development needed to support it.* In A. Dowker (Ed). Mathematical Difficulties Psychology and Intervention (pp. 59-83). San Diego, CA: Elsevier.

Ejieh, M. U. C (2016). *Preprimary Education in Nigeria. Policy Implementation and Problems*. http//Ikogreetim-online.Orgtr.

Ejiembi S. (2016). *Tragic-building-collapse-in-Nigeria.* http:// Punching.Com/ 10-tragic-building-collapse-in-Nigeria.

Eklund, L. (2015). Playing video games together with others: Differences in gaming with family, friends and strangers. *Journal of Gaming and Virtual worlds,* 7(3), 259-277.

Elkind, D. (2014) *Thanks for the memory: The lasting value of true play spot light on young children and play*. Washington, DC: NAEYC.

Elliot, J. (1993). *Reconstructing teacher education: Teacher development.* London; Falmer.

Elliot, S. (2012). *Essential, not optional education for sustainability in early childhood Centres*. Childcare Information Exchange.

Elliott, M. (1991). *Bullies, victims, signs, solutions*', in M. Elliott (ed.) Bullying: A Practical Guide to Coping for Schools, pp. 8-14. Harlow: Longman.

Elliott, S. N., Malecki, C. K. &Demaray, M. K. (2007). New directions in social skills assessment and intervention for elementary and middle school students. *Exceptionality*, 9(1-2), 19-32.

Elliott, S., &Drummond, M. (2014). A socio-cultural exploration of self-perceived parental involvement in junior Australian football. *Asia-Pacific Journal of Health, Sport and Physical Education,1*(3), 33–47.

Epstein, J. A., Bang, H. &Botvin, G. J. (2007). Which psychosocial factors moderate or directly affect substance use among inner-city adolescents? *Addict Behaviour*, 32, 700-13.

Epstein, J. L. (2007). Improving family and community involvement in secondary schools. *Principals' Leadership,* 16-22.

Ersado, L. (2005). Child labor and schooling decisions in urban and rural areas: Comparative evidence from Nepal, Peru, and Zimbabwe. World Development, 33(3), 455-480.

Espy, K. A., Molfese, V. J. &DiLalla, L. F. (2001). Effects of environmental measures on intelligence in young children: Growth curve modeling of longitudinal data. *Merrill-Palmer Quarterly,* 47(1) 42-73.

Evans, M. P. &Gruba A. (2015). *Early childhood count, a programme guide on early childhood care development.* Washington: World Bank.

Evertsons, S. & Harris, C. O. (2010). Relationship of family support and ethnic minority students' achievement in science and mathematics. *Science Education,* 82, 111-125.

Ezeugwu, J. O. (2011). Study habits and their relationships to achievement in senior secondary school core subjects in Nsukka urban areas. *Africa Journal of Science, Technology and Mathematics Education,* 1 (1), 70-80.

Federal Government of Nigeria, (2004). *National Policy on Education.* Lagos: NERDC Press.

Federal Ministry of Education (FME 2009). *Roadmap for the Nigeria Education Sector*. Abuja Federal Government of Nigeria.

Federal Republic of Nigeria (2004). National policy on education (4th edition). Lagos: NERDC Press.

Federal Republic of Nigeria (FRN) (2013). *National Policy on Education.* Government Press Abuja.

Federal Republic of Nigeria (2014). National policy on education. Lagos: Nigeria.

Feldman, C. (2010). *A* longitudinal study of gender differences in young children's mathematical thinking. *Educational Researcher,* 27(5), 6-11.

Finn, D. (2003). The "employment-first" welfare state: Lessons from the new deal for young people. *An International Journal of Policy and Research*, 37(7), 709-724.

Finnish Government (2010). *Tilastoraportti:Varhaiskas-vatussuunnitelmanperusteidentoimeenpanonarviointi*

[Statistics Report: Evaluation of the national core curriculum for early childhood education], Helsinki, https://karvi.fi/.

Finnish National Board of Education: National Core Curriculum for Basic Education (2004). Helsinki: Finnish National Board of Education.

Fisher, K., Hirsh-Pasek, K., Golinkoff, R.M., Berk, L., & Singer, D (2010). *Playing around in school: Implication for learning and educational policy*. In Pellegrini (Ed),Handbook of the Development of Play (pp. 341-362). New York, NY: Oxford Press.

Flannery, B. (2012). *Infant and toddler child care arrangements*. National Center for Children in Poverty.

Foster, M., Lambert, R., Abbott-Shim, M., McCarty, F., &Franze, S. (2014). A model of home learning environment and social risk factors in relation to children's pre-literacy and social outcomes. *Early Childhood Research Quarterly*, *20*, 13–36.

Foulger, T. S., Burke, D., Kim, M., Williams, M. L., Waker, R. Hansen, A. &Slykhuis, D. A. (2013). Innovators in teacher education: Diffusing mobile technologies in teacher

preparation curriculum. *Journal of Digital Learning in Teacher Education,* 30(1), 21-29.

Frey, T., Gelhausen, M., Saake, G. (2011). *Categorization of concerns: A categorical program comprehension model*. In: Proceedings of the 3rd ACM SIGPLAN Workshop on Evaluation and Usability of Programming Languages and Tools, pp. 73–82. ACM.

Fromberg, D. P. (2014). Kindergarten education and early childhood teacher education in the united states: Status at the start of the 21st century. *Journal of Early Childhood Teacher Education*, 27, 65-85.

Galinsky, E. (2012). *In the seven essential life skills every child needs.* Washington, DC: National Association for the Education of young children.

