INFLUENCE OF EARLY CHILDHOOD EDUCATION ON ACADEMIC ACHIEVEMENT, MORAL AND SOCIAL BEHAVIOUR OF PRIMARY SCHOOL PUPILS IN KANO STATE, NIGERIA

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A THESIS SUBMITTED TO SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN EDUCATIONAL PSYCHOLOGY,

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DECLARATION

I hereby declare that this thesis entitled "Influence of Early Childhood Education on Academic Achievement, Moral and Social Behaviour of Primary School Pupils in Kano State, Nigeria", has been conducted by me for the award of degree of PhD in Educational Psychology, Ahmadu Bello University, Zaria. The information derived from the literature has been duly acknowledged in the text and list of references provided. No part of this thesis was ever presented for another higher degree or diploma in any other higher institution or university.

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CERTIFICATION

This thesis entitled "Influence of Early Childhood Education on Academic Achievement, Moral and Social Behaviour of Primary School pupils in Kano State, Nigeria," has been read and approved as meeting the regulations governing the award of Doctor of Philosophy (Ph.D) Educational Psychology of the Ahmadu Bello University Zaira and is approved for its contribution to knowledge and literary presentation.

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This thesis is dedicated to the memory of my Brother Abdulrashid Kailani and my sister Hajiya Hafastu Muhammad, May their gentle Souls rest in Jannatul Firdausi, Ameen.

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LIST OF ABBREVIATIONS

AAT:	Academic Achievement Test
ASEBA:	Achenbach System of Empirically Based Assessment
CBCL:	Child Behaviour Checklist
ECCE:	Early Childhood Care and Education
ECD:	Early Childhood Development
ECE:	Early Childhood Education
ECEC:	Early Childhood Education and Care
ECEP:	Early Childhood Education Programme
EFA:	Education for All
LGEA:	Local Government Education Authorities
MDGS:	Millennium Development Goals
NCCE:	National Commission for College of Education
NCE:	National Certificate in Education
NECE:	Non-Early Childhood Education
NERDC:	National Education Research Development Council
NPE:	National Policy on Education
OECD:	Organization for Economic Co-operation and Development
PTA:	Parent Teachers Association
SBS:	Social Behaviour Scale
SPSS:	Statistical Package for Social Science
SUBEB:	State Universal Basic Education Board
UBE:	Universal Basic Education
UBEC:	Universal Basic Education Commission
UNESCO:	United Nations Educational Scientific and Cultural Organization
UNICEF:	United Nations Children’s Education Fund
ZPD:	Zone of Proximal Development

OPERATIONAL DEFINITION OF TERMS

Academic Achievement: This includes the accumulated scores attain by individual pupils in Mathematics, English studies and Basic Science and Technology during class activities administered by class teacher and the researcher.

Early Childhood Education: These are learning experiences which the child is exposed to within an educational institution prior to formal primary education.

Moral Behaviour: These are system of rules that regulate the social interaction and social relationship of individual pupil within the classroom and base on the concepts of welfare that trust, norm, justice and rights of each other, that will develop proper attitude.

Social Behaviour: It includes acquisition of social skills and exhibition of acceptable behaviour among peer groups within the classroom or during outdoor games on the field within the school environment.

ABSTRACT

The main purpose of this study was to investigate the influence of Early Childhood Education on Academic Achievement, Moral and Social behaviour of primary one school pupils in Kano State, Nigeria. The study was guided by five major Objectives and five corresponding Research Questions; viz, Influence of Early Childhood Education on Academic Achievement Scores in Mathematics, English studies, Basic Science and Technology and investigated the influence of Early Childhood Education on Moral and Social behaviour of ECE and Non-ECE primary one school pupils in Kano state. Five corresponding null hypotheses were formulated and tested at 0.05 level of Significance difference. This study used ex-post facto survey design. A sample size of 440 pupils was used out of the population of 2, 242, 000 and a pilot test was conducted to obtain reliability of instruments used for Academic Achievement Test (AAT) Moral and Social behaviour Scale (MBS and SBS) which revealed a co-efficient 0.74 and 0.84 for AAT 0.76and 0.88 for (MBS) and 0.69 and 0.68 for SBS respectively. The items for Academic Achievement Test (AAT) were administered to pupils in the class personally by the researcher and research assistant 30 minutes were allowed for the Mathematics and English Studies while 45 minutes for Basic Science and Technology with 10 minutes interval and assessment of MBS and SBS were scored using the likert scale. An independent sample "t" test was used to analyses the five Null hypotheses. Analysis revealed statistically significant difference in academic achievement scores in Mathematics "t" 1.984, P= 0.048, df 438, English Studies, "t" =3.770, P= 0.001 df 438, Basic science and Technology "t" 4.360, P=0.001 df 438 meaning ECE pupils performed better then the non ECE counterparts. Contrary Moral Behaviour Scale revealed no Statistical Difference with "t" 0.127 P=0.899 df 438 while statistically significant difference does exist in Social Behaviour Scale with "t" 2.853, P=0.035, df 438, which indicated Social interaction among peers.ECE pupils performed better than the Non-ECE pupils. Hence, Quality Early Childhood Education is likened to an engraved mark on a rock which is difficult to erase off when provided by a qualify teachers, it would enhance provision of solid academic foundation for lifelong development which will no doubt enhance pupils mental ability, exhibition of acceptable moral behaviour and social interaction among peer groups. The study recommended that every child be given individual opportunity to explore and experience formal early years learning, Government should ensure teachers are provided with service training in compliance with the current curriculum. Teachers, stakeholders and parents among others should ensure provision of quality Early Childhood Education as it will aid solid foundation for mental ability, moral behaviour and social interaction ensuring Education for All" for benefit of populace.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The early years of a child's life are crucial to what he/she might turn out to be now and in the future. According to National Association for Education of Young Children (NAEYC, 2010), learning experiences acquired during early years leave long lasting impression, and learning at this stage is often a shared responsibility of the home and school. Mefor (2010) similarly stated that learning process and moulding of a child and its responsibility is internally regulated by parents who are at home and externally regulated by the teachers who teach them in school. However parents' rush for excessive wealth and women's participation in the labour market have denied children at this stage of life, the golden opportunity of education which should be acquired at home. The reason is that, most children during this stage are left at the mercy of Care givers, who know nothing about child- rearing and sometimes are themselves children who also need care. This has often resulted in disastrous incident where children are found to be dropouts in schools or exhibit aggressive behaviours like bullying, shouting or worst case of drug addiction or drug abuse are exhibited due to bad upbringing or interaction with peer groups (Peisner & Feinberg, 2004).

Early Childhood (EC) usually refers to the first eight years of a child's life. Explicitly it is the period before full-time schooling begins, for children aged 3 to 5. In essence Early Childhood Education (ECE) refers to education which includes the "crèches," the nursery and kindergarten, while the primary education refers to education given to children between 6-10 years and above. The period is seen as turning point in child development for building human capital in the form of the basic social, cognitive, and scholastic skills needed for educational achievement. ECE is also seen as a preventive measure to reduce the incidence of remedial classes, grade repetition, getting assigned to special-education classes, and later dropping out of school. As an equity issue, ECE is viewed as an equalizer between rich and poor, a way of providing children from disadvantaged backgrounds some of the human-capital builders experienced by children from more advantaged households (Hammond & Plesca, 2010).

Furthermore, early childhood development is the key to a full and productive life for a child and to the progress of a nation. Early Childhood is therefore, a critical stage of development that forms the foundations for children's future well-being and learning. Research has shown that half of a person's intelligence potential is developed by age four and that Early Childhood interventions can have a lasting effect on intellectual capacity, personality and social behaviour. Integrated programmes whose focuses are children in their very early years are critical for their mental and psychosocial development as opined Organization for Economic Cooperation and Development (OECD, 2000).

Education starts from cradle to grave, experts opined that catching children young with quality education remains a veritable tool for lifelong development. Similarly, education is an indispensable tool in nations building is a process of systematic training and instruction designed to transmit knowledge and acquisition of skills, potentials and abilities which will enable an individual to contribute efficiently to the growth and development of society and nation. It involves all round developments of an individual physically, socially, morally, intellectually, and mentally (Osakwe, 2009). Therefore, education is the right of every child and must not be denied for any reason.

Thus the assertion of world summit on the state of global children and it has led to the inclusion and expansion of early childhood care and education in the global Education for All Programme (Ajayi, 2008). This is yet to be a reality for every child, because some do not get the opportunity to start early; that is, having the early childhood school experience between the ages 3-5 years before embarking on primary education. In other words, comprehensive and quality ECE programme can meet the educational and developmental needs of disadvantaged children and can help to equalize opportunities early in life. If every child can benefit from an early introduction to education whether provided by parents or professionals either at home or in school environment respectively, it is likely that it would have an impact on the academic achievement, social and moral behaviour of the child. For children of parents with full-time jobs, early childhood education may be the only opportunity these youngsters have to develop crucial social learning skills. Hence today's increased demand for educational excellence combined with the economic needs to work longer hours by parent is an equation that highly favours early childhood education.

Furthermore Mefor (2010), maintained that working class women's leaving children at "day care centers" has contributed to labour force rates for mothers of young children which have risen over the past few decades, so is the use of child care, centers and family care at home. A substantial majority of young children now regularly experience child care prior to entry into school. The rate of care for pre-school age children is now, higher than for infants and toddlers. Given this high child care usage, both parents and professionals have sought to understand the influence of these experiences on children's cognitive, social and moral development, (Feisner & Feinberg, 2004).

Regulating pupil's behaviour according to Thornberg (2009) is an essential part of every day school life. In traditional as well as progressivist view rules in school are usually seen as an unproblematic means to organize and regulate pupils and their behaviour in school as well as teaching them to be good citizens or helping them to acquire moral and social skills. Furthermore rules serve to protect or safeguard values and function as instruments used in the pursuance of these values though the cognitive approach of Piaget opinion that the child develops his/her morality which will change from one sided to a morality of cooperation and mutual respect. Turiel (1980), cited in White (2001), opined that this level is found on the concept of like reciprocity and equality that is pupils should not be restricted but be told why such is such.