Geary, D. C. (2011). Cognitive addition: A short longitudinal study of strategy choice and speed-processing differences in normal and mathematically disabled children. *Developmental psychology,* 47, 1539.

Ginny, B. (2012). Development and measurement of preschoolers' quantitative knowledge.

Ginsburg, H. (2014). *Earlymathematical education and how to do it*. In O. Barbarin and B.Wasik (Eds.), Handbook of Child Development and Early Education: Research to Practice (pp. 403–428). New York, NY: The Guildford Press.

Ginsburg, H. (2016). *Mathematics Play and Playful Mathematics: A Guide for Early Education.* In R.M Golinkoff, K Hirsh-Pasek, & D. Singer (Eds), play= learning (pp. 145-165). New York University Press.

Goodman, A. &Sianesi, A. (2005). Social and emotional skills in childhood and their long-term effects on adult life. http://www.eif.org.uk/wpcontent/uploads/2015/03/EIF-Strand-1-Report-FINAL1.pdf.

Gormley, W. T. (2015). The Effect of Universal Pre-k Cognitive Development. *Development Psychology,* 41, 872-884.

Gray, D.C (1997) Cognitive addition: A short longitudinal study of strategy choice and speed-processing differences in normal and mathematically disabled children. *Developmental psychology,* 47, 1539.

Green, C. L., Walker, J. M. T., Hoover-Dempsey, K. V., & Sandler, H. M. (2007). Parents' motivations for involvement in children's education: An empirical test of a theoretical model of parental involvement. *Journal of Educational Psychology,* 99, 532-544.

Grotwell, P. G. (2015). Early childhood education: Issues and development. New-York Nova: Science Publishers.

Hamilton, W. T. (2013). *Requiem for a species: Why we resist the truth about climate change*? Sydney, NSW, Australia: Allen & Unwin.

Harkness, K.(2014). *The importance of physical environment in child care*. The record news.

Harper, S. N., Platt, A. & Pelletier, J. (2011). Unique effects of a family literacy program on the early reading development of English language learners. *Early Education and Development,* 22(6), 989-1008

Hartman ,R. R.(2000). Parent training outcomes: A growth study examining the influence of inattention, impulsivity, and hyperactivity .*Dissertation Abstracts International,* 60 (11–A), 3902.

Hartman, M. (2009). Step by step. *Teaching Exceptional Children,* 41, 6, 6-11.

Hausfather (2010). The role of content in constructivist. *Teacher Educational Horizons*, 80(1), 15-19.

Hawett, B. (2001). Home development and school performance: a ten years follow-up and examination of three models of environmental action. *Child Development,* 59(4), 852-867.

Hechter, R. P. (2013). Changes in pre-service primary teachers' personal science teaching efficacy and science teaching outcome expectancies: The influences of context. *Journal of Science Teacher Education,* 22(2), 187-202.

Hedges, L., Huttenlocher, J., Klibanoff, R. S., Levine, S. C. &Vasileva, M. (2006). Preschool children's mathematical knowledge: The effect of teacher "math talk". *Developmental Psychology,* 42, 59-69.

Hendrick, J., &Weissman, P. (2007). Total learning: Developmental curriculum for the young child (7th ed.).Upper Saddle River, NJ: Pearson Educational, Inc.

Henniger, M. L. (2013). *Teaching young children: An introduction.* Upper Saddle River, *New Jersey: Pearson Education, Inc*.

Hill, N. E, Castelino, O. R., Lansford, J. E., Nowlin, E., Dodge, P., Bates, K. A. & Pettit, G. S. (2014). Parents' academic involvement as related to school behavior achievement and aspiration: demographic variation across adolescence. *Child Development*, (5), 1491-1509.

Hill, N. E. (2015). Including fathers in the picture: A meta-analysis of parental involvement and students' academic achievement. *Journal of Educational Psychology,* 107(4), 919.

Hindman, A. H., Miller, A. L., Froyen, L. C. &Skibbe, L. E. (2012). A portrait of family involvement during head start: nature, extent, and predictors. *Early Childhood Research Journal,* 27, 654–667.

Hirsh-Pasek, K., Golinkoff, R., Berk, L., & Singer, D. (2009). A mandate for playful learning in preschool: Presenting the evidence. New York: Oxford University Press.

Hoffert, S. I. & Sandberg J. F. (2001). How American children spend their time. *Journalof Marriage and the Family,* **63**(3), 295–308.

Holland, P. (2013). *We don't play with guns here*. Open University Press.

Holly, N. (2015). *Implementing a sustainability curriculum in a montessori early childhood*

classroom. A Thesis in Partial Fulfillment of the Requirement for the Degree of Master of Education. Westminster College, Salt Lake City, Utah.

Homes, D. (2013). Pre-School Language Assessment Scale (Pre-LAS 2000—English). Monterey, CA: CTB; McGraw-Hill.

Honig, B., Diamond, L., &Gutlohn, L. (2013). *Teaching Reading Sourcebook for All Educators Working to Improve Reading Achievement.* Updated 2ndEd. Novato, CA: Arena Press.

Howard, T. C. & Aleman, G. R. (2008). Teacher capacity for diverse learners: What do teachers need to know? In: Smith, MC.;Feiman-Nemser, S.; McIntyre, DJ.; Demers, KE., editors. Handbook of Research on Teacher Education. New York: Routledge, 157-174.

Howes, C., Phillips, D. &whiebook, M. (1992). Teachers' characteristics and effective teaching in child care: Findings from the national child care staffing study. *Child and Youth Care Forum,* 21(6), 399-414.

Huang, C. (2016). Academic interactions among classroom peers: Across country comparison using TIMMSS. *Applied Economics,* 39(12), 1531-1544.

Hyson, M. (2011). *Enthusiastic and Engaged Learners.* Teachers College Press, New York.

Hyson, M., Copple, C., & Jones, J. (2006). *Early Childhood Development and Education.* In K. A. Renninger, I. E. Sigel, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Child psychology in practice* (p. 3–47). John Wiley & Sons Inc.

Ibia, E. R. (2015). Behavioural treatments to encourage solo sleeping in pre-school children: An alternative to controlled crying. A case study in Mexican biotechnology sector' (DPhilthesis, Manchester Business School).

Ibia, I. E. (2005). *The African child and his educative process.*Calabar: Unpublished seminar paper.

Isenberg, J. P. (2014). *Exploring your Role in Early Childhood Education, 4th ed.* New Jersey:Pearson Education Inc. Upper Saddle River.

Iyobhebhe, A. E. (2015). Contemporary issues in primary science education teacher quality in nigeria: A search for new direction. *Journal of Childhood and Primary Education*, 1(1), 198-202.

Jack, P. (2016). *Born to play: the Biocultural roots of rough and tumble play, and its impact upon young children's learning and development.* In P. Broadhead, J. Howard and E. Wood (Eds.). *Play and learning in the early years*. London: Sage.

Jakku-Sihvonen, R. &Niemi, H. (2006). *Research-based teacher education.* In R. Jakku-Sihvonen& H. Niemi (Eds.), Research-based teacher education in Finland –Reflections by Finnish teacher educators (pp. 31-50). Turku: Finnish Educational Research Association.

James, A. (2006). Social and Relational Factors in Early Education (Eds.), Blackwell Handbook of Childhood Social Development (pp. 97-116). Oxford: Blackwell Publishers.

Jarvis, P. (2010). *Born to play: The biocultural roots of rough and tumble play, and its impact upon young children's learning and development.* In P. Broadhead, J. Howard and E. Wood (Eds.). *Play and learning in the early years*. London: Sage.

Kagan, S. & Stewart, V. (2013). Education in a global era. *Phi Delta Kappan,* 87(3), 10-15.

Kastler, L. A., Roser, N. L. & Hoffman, J. V. (1988). *Understanding of the forms and functions of written language: Insights from children and parents*. In J. E. Readence& R.S. Baldwin (Eds), Research in Literacy: Merging Perspectives, 85-92. Thirty-Sixth Year book of the National Reading Conference. Rochester NY: National Reading Conference.

Kathayanga, R. S. (2015). *An investigation into the implementation of early childhood development policy in community based child care centres. A case of namatubikanyenjere area development programme in Chitipa, Malawi.* Master of Arts Dissertation, University of South Africa.

Kathy, A. K. (2012). Gender differences and attitude towards learning ofmathematics among secondary students in Keiyo district. *International Journal of Educational Development,* 22(1), 1-9.

Katz,L.(2013). *Engaging children's mind: The project approach (2nd ed)* Westport, CT: Greenwood Publishing Group.

Kendra, C. (2014). *Piaget's Stages of Cognitive Development.* http://psychology.about.com/od/piagets theory/a/keyconcepts.htm.

Kennedy, M. M. (1997). *Defining an idea teacher education program, paper prepared for the national council for accreditation of teacher education.* http://www.msu.edu/mkennedy.

Kipping, R. R., Campbell, R. M., MacArthur, G. J., Gunnell, D. J., Hickman, M. (2012). Multiple risk behaviour in adolescence. *Journal of Public Health,* 34(1), 1-12.

Kolawole, C. O.(2016). *Language education and the curriculum nexus:pathway to achieving sustainable development in Nigeria*. An Inaugural Lecture Delivered on Thursday, 14 April, 2016 at Trenchard Hall, University of Ibadan. Ibadan University press.

Kompt, O. (1996). S*ituated learning: Legitimate periphera participation*. Cambridge, UK: Cambridge University Press.

Lazarus, S. (2010). *Educational Psychology: In Social Context.*4th Edition. Cape Town: Oxford University Press.

Leong, D. J. (2014). *Developing self-regulation: The Vygoskian view.* Academic Exchange Quarterly.

Lewis, K. (2016). Early childhood education and care in England under austerity: Continuity or change in political ideas, policy goals, availability, affordability and quality in a childcare market? *Journal of Social Policy, 8.*

Li, K., Y. Panb, B. Huc, M. Burchinal, A. De Marco X. Fanc and J. Qin (2016) 'Early Childhood Education Quality and Child Outcomes in China: Evidence from Zhejiang Province. *Early Childhood Research Quarterly*, 36, 427–38.

Li, Y., Lv, Y., &Huntsinger, C. S. (2016). Does preschool education exposure predict children's academic and behavioural outcomes in China? *Early Child Development and Care,* 185(1), 121-137.

Lloyd, C. (2002). Developing and changing practice in special needs through critically reflective action research; a case study. *European Journal of Special Needs Education,* 17(2), 109-127.

Lukie, M. (2014). *Caring for young child: Birth to age 5(fourth edition).* Edited by S.P. shelov and R. E. Hannemann. New York: Bantam Books.

Lynn, M. (2001). Critical race theory and the perspectives of Black men teachers in the Los Angeles schools. *Equity and Excellence in Education,* 35, 119–130.

Madden, J. (1976). Longitudinal IQ outcomes of the mother-child home programme. *Child Development,* 47(4), 1015-1025.