Sherman (1996), cited in Thornberg (2009), calls the process of socialization with rules and routine in school "studentizing" in which compliance with authority, rules, times keeping routines ensure their inclusion as a pupils/students in the school world as a preparation for the world works. These questions could be asked what pupils actually learn by rules of their school? What are the moral messages embedded in the system of school and classroom rules. According to Bosstroom (1991) as cited in Thornberg (2009), as pupil's embraced rules they take part not only in short term behaviour but also in far reaching ways of thinking about themselves and the world. Inevitably, schools are a part of moral life of school or source of moral influence (Fenstermacher 2001; Jackson, Boostrom, Hasen 1993; & Thornberg 2006). Indeed, similar to the present study, achievement research needs to deal with the technical issues of how teachers teach efficiently and effectively, but also to go beyond with a mere critical point of view, because education is not a neutral enterprise, but rather it is immersed in ideology, morality, power, cultural control and social reproduction (Apple 2004; Bernstein 2000; Buzzeli & Johnston 2002). In essence morality could be viewed from difference perspectives of social learning theory which adopts many of the concept explain how people develop and are socialized (Sieber 1980 cited in White, Crafford and Schepers, 2001).

Social learning theory, behaviour is seen to be acquired by direct learning modeling and orientation as expected in this study. Pupils who experience early childhood education would picture both their class teacher and parents as modeled who they copy from and is maintained by positive reinforcement. Moral behaviour is viewed as the result of learned responses conditioned by the environment. The process of acquiring moral behaviour depends on what is considered right or wrong by the group. This is subject to social sanctioning by the group (Windmiller 1980 cited in White et al., 2001). Thus, the group or communities are right or wrong. A child learns their rules. In this case a child raised in disciplined religious society will internalize discipline and religious behaviour as an accepted norm or form of behaviour (White, Crafford, & Schepers, 2001). Moral behaviour of pupils though moral development could be viewed from another perspective of psycho – analytical theory which dictates which behaviour is acceptable. Another view of moral development is moral reasoning perspective (cognitive approach) which is just as important for development as the environment context, which is the cognitive approach that has link with Piaget, Penn and Collier (1985, cited in White et al., 2001).

Thus, social skills include different behaviour which helps an individual enter and interact in interpersonal relations. Social skills are important factors of pupil's acceptance and popularity among peers which enables an individual to enter interpersonal relations and interact with others. Eliott and Busse (1991),cited in Jana ,Cirila, Sonia, & Zulijan, 2009), proposed there were five main categories of social behaviour: Cooperation (help other people, sharing and abiding by rules) Assertion (initiating behaviours, asking for things and responding to behaviour of others) Responsibility: (communication with adults and demonstration of care) Empathy: (showing concern for the feelings of others) Self control: (ability to respond appropriately to conflict or corrective feedback from adults). The stated categories pointed out that learning, development and schooling are interwoven in a social matrix and cannot be understood outside that context, researchers opined that pupils used confirmed socially desirable behaviour is directly and significantly related to primary school pupils' academic achievement,, mother tongue and mathematics (Peklaj, Umek, Marjanovic, & Bajc, 2012).

Similarly, Boekaerts (2002) emphasized that schools should structure their environment in way to enable pupils achieve educational goals, and also fulfill their social emotional goals and needs. Notably, research evidence has shown that unless children achieve minimal social competence by age six years they have a high probability of being at risk throughout. Hartup (1991), thus suggest that peer relationship contribute a great deal to social and cognitive development and to the effectiveness with what are function adult or later in life as also predicted by this study which indicated significant influence on both academic achievement and social behaviour.

Aldemir and Sezer (2009) also maintained that Early Childhood is a period when children begin to acquire their personality traits, moral behaviour, habit formation, and social interaction and communication skills. As a result of the increase in the number of young children whose primary caretakers or parents are in the workforce, education and care of children in the Early Childhood period therefore requires teachers who have professional knowledge to assess and respond to developmental and learning needs of all children. Such educators must have the ability to recognize and analyze their personal beliefs, which may clash and interfere with the teaching act. Though, awareness of early childhood education for children dates back to the period of the renaissance, this turned into the decade of seventies with some marks of accomplishment (Akujo, 1991). During the past two decades there had been a steady growth of interest in improving and expanding educational opportunities for young children all over the world. Group experiences away from home have become a popular and acceptable means of supplementing a child's home experience and offering alternatives, for the working parents (Disu,1990) which will be better attained under the supervision of a professionally trained Early Childhood Educators.

The conception that Early Childhood Education (ECE) positively affects academic progress is well established (Wylie, Hodgen, Hopkins, & Vaughan, 2009). Thus, academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university. School systems mostly define cognitive goals that either apply across multiple subject areas (e.g., critical thinking) or include the acquisition of knowledge and understanding in a specific intellectual domain (e.g., numeracy, literacy, science, history). Academic achievement should therefore be considered to be a multifaceted construct that comprises different domains of learning. Because the field of academic achievement is very wide-ranging and covers a broad variety of educational outcomes, the definition of academic achievement depends on the indicators used to measure it (Meissner, Mehugh, Mittelstadt, & Marawski, 2015).

Recent studies, by (Osakwe 2009; Weiland, Zaslow, Espionsa, & Philips 2013) have enabled nations to compare their educational systems with other nations and to evaluate them on this basis. However, it should be mentioned critically that this approach may, to some degree, overestimate the practical significance of differences between the countries. Moreover, the studies have increased the amount of attention paid to the role of family background and the educational system in the development of individual performance. The quality of teaching, in particular, has been emphasized as a predictor of pupil's achievement. Furthermore, this attitude of either students or teachers affects the academic achievement of students. As investigated by Okpala (2001) that social psychological variables like attitude are found to have correlation between attitude and academic achievement. In support of this, Agbani (1997) conducted study on attitude and achievement in knowledge and concluded that attitude was a very important factor in academic achievement in the subject. Teachers are expected to be caring, innovative while teaching concept be based on teacher/pupils centered orientated.

The indelibility of the knowledge acquired by young and innocent children suggests the paramount importance of early childhood education. Knowledge in childhood is likened to an engraved mark on a rock, which is difficult to rub off, as it is better to train boys than to mend men, (Adebayo, 2005). In addition ECE is considered an indispensable tool in nation building and a systematic training and instruction designed to transmit knowledge and acquisition of skills, potentials and abilities which will enable an individual to contribute efficiently to the growth and development of the society and nation. In this regard, Kano State established Early Childhood Education (ECE) prior to primary education which fortunately coincides with the National Council on Education's 2013 decision mandating an approved compulsory one year (pre-primary) education which every child will undergo prior to the commencement of early childhood education in schools irrespective of either the schools are government or private owned in Nigeria.

The need for Early Childhood Education programme cannot be over emphasized because when pupils are given opportunity to develop skills by playing with others and taking part in activities that would build on their abilities and interests which will definitely build up the child's social behaviour and recreation activities as well as develop pupils academically, morally and socially, when taught by qualified staff who will deliver quality knowledge to the pupils would enhance success in school and in life.

1.2 Statement of the Problem

Early Childhood Education and Care Subsector in Nigeria had been bedevil with challenges; prominent among them are lack of infrastructure, lack of uniform standard, lack of funds, and dearth of qualified teachers. National Education Research Development Council and National Commission for Colleges of Education conducted two surveys independently between (2003) and (2004). Their findings shows that higher percentage of children do not have access to early childhood education programme, and the few children that had access to it, had it conducted under poor condition, with teacher quality being the most crucial and vital. Notably there is the need to promote moral and social value education among the young ones but the reverse is the case where school programme laid more emphasis on academic pursuit, tagged by Mitchell (1980) as school Programme for academic preparedness instead of personal and social enrichment or Montessori approach. This poses concern because the current programme has little positive effect on social, moral and cognitive development. These desirable outcomes are of importance and need to be nurtured in children who attend ECE school programme to ensure quality assurance and high standard.

The present study was particularly steered by recent changes in the society. In the last few decades the society's experience with industrialization, growing labour force that involves women participation in work force; access to information media and culture interference, decline in standard behaviour, attitudes and quality relationship among peer groups; has led to a situation whereby social and moral values have been compromised for academic issues; neglecting the tangible moral and social value that should be handled by both parents and educators at home and in the school respectively.

In addition, schools adopt the use of cheap labour by employing untrained teachers at the expense of the growing children. Likewise is the rise in decline challenging behaviours among pupils/children that is, lack of quality positive social emotional relationship development between the pupils and teachers and decline of moral behaviour exhibited by pupils in classroom or during outdoor games. Similarly many children arrived at schools without social skills, English language and moral behaviour required for learning. All these constitute a source of concern to parents, teachers and educators.

Similarly NCCE in conjunction with the United Nations Children's Education Fund (2007) in its revised Minimum Standard for NCE teachers included ECE courses using twelve Colleges of Education as pilot colleges, to ensure quality ECE teacher production. In spite of these efforts, schools are still faced with problems such as location of schools, sanitation, illumination, equipment and infrastructure which make provision for outdoor activities such as swinging, slides, merry go round, football pitch were grossly inadequate for pupils that will enable to engage in physical activities, thus social interaction becomes inhibited. With the above critical appraisal facing the ECE programme, the researcher sought to investigate the influence of early childhood education on academic achievement, moral and social behaviour of primary schools pupils in Kano State.

The major thrust of the study therefore is to determine the influence of ECE experience on academic achievement, moral and social behaviour of primary school pupils in Kano state and to determine whether ECE pupils benefitted more from ECE experience than their Non- ECE counterparts in subsequent learning (primary school).

1.3 Objectives of the Study

The specific objectives of the study are to determine:

1. The influence of Early Childhood Education on academic achievement in Mathematics of ECE and non – ECE primary school pupils in Kano state.
2. The influence of Early Childhood Education on academic achievement in English Studies of ECE and non – ECE primary school pupils in Kano state.
3. The influence of Early Childhood Education on academic achievement in Basic Science and Technology of ECE and non – ECE primary school pupils in Kano state.
4. The influence of Early Childhood Education on Moral behaviour of ECE and non – ECE primary school pupils in Kano state.
5. The influence of Early Childhood Education on Social behaviour of ECE and non – ECE primary school pupils in Kano state.

1.4 Research Questions

The study intends to proffer answers to the following research questions: -

1. To what extent does Early Childhood Education programme influence Academic Achievement scores in Mathematics of ECE and non-ECE primary school pupils in Kano State?
2. What is the influence of Early Childhood Education programme on academic achievement scores in English Studies of ECE and non ECE primary school pupils in Kano State?
3. To what extent does Early Childhood Education programme influence Academic Achievement scores in Basic Science and Technology of ECE and non ECE primary school pupils in Kano State?
4. How does Early Childhood Education programme influence moral behaviour of ECE and non ECE primary school pupils in Kano State?
5. How does Early Childhood Education programme influence social behaviour of ECE and non – ECE primary school pupils in Kano State?

1.5 Research Hypotheses

On the basis of the research objectives and research questions, the following null hypotheses were formulated: -

H_{01}: There is no significant difference in academic achievement scores in Mathematics between ECE and non – ECE primary school pupils in Kano State.

H_{02}: There is no significant difference in academic achievement scores in English Studies between ECE and non – ECE primary school pupils in Kano State.

H_{03} There is no significant difference in academic achievement scores in Basic Science and technology between ECE and non – ECE primary school pupils in Kano State.

H_{04}: There is no significant difference between moral behaviours of ECE and non – ECE primary school pupils in Kano State.

H_{05}: There is no significant difference between social behaviour of ECE and non – ECE primary school pupils in Kano State.

1.6 Basic Assumptions

This study was based on the following assumptions: -

1. Early childhood education experience given to pupils (teach rudiments of numbers addition, counting, shapes subtraction, etc) has influence on academic achievement scores of primary school pupils in Mathematics.
2. Academic achievement scores of pupils in English studies is influenced by early childhood education experiences e.g. alphabets in letters colours making sentences etc.
3. Early childhood education experiences in exploration of nature, environment and creativity etc, influence academic achievement scores in Basic Science and Technology of primary school pupils.
4. Exhibition of accepted moral behaviour of primary school pupils is influenced by early childhood education experience in habit formation and moral values.
5. Social behaviour of pupils is influence by early childhood education experience in teaching co-operation and interaction that will enable pupil's exhibit accepted behaviour and interact freely with peer groups.

1.7 Significance of the Study

Early Childhood Education programme are path ways that link a child's early experience to later learning and development socially, emotionally, morally and cognitively. It is a transitional stage to primary and elementary school. It thus determines sound education which is laid on solid foundation that enhances subsequent learning in later years. Significantly, ECE will give a boost to academic achievement and behaviour of pupils that will enhance subsequent school system. It is highly beneficial to the pupils' cognitive and educational development as well as the well being of young children in terms of their individual needs and characteristics.

The finding of study would provide, pupils with systematic framework academically that would enhance subsequent learning, earlier completion, improve school achievement and higher levels of social, moral and emotional functioning, success in lifelong development. Similarly pupils who engaged in ECE schools – based, exhibit accepted social, moral and emotional attitudes and would attained higher grades scores than their peers who did not engage in ECE learning. Period of early childhood education has a strong and positive impact on further development and pupils learning in later years. Importantly the ECE pupils would perform better academically and also have competent positives social values and moral behaviour and are less likely to be engaged in drug use, violence and drop out of school.

The finding of this study would clarify issues and create awareness for parents on benefits of early childhood education to subsequent learning which would be a strategy for better performance as long as parents makes provision of writing and creative arts materials available and get involve in parent teachers association, where the way forward in education is discussed and decision made. Thus, there is connectivity between the home and school.

It is anticipated that the findings would expose teachers to different approaches of teaching and learning academic concept, which should not be taught solidarity instead concept be taught in collaboration with moral and social interaction.

Teachers are therefore expected to implement the curriculum adequately by ensuring that topics are taught in sequential order. Thus, a topic should be a pre-requisite to another and importantly ensuring that pupils participate in all class activities the completion of which qualifies the pupils for another level.

Results obtained from this finding would clarify issue on the essence of making provision for early years education prior to primary education to stakeholders, National Council on Education, National Education Research Development Council, Early Childhood Educators to ensure that education at this level is assessed to ALL and have a working document for schools and agencies on better effective implementation of early years without de – emphasizing academic concept from social and moral behaviour with the aim of providing a systematic framework for laying a solid foundation academically, socially and morally. This will assist curriculum developers in making decision on methods, teaching and learning experience (content). Regularly engage in programme evaluation guided by programme goals using appropriate conceptually and technically sound evidence and tackle issue related to curriculum development and implementation.

The findings of this study would serve as significant literature on influence of early childhood education on academic achievements, moral and social behaviour of primary school pupils.

1.8 Scope and Delimitation of the Study

The research work was carried out in Kano state schools, consisting the entire primary school pupils both private and public schools within the three Senatorial Districts; (North, Central and South) covering the 44 Local Governments of Kano State, Nigeria.

The scope was further delimited to primary one school pupils irrespective of sex and age who were the immediate beneficiaries of early childhood education within 27 primary schools – totally 440 as the sample size. The choice of a school was based on availability of ECE programme with equal population and each group is independent of each other, homogeneous in nature, with all subjects being primary school pupils.

The study was specifically delimited to academic achievement scores in core subjects; Mathematics, English Studies, Basic Science and Technology class activities based on current curriculum NERDC (2012) and on moral behaviour scale and social behaviour scale used in assessing pupils' behaviour which was generalised to pupils at this level.

The preoccupation of the present study was focused influence of ECE on academic achievement scores in Mathematics, English Studies, Basic Science and Technology and also moral and social behaviour of ECE and non-ECE primary school pupils within the basic educational level likewise those who attend the Islamiyya nursery schools.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

An attempt was made by the present study to review, related literature on Early Childhood Education concepts theories, academic achievement, moral and social behaviour under the following sub-headings:-

2.2 Concept of Early Childhood Education

2.3 Concept of Moral Behaviour

2.3.1 Relationship between Early Childhood Education and Moral Behaviour

2.4 Concept of Social Behaviour

2.4.1 Relationship between Early Childhood Education and Social Behaviour

2.5 Concept of Academic Achievement

2.5.1 Relationship between Early Childhood Education and Academic Achievement

2.6 Theoretical Framework of Early Childhood Education

2.7 Review of Related Studies

2.8 Summary and Uniqueness of the Study

2.2 Concept of Early Childhood Education

Education is one of the vital factors that help in the development of a human being. The fundamental right of every child is to learn and develop to his or her full potentials through equal access to quality education regardless of their age, gender, origin ethnicity and social background. However, ECE provides the foundation of education in the pre-school education which forms an integral part of a child's early education, given formally or informally, in an educational institution to children ages two- five years prior to entering the primary school (Nakopia, 2011).

Early Childhood is the most critical period in human development, thus comprehensive and quality early childhood education can make a significant contribution to the physical, psychomotor, cognitive, social and emotional development of the child; including the acquisition of languages and early literacy. Children are active learners from birth, and the early years are vital to their success in school and later in life. Early childhood education might be considered to be education which takes place before compulsory education. The term refers to education in its broadest sense, including childcare and development. This includes early childhood services provided in kindergartens, nurseries, pre-school classes, child-care centers and other similar institutions. It goes beyond what some refer to as pre-school education, as it is education in its own right, having not only the purpose of preparing children for school, but for life in the same way as all other parts of education systems contribute to this process (Hayes, 2010).

In addition, ECE has an important role in securing all children, good education, thus Childhood years are important in themselves and ECE can contribute to many positive and valuable experiences which form a solid basis for future life and learning. This is supported by the 2007 edition of the Education for All (EFA) Global Monitoring Report (GMR), which provides evidence that children's experiences in the first years create a solid foundation for subsequent learning. In addition, the Organization for Economic Cooperation and Development starting strong II (OECD, 2006) asserted that ECE addresses issues of child poverty and educational disadvantage, as well as promoting women's labour market participation. In recent studies, OECD (2006), looked at the long-term impact of ECE, and its findings reveal that 15-year-olds who had attended pre-school were, on average, a year ahead of those who had no reading literacy. "Education internationally", thus insists that no child should be denied the benefits of good quality early childhood education. At present various opportunities are provided and several avenues are opened that help in imparting knowledge to children all over the world (Bradford, Aguda, Bingham, Bower, Broomby & Coltman, 1996). Globally, individuals and governments invest heavily to ensure high quality and accessible early childhood education at early stage of life. The importance of the early years, in a child's physical, social, emotional, linguistic and cognitive developments cannot be over emphasized. That, future capabilities and successful educational practices are notably linked up with both knowledge and good reasoning ability acquired in the early years of life.

Research studies on capabilities of young children's stages, styles of learning, social, emotional, moral developments and successful educational practices have established that children who lack knowledge and experience may not have good reasoning ability (Branford et al, 1996). Hence education provided at early childhood specifically at nursery and primary education level, will enhance children's future/later reasoning and educational needs within the formal school system which will promote their educational success and ability.