Magburn, S. 2008). Understanding and nurturing young children's writing development. Columbus, OH: Allyn & Bacon.

Mahenge, S. T, (2004). Creating an environment of critical thinking in classroom teaching. In N. Mtana, E. Mhando and G. Höjlund (Eds.). Teaching and learning in primary Education in Tanzania (pp. 94 – 108). Dar-es-Salaam: Ecoprint Ltd.

Makuwa, D. (2011). Characteristic of grade 6 teachers. SACMEQ Working paper 2 Paris: SACMEQ.

Mankoe, J. O. (2014). *Methods and materials for teaching primary school*. Kumasi:Cita Printing Press Ltd.

Maphoso, L. S. (2014). Basic facilities and academic achievement: a comparative study between boarding and non-boarding schools. *International Journal of Educational sciences,* 6(2), 309-315.

Marcia C. C. (2010). *Why do children play? Community College. The developmental Psychology student*. http://www.mesacc.edu/dept/d46/psy/dev/spring98/earchild/index.html.

Marty, B. (2014). *Okulöncesiçocuklardaakrankabulününçeşitlideğişkenleraçısı-ndanincelenmesi.* Unpublished Mas-ter Thesis, Ankara. (in Turkish).

Mature, A. (1999). *Emergent literacy: Symbols at work.* In B. Spodek and O. Saracho (Eds.), Handbook of research on the education of young children (2nd ed., pp.153-166). Malwah, NJ: Lawrence Erlbaum.

Melhuish, E. C., Phan, M. B., Sylva, K. S., Sammons, P., Siraj-Blatchford, I. & Taggart, B. (2008). Effects of the home learning environment and preschool center experience upon

literacy and numeracy development in early primary school. *Journal of Social Issues,* 64(1), 95-114.

Mellen, H.S. (2012). Rough-and-tumble between parents and children and children's social competence**.** *Dissertation Abstracts International: Section B: The Sciences andEngineering, 63*(3-B), 1588.

Mesa, C. C. (2010). *Why do children play? Community College. The developmental psychology student*. http://www.mesacc.edu/dept/d46/psy/dev/spring98/earchild/index.html.

Miller, E. (2014). *Crisis in the Kindergarten: Why children need to play in School*. Collegepark, MD: Alliance for childhood.

Miller, R. (1990). *What are school for? Holistic education in American culture.*Brandon,VT: Holistic Education Press.

Mimet, P (2000). *Child care and development* London: Butler and Tanner Ltd.

Ministry of Education, Science & Technology (MOEST, 2012). *A policy framework for education and training. Reforming education and training in Kenya*. (Ministry of Education, Science Technology, Sessional Paper No 12 of 2012.

Ministry of Education, Science and Technology (MoEST). (2014). National Education Sector Plan. Volume one. Basic education programme rationale and approach 2013/14–2017/18. Nairobi: MoEST.

Mohammed, A. M. (2008). *Implementation factors in Nigeria education: Basic education experience . A keynote*. paper Presented at the 5th National Conference Organized by Nigeria Primary and Teacher Education Association (NPTEA), July 29, at Niger State College of Education, Minna.

Moon, B. (2012). *Time for radical change in teacher education connections.* Common wealth of Learning.

More, D. (1998). Improve your schools atmosphere. School planning and management, 37(10), 18.

Morewood, A. (2007). *The impact of school-wide professional development on teachers practices: A case study of a reading first school in Pennyslvania.* Unpublished Thesis USA: University of Pittsburgh.

Morgan,D.W.(2012). Determine sample size for research activities. *Educational and psychological Measurements,* 30, 607-610.

Mosteller, F. (1995). The Tennessee study of class size in the early school grades. *The Future of Children,* 5(2), 113–127.

Moyles, J. (2012). *The Excellence of play 3rd Edition.* Berkshire: Open University press (p4).

Muir, T. (2012b). Numeracy at home: Involving parents in mathematics education. http://www.cimt.plymouth.ac.uk/journal/muir.pdf.

Munyeki, J. (2012). *Stop this poaching madness now.* The County Weekly, p. 36.

NAEP (1996). Technical report. National centre for education statistics. Office of educational research and improvement: US department of education.

NAEYC (2009). Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8." Position statement. Washington, DC: Author. www.naeyc.org/files/naeyc/file/positions/position%20statement%20Web.pdf.

NAEYC Early Childhood Program Standards and Accreditation Criteria. (2005). Washington, DC: NAEYC.

Natalie, R., Kathryn, N. R., Karalyn, T. Kenneth, W. M. & Katherine, L. W. (2010). Gender differences in positive social–emotional functioning. *Psychology in the Schools,* 48(10), 958–970.

National Association for the Education of Young Children and National Council of Teachers of Mathematics (2002). *Early childhood mathematics: Promoting good beginnings.* Ajoint position statement of NAEYC and NCTM.

National Council of Teachers of Mathematics (2000). *Principles and standards for school mathematics.* Reston, VA:NCTM.

National Research Council (2000). *Educating children with autism*. Washington, DC: National Academy Press.

National Scientific Council on the Developing Child (2004). *Children's emotional development is built into the architecture of their brains*. Working Paper No. 2. www.developingchild.harvard.edu.

Ndon, P. (2014). The effect of school type on academic achievement: Evidence from Indonesia. *World Bank Policy Research Working Paper*, 3604.

Ndukwu, P. N. (2002). *School and teacher factors material resources utilization in pre-primary schools in Lagos State.* Unpublished Ph.D Thesis. University of Ibadan, Ibadan.