Early childhood education is an activity that takes place before formal school, in this case, preschool is a part of early childhood, and the aim is the versatile development of child's personality and also helping the child to be ready and mature for a smooth transition to school (Ajala, 1978). In other words, early childhood programme encompasses both qualitative education and care, which should not be separated but provided in a complementary fashion. Quality early childhood education will earn children a position or state of readiness to learn in a formal and non-formal setting. Disposition to learn refers to development of social skills and behaviour in formal educational environment, while readiness to learn is related to the fact that children will start schooling on a solid (footing) foundation to develop their potentials.

Emphatically, early childhood education is seen as an evolving field of study, research and practice, which concerns itself with all aspect of early life experience, from separation of anxiety to early literacy development. Early childhood education sometimes called early childhood care and education or early childhood care Development Education refers to the education that children obtain during early stages of life. Learning is known to be greatly influenced by extraneous factors like the nature of educational environment: instruction material conducive environment provision facilities to which the child is exposed during the first 6 years of life, (Bowan, Donovan & Burn 2001).

Early gains in school readiness due to early childhood education have been shown to have enormous positive economic and social impacts, lasting well into adulthood ranging from higher educational attainment and less chance of involvement in criminal activity, to higher status employment and higher earnings. Hence, Early childhood education is crucial in life in terms of a child's physical, intellectual, emotional, moral and social development; growth of mental and physical abilities progresses at an astonished rate and a very high proportion of learning takes place at this stage (Birth to age six). It is a time when children need high quality personal care and learning experience. That is, for any meaningful learning or acquisition of skills and knowledge to take place, the environment should be provided with adequate instructional materials in addition to quality educators; (Schweinhart, Sparling, Ramey & Ramey, 2009).

Children who received quality early childhood education from qualified teachers are more likely to succeed in school and in life. Such children with richer literacy environment demonstrate higher level of reading, knowledge and skills at primary school level: Good early childhood education increases cognitive abilities, school achievement and improves classroom behaviour. Hence, there is the need for careful planning and effective implementation of early childhood education programme which will have positive impact on effective completion of school for the child; (Smith & Barnett, 2004).

To buttress this, Mills (2007) specified that early childhood education produces benefits that persist into early adulthood which means that children who participated in early childhood education are likely to perform better in subsequent educational, moral, and social milestone than a similar group who attended another pre-school programme. The "former" group who participated in Early Childhood Education for one or two years will benefit in several ways viz:- Less grade repetition, lower dropout rates, improved parent-child relationship, higher intelligence scores, higher school completion rate, improved social and emotional behaviour, increased female labour force participation, lower rates of juvenile crimes and have a lower chance to committing violent crimes. These will not only benefit the child but the society as well. For effective and efficient development of a child's latent abilities and forms of behaviour of positive values in the society in which the child lives, early childhood education becomes imminent, not only to the educational development but also social interaction and good moral behaviour inclusive, (Osakwe, 2009).

No serious government takes the education of its citizens at the stage of ECE with levity. As such, the National Policy on Education revised, (2007) in line with other nations of the world specified that early childhood education should be given in an educational institution to children aged three to five plus prior to their entering the primary school." The first five years of a child's life are very crucial and important in his/her life, as whatever he/she is exposed to during this period has a serious and lasting effect on him/her in future. In France, the central government shares the largest responsibility of the total cost of educating the children while the local authority provides the remainder. While in England, Wales and West Germany it is the local authorities that control and administer the pre-school education through nationally prepared guidelines.

However, in Nigeria ECE is controlled by both private sector and partly by the government prior to the recent introduction of ECE classes in public primary schools. As precious as the early childhood education is, it is sad to note that it received an unappreciable attention from the Nigerian government and citizens for a long time. But in recent time, with the introduction of UBE, most public schools have ECE classes which are likely to make its products different from previous year's graduates to primary school.

The National Curriculum Conference held in Lagos in September 1969, as historic as it was, failed to address any issue related to early childhood education. Rather, it focused much on primary, secondary and tertiary education, teacher education, science and technical education as well as women's education. The 6-3-3-4 system of education is silent about early childhood education as well. It was not until recently that the Federal Government of Nigeria broke its silence on it and realized the need to have a say in the conduct of nursery education and thus clearly stated the purpose and objectives of Early Childhood Education in Nigeria, in the National Policy on Education (NPE) published in 1977 and revised in 1981, 1998, 2004 and 2007. This policy stipulates that the first ladder of education would be handled and manned by private individuals and public schools but monitored by the government. Consequently, the Nigerian Educational Research Development Council (NERDC, 2012) and National Teachers Institute (NTI) started to organize series of seminars, workshops and lectures to educate proprietors of nursery schools on how the goals of nursery education could be achieved, (NERDC, 2012), so also the state government organized such for teachers.

Importantly, early childhood education is an educational programme and strategy, focused on children from birth to the age of 5 years. This period of time is widely considered the most vulnerable and crucial stage of a person's life. Early childhood education is geared towards guiding children to learn through play, and it is sometimes referred to as "pre-school" or "infant" or "child" care programme (Lewis, 2011). Similarly, Early Childhood Education is viewed as the organized practice of educating those who are in their early years. Notably, early childhood education is the key to building a great foundation for a child's educational success, and learning habits to form patterns of life that are not easily changed in later years. Thus parents and Early childhood educators should endeavour to establish good habits and productive patterns of behaviour for children in their custody, to enable them achieve greater educational success, (UNICEF 2007). Besides, Early Childhood Education is viewed as being able to cater for the present circumstances where parents are unable to give sufficient time to their children due to high demand for labour force. This further necessitates the need for early childhood education programme.

Significantly, early intervention is crucial because skills developed in Early Childhood form the basis for future learning and labour market success, making Early Childhood a critical time for human capital accumulation, (Naudeau, Jamison, Breman, Measham, Kataoka, & Valerio, 2011). However, in cognitive and overall development, before a child enters primary school often have long lasting consequences on children, their families, and society at large, and they are more costly to remedy. Conversely, evidence from many countries shows that quality ECE can narrow the 'opportunity divide' and reduce poverty, ethnic and linguistic disadvantages (UNESCO 2010). The role of early childhood education in the life of a child represents the transitional ground that prepares the child mentally and psychologically for the expectation and sustainability into model primary education in nearest future.

Despite the overwhelming case for building strong foundation, early ECE remains a peripheral concern within education system virtually everywhere, characterized by insufficient resource and fragmented planning (UNESCO 2011). Evidence strongly suggests that those who need ECE the most receive it the least. The majority of poor children in low and middle income countries do not have access to high quality ECE (Naudeau et al., 2011). Household poverty and low levels of parental education are two of the most critical barriers to early childhood programme (UNESCO 2010). In spite of these barriers, accessibility and quality of programme need attention. Thus, the call for the implementation of Education For All (EFA) as stipulated by (UNESCO 2011). Irrespective of locality, town or country the implementation of EFA will be a contributing factor to breaking poverty cycles and enhance quality foundation for subsequent education. This present study will no doubt be a pointer to the influence ECE has on academic, social and moral behaviour of pupils and its benefits to the society at large.

2.2.1 Emergence and Philosophical Views of Early Childhood Education in Nigeria

Early childhood education in Nigeria can be traced back to the colonial days, when it was the preserve of the children of colonial officials and the elites. The number of such institutions thus increased as a result of influx of children of various European and American citizens working in different parts of the country (Onibokun, 1985). Professionals were on the increase, fast emulating the European officials in sending their children to pre-school institutions.

The Federal Government of Nigeria launched the Universal Primary Education (UPE) in 1976. Though the National Policy on Education did not recognized the significance of early childhood education, the provision was to be ensured by private efforts invariably denying the children of the “poor” in the public schools access to it. This anomaly was however corrected by Universal Basic Education scheme (UBE 1999) which made it possible for every child to go to school prior to primary to junior secondary school without bothering about the school fees. This also highlights the need for Early Childhood Education, for Nigerian children irrespective of family background.

The establishment of Universal Basic Education (UBE) and its implementation has been a serious effort in the provision of Early Childhood Education programme in Nigeria with specific reference to Kano state. The UBE scheme provides for every child between ages 3-8 years the opportunity to acquire quality education, despite differences in their socio – economic status, gender, environment, moral behaviour, social status and intelligent quotient. In ensuring ECE implementation, the Kano State government, in line with the Federal Republic of Nigeria's (FRN) National Policy on Education (NPE) section 14a; established ECE section in existing Public Primary Schools within the 44 local government area in the Kano state. Teachers are mandated to be retrained at workshops and seminars during vacation and also to acquire knowledge beyond grade II teacher qualification or SSCE. That is a minimum of NCE qualification to ensure that quality teachers are employed for good knowledge delivery, good moral and positive role model at this level and provide a monitoring team who will supervise these schools.

Pre-primary Education Objectives

1. Effect a smooth transition from the home to the school.
2. Teach co-operation, team spirit, and social interaction.
3. Prepare the child for primary level of education.
4. Provide adequate care and supervision for children while parents are at work (farm, market, offices school etc).
5. Inculcate in the child spirit of enquiry and creativity through exploration of nature, environment, art, music and playing with toys.
6. Teach rudiment of numbers, letters, shapes, colours etc through play.

7. Learn good habits especially good health habit and good moral values e.g greeting (NERDC 2012).

Primary Education Objectives

i. Inculcate permanent literacy, numeracy and ability to communicate effectively.

ii. Lay a sound basis for scientific and reflective thinking.

iii. Give citizenship education as a basis for effective participation in and contribution to the life of the society.

iv. Mould character and develop sound attitude and morals in the child.

v. Give the child opportunities for developing manipulative skills that will enable him to function effectively in the society within the limits of his capacity.

vi. Develop in the child the ability to adapt to changing environment.

vii. Provide the child with basic tools for further educational advancement, including preparation for trades and crafts of the locality (NERDC 2012).

In addition, the National Policy on Education, (NPE 2007) specifies strategies for implementation of the above objectives as follows:

1. Ensure private and public efforts in the provision of pre-primary and primary education.
2. Make provision in teacher education programme for specialisation in early childhood education.
3. Ensure that medium of instruction is principally, mother language but unfortunatel y conventional schools use English. In line with this Adebayo (2005), stated that standard of nursery schools is measured by the level of pupils mastery of the language (English) which is at the disadvantage of mother tongue presented by UBE (2009). This will definitely create a gap between the theory and practice of education in the country. According to Fafunwa as quoted by Adebayo (2005),

instruction through mother tongue at early stage of education helps to develop curiosity, manipulative ability, moral dexterity, mechanical comprehension on hard - eye co-ordination.

4. Qualitative production of textbooks in core subjects and others.
5. Ensure that main method of teaching is through 'play way method'
6. Regulate and control the operation of pre-primary education, which can only be achieved through effective monitoring and supervision team of both Federal/State Ministries of Education.

Though the philosophy of Early Childhood Education is generally tied to the concept of "Good life" or the best life which every society wants for its citizen, the conception of "good life" may differ from one individual to another. "Good-life" means helping children to appreciate and strive towards that which brings joy, that is more profound and lasting than happiness". Good life also means tolerance, love, service and the ability to give and take. It means a delight in creating an honest craftsmanship and recognition of the beauty inherent in the rightness of things for their purpose (Evans, 1995).

Therefore, the philosophy of early childhood means much more than just teaching certain skills and facts. It strives for total development of the child which entails physical, mental and spiritual growth, feeling, attitudes, and relationship with others, his/her character and personality. It is also concerned with the child, as an individual possessing certain innate tendencies or activity (NTI 2007).

In essence, the implication is that the early years determine the future physical, social, emotional and intellectual capabilities of the child. Scheweinhart and Weikart, (1980), observe that an enriched early childhood experience permanently enhances childhood competence to meet social expectation, advance appropriately in school, avoid trouble and have high aspiration for children. Educators should therefore ensure that the learning environment is well equipped with instructional materials, conducive environment for learning and use of play way method in teaching that will enhance perception of future learning and developments.

2.2.2 Pre-requisite (Domain) of Early Childhood Development

Development describes the growth of human throughout the lifespan, from conception to death. The scientific study of human development seeks to understand and explain how and why people change throughout life. This includes all aspects of human growth including physical, social, emotional, cognitive (perception) and personality development which enhance exhibition of potential skills that enable individual excel in all aspect of development (Cherry, 2005). The scientific study of development is important not only to psychology but also to sociology, education and health care. Development does not just involve the biological and physical aspects of growth but also the cognitive and social aspects associated with development throughout life (Cherry, 2005). Importantly, practical applications of studying human developments, is understanding how and why people change and grow, this knowledge is required in knowing how ECE pupils develop to ensure their full potentials as specified below.

a) Physical Development

Physical development is the progress of a child's control over his body. This includes control over muscles, physical co-ordination, ability to sit and stand. These are the initial developments in a child's growth and development. With age, there are many more developments that take place. Physical development is characterized by how individuals grow throughout their lifespan. This type of development includes the physical changes occurring from birth through adolescence to adulthood. Physical development varies, but is guided by milestone achieved during certain age ranges.

Between ages three to five (the preschool period), physical development is being further coordinated. Skill-building in other domains such as cognitive, emotional and social developments allows preschoolers to demonstrate a greater degree of control in larger motor movements, as well as refinements in small or refined motor capabilities. For instance preschoolers stand on one foot, jump, begin to walk downstairs with alternating feet and possibly make skipping leg movements. Additionally, a child of this age has developed the physical ability and coordination to use eating utensils, such as spoon or fork, draw shapes with a writing tool, cut with children's safety scissors, and get dressed with minimal adult assistance.

The last years of the Early Childhood developmental period are between ages five to eight. At this time, children will have typically begun kindergarten and moved into the elementary years. Physically, children of this age are taller and stronger than their younger preschool -aged peers. Motor coordination is much more refined., and young grade-school-aged children can write letters and words with pencils, cut well with scissors, draw pictures of people and objects, and dress themselves with no adult assistance. Large motor physical abilities progress significantly throughout this period and they include walking well down stairs with alternating feet, running at a fast speed, throwing and catching ball with accuracy, hitting a ball with a bat and jumping. At this point in physical development children are generally ready to begin team such as T-Ball, soccer and basketball (Papalla et al., 2007). Therefore, a child who has obtained these developments is said to be physically developed but in rare cases individuality and disability which need to be corrected either medically or through modifications hinder or slow down certain development.

b) Cognitive Development

Cognitive theorists and behavioural theorists play a role in determining who the child is, in terms of abilities and skills acquired. Piaget, a cognitive theorist, also referred to as an epistemologist did conceptualize cognitive development theory to adopting and organizing the environment around. Adaptation occurs anytime there is new information or experiences. An individual must adapt the new information into psychological structure. That is when anything new presents itself, the existing mental development placed through the complementary process of assimilation and accommodation (Wadsorth, 1984).

Young children are not only growing physically during early childhood, but they are also growing mentally. Children of this age 0-6/8 years continue to advance in their skills and interaction with the world around them. These pupils also make tremendous leaps on how they process, store and use information. Quantifying cognitive change is a bit tricky, because of the number of new neurons or measure of connections. There are reliable theories, on cognitive development such as Piaget's stages of cognitive development, Erikson's psychosocial stages, and Bron Fenbrenners's ecological model to give away to best in understanding and to measure children's mental and social development and progression. According to Piaget, children in the pre-operational stage of development build on skills learned and mastered during the sensory-motor stage. During this stage, young children's play becomes increasingly imaginary and filled with fantasies. As children develop cognitively, their play will move from simple make belief to plot involving more characters and scenario games with sophisticated rules etc. Piaget also stresses that play isn't fun but an important part of brain development, (Oswalt, 2008).

However, high acquisition of vocabulary is better attained with increase in age, quality education and cognitive ability of the individual child.

Each child is unique and grows at his or her own pace and time. The intellectual achievements of early childhood are remarkable, although many abilities remain limited or are partially developed. In the area of memory pre-schoolers reveal accurate memories by asking (adults) questions about specific parts of an experience and helping them reconstruct the events. One reason why children sometimes seem to have poor memories is that, they often remember only the feature of an experience that captures their attention rather than aspects adults consider relevant. For instance, the child will only remember eating groundnut and not who won the game. Which shows that children are better at remembering the general sequence of familiar events; like going to the departmental stores and getting a shopping cart, selecting items, paying to the cashier and loading items in the car (Encarta, 2009).

Similarly children adapt to solving practical problems e.g. moving a stool in front of the sink to reach the shelf. These children lack the logical reasoning skills that support formal or abstract problem solving. However, they show remarkable solution to informal challenges when the child finds out how birds nest is constructed with an adult's guidance. At age three, most children have difficulty following basic rules, they may count objects more than once and may count in the wrong order. At age five or above most children have mastered these basic principles of counting; as children mature, they begin to group mental processes of work. Thus at age two, children have simple awareness that guides people's action. At age three, they can appreciate how beliefs and desires are subjective, and how they promote mental experience that differs between people. Thoughts may not accurately reflect reality because people can make mistakes. As children develop "theory of mind" they can better understand others and themselves and become more skilled social partners (Encarta, 2009).

Essentially, early childhood is a time of amazing stride in language development. At about 3-5 years, children are already putting words together into simple sentences, mastering grammar and undergoing a “vocabulary explosions” between 6 – 8 years that will result in a vocabulary of more than 10,000 words. Preschoolers acquire new words at a rate of five –six new words daily as they empty intuitive rules for understanding the words meaning at their first exposure to them (Encarta, 2009).

Husek (2005) ascertains that intelligence (academic achievements) has two closely inter-related parts and it develops in a series of stages respectively. Assimilation and accommodation, often in conflict but provide impetus for intellectual ability development, constant balance of the two triggers intellectual development. Importantly intelligence develops in series of stages leading from one to the other because without the accomplishment of the first stage, the individual can’t move on. Notably here, the individual child moves gradually from one stage of intellect to the other, which is from kindergarten or pre-primary before the formal level of education. However, Piaget’s in his theory, did not put into consideration individual differences, (genes) and environment which play a vital role in the comprehension of what is taught. Emphasis was more on stages than genes and environment which influence, intellectual ability of an individual.

Piaget's central claim is that increase in reasoning skill over time were punctuated by shifts in perspective, which could only be called qualitative change from one stage (or "type,") of thinking to another. This is a thoroughly cognitive theory; for Piaget, children start out as concrete and egocentric thinkers (infants even have to learn objects that persist when they are out of sight). As they gain more cognitive ability with age, they begin to be able to "decentre" and see things from another perspective. But they are still concrete in their approach to things. More experience and some cognitive reorganization eventually allow most people to become abstract thinkers.

Thus, Piaget's stages of cognitive development specify pupil's perception at each stage of life. Viz: -

Table 2.1 PIAGETIAN STAGES OF COGNITIVE DEVELOPMENT

Approximate Age Range	**Stage**	**Typical Developments**
Birth to age 2	Sensorimotor	Children develop the concept of object permanence and the ability to form mental representations.
Age 2 to 7	Preoperational	Children's thought is egocentric; they lack the concept of conversation and the ability to decenter.
Age 7 to 11	Concrete Operations	Children can decenter; they acquire the concept of conversion; but they cannot reason abstractly or test hypotheses systematically.
Age 11 or 12 and above	Formal Operations	Children begin to reason abstractly.

Source: Adapted from Piaget, Inhelder (1968) & Elui, (1999).

c) Psycho-Social and Emotional Accomplishment

Emotions and social behaviour are based on the child's developmental stages and temperament. Every child has an individual temperament or mood. Some children may be cheerful, adaptable and easily develop regular routines of sleeping, waking up, eating and other daily activities, tend to respond positively to new situation, while those who are not very adaptive are likely to have irregular routines and tend to respond negatively to new situation (Merek, 2006).