Nicole, B. (2011). The influence of education and home environment on the cognitive outcomes of preschool children in Germany. *Child Development Research*, 5(1), 1-10.

Nicolopoulou, A. (2015). *Narrative play and emergent literacy: Storytelling and story-acting meets journal writing.* In D. Singer, R. Golinkoff, & K. Hirsh-Pasek(Eds.), *Play Learning.* New York, US: Oxford University Press.

Nwosu, J. (2012). Dating and academic performance: an empirical analysis among Babcock University's undergraduate students in Ogun State. *British Journal of Education,* 5(11), 112-118.

Nwosu, S. N. &Maduewesi, E. J. (1980). Home environment process variables that are related to educational achievement. *African Journal of Educational Research (AJER)*, (1 & 2), 1-15.

Nwosu, S. N. (2013). Home environmental process variables that are related to educational achievement. *African Journal of Education Research*, 3(1/2), 1-15.

Obemeata, J. O. (2012). *Economics education in Nigerian secondary schools*.http://www.unilorin.edu.ng/journals/education/nijef/march_1991/ECONOMICS_EDUCATION_IN_NIGERIAN_SECONDARY_SCHOOLS.pdf.

Obidike, J. V. (2013). Towards effective early childhood care and education programme in Nigeria. *Journal of Teacher Perspective,* 6(3), 507-513.

Odinko, M. N.&Uzoeshi, I. V. (2014). Teacher factors as predictors of nursery –pupils socio-emotional skills development**.** *Nigerian Journal of Clinical and Counselling Psychology,* 20, (1), 235-259.

Odinko, M. N.(2016).Meeting the needs of the whole child through effective early childhood care, education and evaluation. *Journal of Early Childhood Association of Nigeria, (ECAN),* 5(1), 19–40.

Oduolowu, E., (2011). *Contemporary issues in early childhood education*. Ibadan: Franco-Ola Publisher.

Okewole, J. O., Iluezi-Ogbedu, V. A. &Osinowo, O. A. (2015). An evaluation of the implementation of early childhood education curriculum in Osun State, Nigeria. *Journal of Education and Practice,* 6(4), 48-54.

Okoro, O. (2006). *Philosophy of pre-Primary Education.* Onitsha, Ballin Publishers Nigeria Limited.

Omoniyi, M. B. I. (2013). Adolescent perception of rape in institution of higher learning: implication for counselling. *Journal of Education and Practice,* 4(22), 1-10.

Onah, F. E. (2011). Influence of sex and school location on students achievement in Agricultural science. *Africa Journal of Science, Technology and Mathematics Education,* 1(1), 96-102.

Ontario, A. D. (2010). *The role of play in human development.* Oxford: Oxford University.

Onukaogu, C. (2012). *Canadian Council on learning (Early Childhood Learning Knowledge Centre), Let the Children Play: Nature's Answer to Early Learning.*

Osakwe, N. R. (2011). Management of School Records by Secondary School Principals in Delta State, Nigeria. The Social Sciences, 6(1), 40-44.

Osana, P. (2010). Are boys better than girls in in mathematics and English language in Academics Performance? *Psychology for everyday living,* 2, 21-27.

Ottawa, C. L. (2006). The relation between children's constructive play activities, spatial

Patall, E. A., Harris, C. &Jorgianne, C. R. (2008). Parent Involvement in Homework: A Research Synthesis. *Review of Educational Research,* 78(4), 1039–1101.

Pellegrini, A. D. (2015). *Recess: Its role in development in education.* Mahwah, NJ: Lawrence

Erlbaum Associates.

Penn, H. (2011). Gambling on the market: The role of for-profit provision in early childhood education and care. *Journal of Early Childhood Research,* 9(2), 150-161.

Perry, B. & Dockett, S. (2012). *Young children's access to powerful mathematics ideas*. In L. D. English (Ed.). Handbook of international research in mathematics education (2nd edition) (pp. 75-108) New York: Routledge.

Petal, E. A. (2008). Parental involvement in home work: A research synthesis. *Review of Educational Research,* (4), 1039.

Peter, A. (2013). *Boys' and girls' uses of objects for exploration, play and tools in early childhood*. In A. D. Pellegrini, and P.K. Smith (Eds.).The nature of play: Great apes and humans, (pp. 113-135). New York: Guilford Press.

Piaget, J. (1936). *Origins of Intelligence in the Child.* London: Routledge&KeganPaul.Proceedings of the 35th Conference of the International Group for the Psychology of

Psacharopoulos, G. &Woodhall M. (2000). Education for development: An analysis of investment choices. U.S.A. Oxford University Press.

Quellette, G. &Senechal, M. (2016). Invented spelling in kindergarten as a predictor of reading and spelling in grade 1: A new pathway to literacy, or just the same road, less known? Developmental Psychology, 43(1), 77-88.

Rajani, R. (2003). *Is primary education heading in the right direction: Thinking with Nyerere.* Dar-Es-Salaam: HakiElimu.

Raney, L. E. (2015). *Integrated care.* Arlington, VA: American Psychiatric Association.

Reece, C. (2013). Children's spelling of syllabic/r/ and letter-name vowels: Broadening the study of spelling development. *Applied psycholinguistic,* 22(2), 139-165.

Reggio Emilia preschool in San Francisco. *Universal Journal of Educational Research*, 3(12), 074-1086

Ruiz-Primo, M. A., &Furtak, E. M. (2006). Informal formative assessment and scientific inquiry: Exploring teachers' practices and student learning. *Educational Assessment,* 11(3–4), 205–235.

Ruopp, R., Travers, J., Glantz, F.M. &Coelen, C. (1979). Children at the center: Summary finding sand their implications. Final Report of the National Day Care Study. Cambridge, MA: Abt Associates.

Rushon, K. (2014). Brain-based research in early years.National oxford publishers.

Rushton, K.R. (2014). *Learning to be literate in Aboriginal communities: The significance of text* (doctoral thesis). The Sydney e-Scholarship Repository at http://hdl.handle.net/2123/12779.

Rutter, M., Giller, H., &Hagell, A. (2014). *Antisocial behaviour by young people.* Cambridge, Ma: Cambridge University Press.

Saito, M. (2011). *Trends in the magnitude and direction of gender differences in learning outcomes* (SACMEQ Working Paper 4). Paris, France: UNESCO International Institute for Educational Planning.

Sarama, J.& Clements, D. (2008). *Mathematics in early childhood.* In O. Saracho& B. Spodek (Eds.), Contemporary Perspectives on Mathematics in Early Childhood Education(pp. 67-94). Charlotte, NC: Information Age Publishing.

Scarborough, H. S. (2012). On the efficacy of reading to preschool. *Development Review,* 14, 245–302.

Segal, D. L. (2014). *Farsi version of the Geriatric Anxiety Scale: Translation and psychometric properties among Iranian older adults.* Paper presented at the 65th annual meeting, Gerontological Society of America, San Diego, CA.

Segal, M. (2014). *The Root and Fruits of Pretending, in Children's Play. The Roots of Reading*: Edited by E. F. Zigler. D. G. Washington, DC: Zero to Three Press.

Seltzer, M. M. (1985). Informal supports for aging mentally retarded persons. American Journal of Mental Deficiency, 2(3), 259-265.

Senberg, M. (2014). *Malmösomvandling. Frånarbetarstad till kunskapsstad. EndiskursanalytiskstudieavMalmösförnyelse*. (Doctoral dissertation). Lund University, Department of Communication and Media.

Sexton, S. (2001). Trading Health Care Away? GATS, Public Services and Privatisation, *The Corner House*, July, Briefing 23.

Shaklee, B. (2011).Play in early childhood: From birth to six years(3rd ed.). New York, NY: Routledge

Sheldon, S. B., & Epstein, J. L. (2005). Involvement counts: Family and community partnerships and mathematics achievement. *Journal of Educational Research,* 98(4), 196-207.

Sheridan, E. M. (1981). Early Reading in japan. South bendInd, Indiana University, 11, (ED204-746).

Shulman, L.S. (2004). *The wisdom of practice: Essays on teaching, learning, and learning to teach*. San Francisco: Jossey-Bass.

Siegler, R. S. (2003). *How children develop*. New York: Worth.

Singer, G. H. S. & Maul, C. A. (2009). Just good different things: Specific accommodations families make to positively adapt to their children with developmental disabilities. *Topics in Early Childhood Special Education,* 29, 155–170.

Singh, R. (2014). *Ensuring that ECCE services level the playing field*. Paper presented in the Second International Conference on 'Early Childhood Development from Trans-disciplinary Perspectives' at JamiaMilliaIslamia University on 2 April 2014.

Sirin, S. R. (2010). *Meta analysis.* In N. J. Salkind (Ed.). Encyclopedia of Research Methods. Thousand Oaks, CA: Sage Publications.

Smith, L. (2012). The relation of recognition memory in infancy and parental socioeconomic status to later intellectual competence. *ERIC Journal, Norway*. https://eric.ed.gov.

Smith,L., Fagan, J. F &Ulvund, S. E. (2012). The relation of recognition memory in infancy parental socio-economic status to later intellectual competence. *ERIC journal,* Norway. https://eric.edu.gov.

Smith, T. E. C., Polloway, E. A., Patton, R., & Dowdy, C. A. (2008). *Teaching students with special needs in inclusive settings*. Boston, MA: Pearson Education.

Snow, C. E. (2011). *Ensuring reading success for African American children.* In Barbara B. (Ed.) love to read: Essays in developing and enhancing early literacy skills of African American Children. Early literacy initiative, national black child development institute.

Snow, C. E., Porche, M. V. &Pallante, D. H. (2011). Professional development for reading achievement: Results from the collaborative language and literacy instruction project (CLLIP). *The Elementary School Journal,* 112(4), 649-671.

Snowling, C. E. (2014). Extended discourse in first and second language acquisition: A challenge and an opportunity. *Journal of Japanese Linguistics,* 30(1), 2–9.

Snowling, M. (2014). Reading Development and Dyslexia in Goswami (ED), Blackwell Handbook of Childhood Cognitive Development, pp. 394-411.

Sofoluwe, A. O., Akinsolu, A. T., &Kayode, D. J. (2013). *Managing university education for national transformation in Nigeria.* In A. O. Ayeni, U. G. Emetaron, A. O. Okwori, J. A. Undie & J. E. Okon (Eds.), Managing education for national transformation (pp. 210-224). Lagos, Nigeria: Nigerian Association for Educational Administration and Planning (NAEAP).

Sonia, R., Ifitkhar, A. B. & Ashiq, H. (2019).Students' cognitive development in colleges: Acomparative study of private and public sectors. *Global Regional Review (GRR),* 4(2), 258-466.

Sood, N. (2014). Meaningful Access and Quality of Preschool Education in India, Saarbrcken: Lap Lambert.

Sooter, T. (2013).Early childhood education in Nigeria : Issues and problems. *Journal of Educational and Social Research,* 3(5), 173.