According to Erikson, (1956) in Elui (1999), socialization processes consist of eight phases "the eight stages of man". Each stage is regarded by Erikson as 'Psychosocial crisis which arises and demands resolution before the next stage can be satisfactorily negotiated. However, attainment of these stages (that is basic trust versus basic mistrust , autonomy versus shame, initiative versus growth, industry versus inferior, intimacy versus isolation, generality versus self absorption , integrity versus despair, identity versus role confusion) are determined by both environmental and hereditary factors. That is, individual differences play a great role in the attainment of these stages specified above. Importantly, parenting style which a child is exposed to and the peer group an individual interacts with, are likely to determine who the child will be in the future. Identification with any of the stage will assist this study in grouping the pupils and to measure social behaviour and moral behaviour status of the individual child and how it affects the academic achievement of each pupil.

2.2.3 Types of Early Childhood Education Programmes

Early Childhood Programme offers multiple Social and Economic benefits for parents and their children. Parents long for environments where their children are nurtured with real affection, receive individualized attention and are appreciated for their uniqueness, have new experiences and learn new skills. Quality Early Childhood programme have common principles, approaches and tools that guide practice. There is recognition that children’s earliest experience matter deeply, laying the foundation for lifelong learning behaviour and health. Families and communities are viewed as partners who strengthen the programmes ability to meet the needs of young children. Respect for diversity, equity and inclusion are acknowledged as essential for optimal development. Research also shows that a planned curriculum, anchored by play, best capitalizes on children’s natural curiosity and exuberance to learn. Therefore, choice of programme for siblings matters for effective development of pupils; school programmes needed for pupil’s development; School programme needed for pupils development..

i. Preschool as personal social enrichment (social adjustment).

ii. Preschool as academic preparedness.

iii. Preschool as compensatory approach.

iv. Maria Montessori approach school.

v. Islamic nursery school.

vi. Public school.

vii. Waldorf Early Childhood programmes.

viii. Reggio Emilia approach to Early Childhood.

a.) Preschool as Personal Social Enrichment

This programme avoids academic skills, but is designed to develop personal skills. An implicit assumption is that if the children are allowed to actualize the potential of present development of pupils such as habit formation, toilet training, they can tackle such demands when the need arise (developing capacity to adjust in future). Advocates of personal social enrichment uphold the view that there is ample time for academic work later in life. Now the child is allowed to learn to appreciate art, nature, people and themselves (Mitchell, 1980). Pupils should be taught academic activities cum social behaviour side by side because the earlier the better, “that is, “catch them young”. Academic activities are equally important as well as social behaviour when learnt by the child. A programme which solely focuses on social interaction of the pupils not giving detailed scrutiny of other developmental features of a child will not provide quality improvements that will necessitate quality education in subsequent years ahead, which the present study intends to investigate. Learning experience should not be limited solely to social interaction but moral and academic activities inclusive.

b) Preschool as Academic Preparation

According to Mitchell (1980), schools under this category, stress academic preparedness such as English language, mathematical skills, Exploration, Science, etc. Advocates of this school “academic preparation” programme, base their reasoning on the following premises:

i. The earlier children start on the formal academic paths the earlier the completion of academic training.

ii. Learning comes easily to pre-school children and their eagerness for academic skills could be capitalized on.

iii. Intellectual growth is rapid in the early years; as such education will help maximize its growth.

Preparing the pupils for academic activities is a task that should be tackled at early stage of a child’s academic pursuit so as to capture the eagerness for adequate academic skills in the future. This programme is similar to the present study which intends to measure academic achievement scores of pupils in Mathematics, English Studies and Basic Science at primary one. However academic activities should not be left on its own at the expense of other developments. Therefore other developments should complement the academic task bearing in mind that all work and no play makes jack a dull boy.

c) Pre School as Compensatory Education

Compensatory education offers supplementary programmes or services designed to help children at risk of cognitive impairment and low educational achievement succeeds. Poor children do worse in school than their well-off peers; they are more likely to experience learning disabilities and developmental delays. Poor children may score between 6 and 13 points lower on various standardized tests of IQ, verbal ability and achievement. Poverty also has a negative impact on high-school graduation and college attendance. Children raised by a single parent, children who have more than two siblings, children by teenaged parents and children raised in poverty-stricken neighbourhoods are also at risk of low academic achievement. Though, in rare cases some of these children who attended such programme (ECE) excel than their counterparts from advantaged homes or who attended different programme.

Numerous programmes have been created in order to help children at risk reach their full potential, among which is the compensatory education which include Head Start, the Chicago Child-Parent Centre Programme, High/Scope, Abecedarian Early Intervention Project, Smart (Start Making A Reader Today), the Milwaukee Project and the 21st Century Community Learning Centre. In Germany and Great Britain Early Excellence Centres are widely discussed programmes of compensatory education. Not all of these programmes have been proven to be effective. However, scientists were able to identify social programmes that work; among these are the High/Scope Perry Preschool Project, the Abecedarian Project, and Smart (Masse & Barnett, 2002). These not commonly found in Nigeria except with the use of extra hour lesson at home after school.

Differences also exist among children from low socio – economic status families. They are less likely to cope with the demands of the first grade than are children of middle socio – economic status families. This is not farfetched since there is the tendency that parents of children of the middle class are likely to provide materials or opportunities that will enhance preparation for entrance into the first grade e.g. educational materials like alphabets, Lego, and attendance of day care school, center/nursery, extra lesson then graduate into play groups, before commencing pre-primary education and primary (Mitchell, 1980). On the other hand the school will meet up the demands of such pupils from low socio – economic status by providing adequate facilities, personnel play and written materials. However, provision of adequate facilities and trained personnel thus enhance better perception of concepts, and ability to cope with school demands.

Similarly, the present study advocates for provision of educational items, trained personnel and play materials which will be made available to all pupils in schools irrespective of economic status of parents or school ownership (public or private) that will assist pupils in solving sums, and ability to access learning experience.

d) Montessori Approach (Nursery Education)

Mitchell (1980) observes that the Montessori nursery education approach blends both academic preparations with persona -social development. Montessori approach opined that children should progress at their own pace in an environment filled with toys and games; better utilization of which will enhance the child's thought process. Maria Montessori early childhood education programme is designed for children ages 3-6. Schools, within this programme are directed through a sequence of materials that offer hands-on learning. Teachers are known as directors, as they direct children to appropriate activities, instead of constant teaching. Directives come as a result of the teacher's observations and carefully maintained notes. Children tend to stay with their teachers for three years. Though this programme is provided in private schools, but a few public school systems are implementing Montessori approach in their school programmes. Recently public schools started ECE classes operation especially in Kano State as stipulated by UBE. Performance of pupils is likely to be more effective compared to other pupils with non ECE experience in some public schools.

Furthermore, some psychologists like Piaget are of the opinion that skills taught in Montessori schools will enhance easy acceleration from preoperational stage to concrete operational stage which is the level at which an individual adopts abstract concept. This age group falls in the range of target group of present study. That is pupils within ages of 2-7 years, in this environment are provided with stimulating situation in which the child sense perception, starting with things and after words extends gradually to qualities and forms. The child moves freely, but freedom is understood as the discovery of his own dignity and awareness of the value of his own personality and that of others. The aim is to make the child healthy, thoughtful, industrious, well behaved, and useful to him and others.

Learning in Montessori classroom, is that of pupils discovery. The pupil is the teacher and utilizes the structured materials to enhance learning. Learning comes from "….working repeatedly on logically connected projects in order to satisfy his curiosity, and in order to build his own sense of competence" (Montesorri, 1974). As a child repeatedly works on projects and discovers his/her own knowledge he/she is bound to make mistakes. Montessori said that it is through these natural mistakes, that pupils learn how to critically, analyses and resolve problems within the environment without relying on others to solve the problems for them. "Each child discovers mistakes through feedback given by the project materials rather than by the teacher. The teacher avoids pointing out mistakes in favour of self-evaluation by each child. Instead of judging and correcting, the teacher advises the use of different complementary project materials, or "teaches again," presenting a material from a different angle", Learning is doing; it is to experience through discovery, manipulation, critical thinking, through mistakes and through problem solving skills. In the process of learning, children can gain self-esteem and generalization skills prior to the first grade that will prepare them to become a life-long learner, forgetting that individual difference plays its own role in child's development, which is influenced by genes and environment.

Montessori's approach, notably develop pupils' potential in its fullest in preparation for subsequent learning. Likewise the present study which intends to investigate ECE impact on pupils academic, social and moral behaviour for adequate development, for future learning and pupils ability will be determined.

e) Public School

This programme unlike those discussed earlier, is state-funded, and is primarily available to lower-income families. Some States provide the programme to all children within the district. Availability differs from state to state, and district to district within each state. Teachers apply the best teaching methods in early childhood practices they know, in an attempt to better prepare the children for their future learning. Recently with the introduction of UBE scheme most public primary schools in Nigeria started off ECE programme, sponsored by the government which was flagged off by Kano state for education to take off on solid footing and this will provide equal opportunity to pupils irrespective of economic status of their parents. Though, most public schools are funded by state or local governments in recent times parents are levied to complement the state government/community efforts.

f) Waldorf Early Childhood Programme

In Waldorf Early education, the teacher demonstrates practical, domestic and artistic activities, which the children are to imitate. Imagination is encouraged through storytelling and dramatic play. Toys used are created from natural materials only, with which to play and to explore in the classroom. Curriculum is based on the three developmental phases of childhood: birth to 6 or 7 years of age, ages 7 to 14 and 14 to 18. Waldorf founder, Rudolf Steiner, believes that children in this first phase of childhood learn best through imitation. The first phase, which is the category of pupils the present study intends to use is for children between ages 6 – 7 years in primary 1. This type of programme is commonly practised with pupils in primary and secondary schools in our present school system in Nigeria, in private schools or schools of the elite as the case may be, though in recent times some states have made effort in providing, such programme.

g) Reggio Emilia Approach to Early Childhood

The Reggio Emilia approach is another programme with Italian roots, like Montessori. In this type of programme, teachers, parents, and children collaborate in the learning process. If children show an interest in an activity, teachers will provide ample learning opportunities across the curriculum to arouse interest. Schools also provide information to parents, based on their questions and needs, to assist the children in the learning process. Parents are frequently found participating in the classroom. Assessments are made via photographs, videotapes, tape recordings, and written documentation. Children also stay with their teachers for three years, Reggio Emilia programmes are found in private schools, though some public schools around the country adopt this method. In most cases pupils who attend such schools are children of the elite or individuals that matter within the society due to high funding. Notably, such approach will take care of both cognitive needs and physical motor skills that will enhance learning in the future. This approach is commonly found in private schools or schools owned by Non – Governmental Organisations and staff schools attached to Colleges, Polytechnics or Universities in Nigeria.