State of the World's Children Report (2013). Executive Summary, Integrated social protection systems: Enhancing equity for children. New York, NY: Author.

Streuli, N. U. (2011). Increasing choice or inequality? Pathways through early education in Andhra Pradesh, India, Working Paper 58, Studies in Early Childhood Transitions, The Hague: Bernard van leer Foundation.

Sule, M. N. (2013). *The concepts sociology education*, in Enoh, O. (Ed.) elements of education and Society. Jos. FAB education book.

Szinger, G. (2009). Pre-school literacy in the light of the European tradition. *International Web Journal,* 4(2), 15-25.

Tan, E. T., & Goldberg, W. A. (2009). Parental school involvement in relation to children's grades and adaptation to school. *Journal of Applied Developmental Psychology, 30*(4), 442–453. https://doi.org/10.1016/j.appdev.2008.12.023

Tammy, R. (2013). Effective teaching methods of people with intellectual disabilities. www.Mental Health. Net.

Thenjiwe, P. (2012). The influence of school sex, location and type on students' academic performance. *International journal of education and science,* 2(2), 81-85.

Tomopoulos, S. &Bathory E. (2017) Sleep regulation, physiology and development, sleep duration and patterns, and sleep hygiene in infants, toddlers and preschool-age children. *Current Problems in Pediatric and Adolescent Health Care,* 47(2), 29-42

Tovey, H. (2012). *Playing outdoors: Spaces and places, risk and challenge.* Maidenhead: Open University Press.

Turbill, J. (2009). *Developing a spelling conscience. In literacy through language arts: Teaching and learning.* Context. Urbana, IL: National Council of Teachers of English.

U.S. Bureau of the Census Current Population Report, (2005a). *Who's minding the kids? Child care arrangements: Winter 2002.* Washington, DC: Government Printing Office.

Udida, L. A. Ukway, J. K. &Ogodo, F. A. (2014). The influence of poverty on pupils' behavior and academic achievement. *International Journal of Educational Research*, 2(1), 151-160.

Umoru, A. O. (2014). *Implementing mastery learning strategy in Nigeria: The investment implication.* A paper presented at the WAEC Monthly Seminar Series.

UNESCO, (2010). The world conference on early childhood care and education: building the wealth of Nations, Concept Paper. http//unessdoc.unesco.org/ images.

UNICEF (2004). *The State of the World's Children 2004.* New York, NY: UNICEF.

Uttal, D. (2010). *On the relation between play and symbolic thought: The case of mathematics manipulative*. In Contemporary Perspective on Play in Early childhood Education, (pp. 97-114). Greenwich, CT: Information Age Publications.

US Early Childhood Head-Start Task Force, (2002).Teaching our youngest. Washington, D.C: US. Department of Education, Education Publications Center.

Uzoegwu, P. N. (2004). *Effect of the cooperative learning method on students achievement in English essay writing.* Unpublished PhD Thesis University of Nigeria Nsukka.

Verdine, B. N., Golinkoff, R. M., Hirsh-Pasek, K., Newcombe, N. S., Filipowicz, A. T., Chang, A. (2013). Deconstructing building blocks: pre-schoolers's spatial assembly performance relates to Early Mathematical skills. *Child development,* 10, 1111-12165.

Verspoor, A. (2008). *Conditions and factors of effective schools in Africa.* Paper presented at the ADEA Biennale on Education in Africa, Libreville, Gabon, March 27-31, 2006.

Von Glasersfeld, E. (2003). *An exposition of constructivism: Why some like it radical.* In R. B. Davis, C. A. Constructivist views on the teaching and learning of mathematics (pp. 19-29). Reston: National Council of Teachers of mathematics.

Walker, S. (2009). Socio-metric stability and the behavioural correlates of peer acceptance in early childhood. *Journal of Genetic Psychology,* 170, 339–358.

Walter F, James C, and James, E (2014) '' Constructive play. A value added strategy for meeting early learning standards'' Young children. July 2008 38-40.

Weigel, D. J., Martin, S. S. & Bennett, K. K. (2006). Mothers' literacy beliefs: Connections with the home literacy environment and pre-school children's literacy development. *Journal of Early Childhood Literacy,*6(2), 191–211.

White, S. &Dewitz, P. (1996). Reading proficiency and home support for literacy. *NAEP Facts,* 2(1), 1–5.

White,S.(1996). Reading proficiency and home support for literacy. *National assessment of educational progress*, 2(1).

Whitebread, D. & Jameson, H. (2013). *Play beyond the Foundation Stage: story-telling, creative writing and self-regulation in able 6-7 year olds*. In J. Moyles (Ed.), TheExcellence of Play, 3rd Ed. (pp. 95-107). Maidenhead: Open University Press.

Whitehurst, R. M.(2013).The relationship between elementary principals' visionary leadership and students' reading performance. *The Educational Forum,*77(3),315-328.

Willey, L. L., Jones, M. T. & Sievert, P. R. (2009). *Effects of anthropogenic disturbance on home range size of eastern box turtles (Terrapene C. carolina) and wood turtles (Glyptemysinsculpta) in central and western Massachusetts.* Urban Wildlife Conference; Amherst, MA.

Wiltz & Fein (2014). *Playing and learning*. Page 3, Pearson Prentice Hall, ISBN 978-13 512546-5.

Wright, S. (2013). Young children's meaning-making through drawing and telling: Analogies to filmic textual features. *Australian Journal of Early Childhood,* 32(4), 37-48.