Although, Montessori also opined that pre-school (ECE) education for children under the age of six was necessary and that children learned from having the freedom to explore and manipulate the environment and also children learned through interacting with their peers and with specifically designed materials available within school environment, funding is not on the high side. The environment must be structured, organised and are placed aesthetically with learning material for the child. This actually called for the crucial nature of educational concerns to children who exist in ECE classrooms such as: - Art and play clay corners, construction, history, science, home and shopping corners. These corners give rooms to interaction, acquisition of skills and knowledge that will enhance moral, social and academic achievement of skills (Montesorri, 1974).

Similarly, early interventions are the most cost effective in that they minimize the need for special interventions, have the most significant effects on children’s development and learning and have a decisive learning impact on how children grow to adulthood. An early start in education is particularly important for children from disadvantaged families; by the time children enter primary school, disparities in language skills linked to income and other factors are often marked that children never catch up. The issue of differences between home and school language is particularly important in impeding the progress of immigrant children.

Thus, children who do not receive guidance in monitoring or regulating their behaviour during the early years have a greater chance of being anxious, impulsive and behaviourally disorganized when they reach school (UNICEF 2001). This implies that Early Childhood programmes can not only benefit all children, but also can help compensate for young children’s negative experiences as a result of conflict, lack of stimulation or nutritional inputs – more than 200 million children in developing countries under the age of 5 are exposed to these multiple risks that negatively affect their development (Naudeau et al., 2011:37). This issue facing educational sector can be resolved through the implementation of global act Education For All in most countries irrespective of developed or under developed by the government and UNICEF aid.

2.2.4 Relationship between Early Childhood Education and Primary Education.

Early childhood education provides a good foundation for later learning and is an integral part of life learning. The main purpose of linking early childhood education and primary education is to ensure that there is smooth transition for children from one level another (UNESCO, 2006).Thus, in keeping in line with Education for All [EFA] orientation, government and education providers need to ensure smooth transition from pre-nursery to primary school so that the gains made in the former will be firmly sustained in later years. This work briefly outlines the new contexts that have prompted increased policy attention to this issue and reviews two current sets of approaches to the transition and challenges in line with (UNESCO 2006).

The growing policy attention given to Early Childhood services and primary education stems from three inter-related contexts as follows:

1. The expansion of ECE programmes which has now become a world-wide trend. The global pre-primary gross enrollment ratio grew from 33% to 40% between 1997-2005. And the world regions recorded an increase in the ratio 10% to 14% in sub-Saharan Africa 15% to 17% in the Arab states, 40% to 45% in East and the pacific, 56% - 62% in Latin America and the Caribbean and 76% to 79% in North America and Western Europe (UNESCO 2006).
2. The attention of the government is shifting from enrolling children in school to ensuring the successful completion of primary education by all children. Despite considerable progress, this remains a distant reality particularly in the developing countries, (UNESCO 2008). The introduction of Universal Basic Education in Nigeria (2009) makes it possible for a child to attain Basic Education in recent times in Nigeria, which thus emphasizes pupils' attendance of ECE programmes prior to primary education in order to start on a sound footing which will enhance subsequent learning.

Effective linkages between ECE and primary education may be difficult to achieve, given the divergences between the two institutions. Primary schools are well established and relatively uniform institution, which became part of national educational system as early as the end of the 19th century. In essence these programmes for young children evolved more slowly, with family and maternal care as the usual means of child care until most part of the 20th century (OECD, 2006.)

UNESCO & EFA (2006) specify that two well-known approaches that could aid effective transition from ECE into primary education are “school readiness” and “ready schools”. School readiness stresses the role of ECE in promoting children’s development and adapting to the practice and environment of primary school, which involves the identification of character that individual child should display if they are to be considered “ready for school” .

School readiness includes development in five distinct but interconnected areas:

1. Child health and physical development
2. Social and emotional development
3. Approaches to learning or enthusiasm, curiosity, persistence
4. Language and communicative skills
5. Cognitive development and general knowledge e.g cognitive and problem solving skills, such as learning to observe and to note similarities and differences. (UNESCO 2006).

While “ready school” approach emphasizes the schools’ adaptation to the child developmental needs. It also focuses on the accessibility of primary school as well as characteristics of the school environment that can encourage or hinder learning (Woolhead & Moss, 2007). Notably schools carry a major responsibility for readiness and give attention to aspects such as; school, individual difference of pupils, administrator leadership, environment, curriculum, methods of teaching, teachers quality / support, parental and community involvement which will definitely enhance effective linkage between preschool and primary education.

Regardless of the pedagogical approach adopted, various strategies should support continuity and a smooth transition for children to primary school. Some upstream strategies include administrative integration of Early Childhood Education within the education system. The development and use of integrated curriculum linking early childhood education and primary education goals, content and common methods, teacher training and qualification schemes for Early childhood and primary school educators (Kago, 2007).

Furthermore, UNESCO (2007) specifies more relational strategies needed to improve children's experience when moving from ECE to primary school. These include:

1. Transferring classmates together to the same primary classroom
2. Conducting information meetings for parents about life and activities in primary schools
3. Requiring school and kindergarten to work together
4. Providing opportunities for teachers to get to know families of children

Although UNSECO (2007) specifies some strategies that could influence smooth transition from ECE to primary school level nevertheless individual difference that is the child's ability, school environment, personnel with relevant teaching qualification, method of teaching at this level irrespective of the economic status and language (media of communication) has a role to play in starting education on a sound footing.

2.3 Moral Behaviour

2.3.1 Concept of Moral Behaviour

Moral behaviour is the process through which children develop proper attitudes and behaviours towards other people in the society, based on social and cultural norms "rule and laws". Moral behaviour is however a concern for every parent, teaching a child to distinguish right from wrong and to behave accordingly. Moral behaviour can also be said to be a complex issue that existed since the beginning of human civilization has been a topic of discussion among most distinguished psychologists, theologians and culture theorists like Jean Piaget who explored how children develop moral reasoning. He rejected the ideas that children learn and internalized the rules and moral of society by being given the rule and forced to adhere to them (Miller, 1993).

Many researchers like Beresford Miller (1992), have focused on how children's behaviour is shaped by their observations of role-models in the world around them. These roles – models include peers, figures in the media, and other people besides their parents. In fact, researchers have often demonstrated that other people's positive and negative behaviours can be imitated by children. There is good evidence that children's prosocial behaviour (e.g., shopping, helping, and caring) can be increased by observing models that show such behaviours themselves.

In a similar way, seeing others behave in antisocial ways could potentially encourage negative behaviours. In one famous series of experiments in the 1960s, for example, Albert Bandura demonstrated that children who observed an adult behaving aggressively towards an inflatable toy doll were more likely to reproduce that aggressive behaviour themselves. This linkup between what you see around you and what you do yourself, underpins many of the concerns people have about violence on television, although this remains a controversial topic in both public and academic debate (Miller, 1992).

If children do learn patterns of moral behaviour from others, is it reasonable to assume that the way they think about moral situations is also influenced by social factors. Some evidence for this is found in cross-cultural studies of children's reasoning about moral dilemmas. For example, imagine that a man is about to catch a train to get to his best friend's wedding, where he is due to serve as best man. But in the train station, his wallet and train ticket were stolen. He then sees the opportunity to steal a ticket from another person. Should he steal the ticket to get to his friend's wedding? A research study by Joan Muller and David Beroff (1992), showed that when faced with these kinds of dilemmas, Indians and Americans (aged 8, 12, and 21 years) differed in their choices. An average of 84% of Indians chose to meet their social obligations (e.g, to serve as best man at the wedding) even if it meant breaking a principle of justice (e.g, by stealing). But only 39% of Americans tend to resolve the dilemmas in this way. This kind of evidence strongly suggests that children's beliefs about morality are at least partly shaped by the value systems of the society in which they are brought up. That morality is shaped by value system of the society and individuality.