Wrotham (2014). *The Roots of School Readiness in Social and Emotional Development.* Doctoral Thesis, Rome: Sapienza Universita di Roma.

Zucker, A. R., Heitzeg, M., Villafuerte, S. &Weiland, B. (2014). Effect of genotype on development of incentive-motivation circuitry in a sample enriched for alcoholism risk. *Neuro-psychopharmacol,*39, 3077–3086.

APPENDIX 1

KWARA STATE UNIVERSITY, MALETE

COLLEGE OF EDUCATION

DEPARTMENT OF EARLY CHILDHOOD AND PRIMARY EDUCATION

Classroom Behaviour Rating Scale

Dear Respondents,

This Rating scale was designed to elicit information on classroom behavior Rating scale. It is meant for research purposes only. Therefore your sincere response to the items will help to provide useful information for this research work. All information supply was treated with utmost confidentiality.

Instruction please (tick) or fill in the gap as appropriate

DEMOGRAPHIC INFORMATION/DATA

School Type: Public ( ) Private ( )

School Location: Urban ( ) Rural ( )

Teacher Qualification: NCE ( ) B.Ed ( ) PGDE( )

M. Ed ( ), Others:_____

Number of Pupils: ☐ Children

Classroom Observation Sheet

	CLASS ROOM BEHAVIOURS	NEVER	SOMETIME	ALL THE TIME
A	**Teachers Activities**			
1.	Teachers talk to children			
2.	Uses materials in group			
3.	Uses material individually			
4.	Demonstrates			
B	**Reinforcement; Teacher Uses**			
5.	Positive (clap)			
6.	Negative (flogging, cursing)			
C	**Teacher Ask Question**			
7.	Individually			
8.	Group			
9.	Whole class			
10.	Encourage children to take turns			
D	**Teaching Method**			
11.	Teacher uses play method			

12.	Teacher recites rhyme in relation to the topic			
13.	Teacher writes on the board			
14.	Teacher draws			
15	Organizes children into play activity groups			
16	Teacher paints			
E	**Children Respond**			
17	In group			
18.	Individually			
19.	Demonstrate			
20.	Observe			
21.	Uses Materials			
22.	Repeat after the Teacher			
23.	Children Copy			
24.	Children Recites Rhyme			
25.	Children Draw			
26	Performs group play			

APPENDIX II

KWARA STATE UNIVERSITY, MALETE

COLLEGE OF EDUCATION

DEPARTMENT OF EARLY CHILDHOOD AND PRIMARY EDUCATION

COGNITIVE DEVELOPMENT SKILL TEST (CDST)

Dear Respondents,

This test was designed to elicit information checklist on cognitive development skill test. It is meant for research purposes only. Therefore your sincere response to the items will help to provide useful information for this research work. All information supplied was treated with utmost confidentiality.

Instruction please (tick) or fill in the gap as appropriate

DEMOGRAPHIC INFORMATION/DATA

Class:_____

School Type: Public ( ) Private ( )

School Location: Urban ( ) Rural ( )

Child Gender: Male ( ) Female ( )

Number of Childreninthe class: ☐ Children

SECTION B

(1) Identify these letters

C	E	A	D	F
I	J	B	H	K

10 Marks

(2) Read these letters

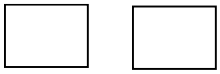
a	b	c	d	e	f	g	h
i	J	k	l	m	n	o	p

16marks

(3) Write letters a to e

(4) Match these Numbers with Objects

Objects **Numbers**



2

Examples ⟶

5

3

2

4

1

(5) Identify these Numbers

9	**1**	**3**	**5**	**7**
2	**4**	**10**	**6**	**8**

(6) Read these Numbers

1	**2**	**3**	**4**	**5**

6	7	8	9	10

(7) Write Numbers 1 to 10

(8) Identify these Colours

(9) Identify these Objects

APPENDIX III

KWARA STATE UNIVERSITY, MALETE

COLLEGE OF EDUCATION

DEPARTMENT OF EARLY CHILDHOOD AND PRIMARY EDUCATION

Mother Child Support Rating Scale (MCSRS)

Dear respondents,

This Rating scale was designed to elicit information of parents on home characteristicsIt is meant for research purposes only. Therefore your sincere response to the items will help to provide useful information for this research work. All information supply was treated with utmost confidentiality.

Instruction please (tick) or fill in the gap as appropriate

Demographic Information/Data

School: Urban ( ) Rural ( )

Child's Gender Male ( ) Female ( )

Location of Child's Home: Urban ( ) Rural ( )

Mother's Level of Education; School certificate ( ) S.S.C ( ) N.C.E/ O.N.D ( ) First Degree ( ) Masters ( ) Ph.D ( ) Others: ……

Who does the child live with? Father ( ) Mother ( ) Uncle ( ) Aunt ( ) Both Father and Mother ( )

PROFESSION …….

	Mother Childs Support at Home	All the time	Some times	Never
1.	I hang colorful chart at home to attract my child to read			
2.	I always read together with my child at home			
3.	I buy mini story books for my child			
4.	I provide learning materials for my child at home			
5.	I visit my child school regularly to check his/her writing ability			
6.	I provide writing materials such as pencil and exercise books for my child			
7.	I assist my child to pronounce some difficult words			
8.	I assist my child with his/her assignment			
9.	I tell my child story when am less busy			
10.	I sing rhymes with my child at home			
11.	I provide literacy materials for my child at home			
12.	I provide numeracy material for my child at home			

13.	I teach my child how to identify letters			
14.	I teach my child how to identify numbers			
15.	I teach my child how to distinguish between uppercase and lower case			