Despite this evidence, children's moral sense develops by watching others and "internalizing" the values and norms they perceive in the world around them. Many researchers have placed more emphasis on systematic changes in children's thinking as they get older. Importantly, Bandura in Daena's (2009) view that moral behaviour is learned through a process called behaviour modelling. Individuals do not actually inherit behaviour tendencies but modelled in these principles: environmental and observation. Thus in cognitive theory, the learner is guided by cognitive processes rather than formed or shaped by reinforced practice (Direct reinforcement) directly experienced by the learner. A vicarious reinforcement, observed consequence of the behaviour and self – reinforcement feeling of satisfaction or displeasure for behaviour gauged by personal performance standards). Four components responsible for learning, performance and acquisition are as follows: observation, attention, retention and reproduction.

i) **Observational Learning:** That is children learn behaviour responses from observing others either personally or through the media and environment. Observational learning is also known as imitation or modelling. In this process, learning occurs when individuals observe and imitate others' behaviour. There are four components processes influenced by the observers' behaviour following exposure to models. (Allen & Bantrock, 1993). In essence, morality could be viewed as being embodied with full potentialities, reasoning, abilities, innate of self and environment where the humans find self, which are all in line with the present study seeks to determine relationship between ECE, and moral, social and academic achievement of primary school pupils.

ii) Attention: Individuals cannot learn much by observation unless the features of the modelled attend to what the individual is doing and saying in other to reproduce the model's behaviour (Allen & Bantrock, 1993). The irony is that sometimes an individual may exhibit certain features that are inherited, and observed features could be exhibited concurrently, but should be corrected if it is not an acceptable norms within the society.

iii) Retention: In order to reproduce the modelled behaviour, the individuals must code the information into long term memory. Therefore, the information will be retrieved if a simple verbal description of what the model performed would be known as retention. Memory is an important cognitive process that helps the observer code and retrieves information, (Allen & Santrock, 1993). In the Bobo Doll experiment, the children imitate the aggression they witnessed in the video. The aggressors hits Bobo doll because it was coded and stored in their memory. Notably, in any learning experience, information is learnt, coded and retrieved for later use. For instance, alphabets learnt by pupils at pre-primary education experience will be retrieved and use for spellings of words at primary education experience.

iv) Reproduction: The observer must be able to reproduce the model's behaviour that is learnt and should possess the physical capabilities of the modeled behaviour. Example, the child's ability to skip or ride a bike. Once behaviour is learnt through attention and retention, the observer must possess the physical capabilities to produce the act. The children had the physical capabilities of hitting and pummeling the doll to the ground. In the reproduction stage for instance, the child must have developed the capability of making use of what is learnt. The individual must have developed the capability of making sentences or reading a passage and answering questions from what the child is able to retrieve from alphabets and spelling of words learnt before now.

v) Motivation or Reinforcement: This is another process of observational learning as stated by Bandura in Allen & Santrock, (1993), is that the observer expects to receive positive reinforcement for the modelled behaviour in the Bobo doll experiment where children witnessed the adults being rewarded for their behaviour. Therefore they perform the same act to achieve the rewards e.g. when children witness violence on television being rewarded positively or negatively Thus, they attend, code, retrieve, possess the motor capabilities and perform the modelled behaviour because of the positive reinforcement determined by the media (Bootzin, Bowers, Crocker, Bandura cited in Daean, 2009) theorized that children continue to learn and develop, when a child act is either positively or negatively, rewarded in what will determine recurrence of such action. For instance a child who was asked to kneel down for noise making will not repeat such. Likewise a pupil who scored 15/20 for doing his assignment will ensure that no assignment is left undone, which eventually will enhance academic achievement and behaviour of pupils.

vi) Environmental Experiences:- Bandura reports that individuals that live in high crime/indecent areas act violently than those who dwell in low crime/decent areas. This assumption is similar to show and Mickay's theory of social disorganization as is surrounded by cultures conflict, decay, and insufficient social organization was a major cause of criminality (Bartollas, 1990). Essentially, it is very important for an individual to be introduced to concept or behaviour at an earlier stage; as pointed out by Piaget and Kohlberg that identification of right or wrong be made known to children between 7-9 years, when wrongs are punished and rights rewarded.

In view of the above, moral theorists pointed out that behaviour is learnt through observation, inheritance, practice and gender differences; males believe in justice while the females viewed it as care giver. Thus, this has a role to play in learning situation –

what is taught in class, is better demonstrated and practicalised to enhance effective perception of learning.

2.3.2 Moral Behaviour among Children

Lawrence Kohlberg’s theory and Gauri Dushi pointed out that morality starts from the Early Childhood years and can be affected by several factors such as age, parental interaction, role model interaction, social interaction, school and gender difference to mention a few. Age is an important factor in forming moral concepts and moral behaviour. As the individual passes from infancy to adolescence, he becomes more tolerant towards certain ideals which sometimes do not tally with what he thinks to be good. From unconditional obedience of his seniors in early and late childhood, the individual becomes critical and defiant in early adolescence. But in later adolescence he comes to accept many things which he had earlier rejected.

Parents and teachers alike, worry about the next generation developing strong morals. Increasingly, young people live as though morals are not of high priority. Though, parents are concerned because children do not seem to have the same amount of respect and the strong work ethic that they had, and teachers are more concerned too because students do seem to have a problem with cheating and they lack a sense of compassion for their classmates. The various factors that affect children's moral development are as follows.

A. Parental Interaction

Parents have the greatest influence in a child's life. Parents teach the majority of what is right and wrong when the children are living with them. Interestingly enough, punishment for disobeying rules creates only part of moral judgments in children, and in fact they learn by example. And whichever home they are actually living in will shape how they make moral decisions. Family plays an important role in a child's moral development. His first initiation into the mysteries of the good and the bad is through his parent's acceptance or rejection of his various actions. The actions which are approved by the parents are regarded as good and those rejected by them are regarded as bad. The truth remains that the foundations of a child's moral development are laid in the family.

When children experience interactions inside and outside the home in which they feel safe and cared for and where anger and hostility are not present, they develop a strong sense of self-esteem which develops into a strong moral base. When they see or experience something such as violence that is contrary to their normal way of living, they instinctively know that way of life is wrong. Parents who spend time discussing the basis of their moral principles and the expectations of rewards following those moral principles usually do a much better job at teaching their children to hold to the same level of morals as they were.

B. Role Models' Interactions

Outside parents, teachers, and other role models, schools play a vital part in shaping the morals of the next generation. They place a high value on character traits such as honesty, integrity, and compassion, thus teachers who exhibit these attributes will naturally pass them along. Abraham Lincoln is noted for saying, "What you do, speaks so loudly I cannot hear what you are saying." Inconsistency and hypocrisy on the part of teachers and parents alike can cause real harm to a child's moral development. Other role models can influence a child's life without even knowing they are doing so. For instance, the media provides a direct yet sometimes inaccurate link between children and their role models.

According to Lee (2004), children watch adults to learn behaviour, such as saying "please" and "thank you" in conversation. Hearing children use parents' favourite curse words reminds adults of the importance of modelling appropriate behaviour when children are present. The negative side of children modelling adult behaviour includes the use of alcohol, tobacco and drugs -- both legal and illegal. Many parents model behaviour unconsciously when unaware that those young eyes observe their actions. Adults however, have the ability to change behaviour by teaching or modelling different behaviour.

Many times a role model speaks or acts inappropriately yet a child thinks those actions or words are acceptable simply because someone they look up to have behaved in some manner. However, children need guidance in choosing proper role models that will best shape their moral development. The general social atmosphere also affects the moral development of the individual. It is this reason why the moral behaviour of individuals belonging to cultured societies is markedly different from that of individuals belonging to uncivilized societies.

C. Social Interactions

Various forms of social interaction are needed to develop into well-rounded adults. These include interacting with other adults, family members, and other children, older or younger than they are. Each interaction will reinforce or challenge a child's preconceived ideas about what is morally acceptable. Most children want to have a feeling of belonging and quickly learn the social act that will help them fit in. In learning how to get along with others, children learn by trial and error, how to adjust their actions to be suitable and accepted within the society. Remember, developing strong morals take time to learn. That is for a child to be morally upright there is a need for good parental guidance from teachers and interaction with media effectively.

i. School (Peer Group)

Children are always in search of suitable companions for play. They are influenced by the notions of good and bad that prevail among his chosen companions. The school, too, plays an important role in forming moral concepts. The child is influenced by the notions of the good and the bad, as a result of his relationship with his classmates, teachers and senior students. The propriety of his moral behaviour depends to a great extent on his learning. Children accept many things which they see their seniors doing in the school. Most of what has been learnt at the mother's knee is rejected. The teaching of moral science and a programme of moral education go a long way in the moral development of children and adolescents.

ii. Gender

Gender also plays an important role in moral development Girls are more seized with the sense of guilt and shame if their behaviour does not find propriety in the accepted social or moral behaviour within the accepted moral code. They try to be less critical of the moral tone set by their elders. Boys on the other hand, are more aggressive than the girls and in most cases, set their own standards of moral behaviour and try to stick to them. Hence moral development is a complex process in which the action and interaction of an individual and those surrounding him/her is of great importance (Smith et al., 1992).

2.3.3 Relationship between Early Childhood Education and Moral Behaviour

We all hope that, as children grows up, they will develop a clear understanding of the difference between 'right' and 'wrong'. It is intuitively appealing to see parents as the main influence on children's moral development. But children's beliefs about what is 'right' and 'wrong' really depend on how they were brought up and their interaction with environment. The idea that children learn moral values simply by being punished for misbehaviour is certainly problematic. Of course, children's misbehaviour sometimes does have to be disciplined through immediate negative consequences, especially when the safety of others or of the children themselves is threatened. However, relying on frequent punishments (e.g., shouting, smacking) to encourage the long-term development of positive moral behaviour is unlikely to be effective.

In fact, research evidence shows that parents' use of physical punishment may be related to greater levels of aggression by young children towards their peers. Children are more likely to learn positive moral values from their parents if they are helped to understand those values through explanations or experience. Researchers like Bersofford and Miller (1992) had focused on how children's behaviour is shaped by observations of role-models in the world around them, including peers, figures in the media, and other people besides their parents. In fact, researchers have often demonstrated that other people's positive and negative behaviours can be imitated by children. There is good evidence that children's prosocial behaviour (e.g., sharing, helping, and caring) can be increased by observing models who show such behaviours themselves.

Hence, moral development is the process through which children develop proper attitudes and behaviours towards other people in the society, based on social and cultural norms "rule and laws". Moral development is a concern, for every parent, teaching a child to distinguish between rights from wrong and to behave accordingly to the norms of the society is goal of parenting, though it is said to be a complex issue that existed since the beginning of human civilization. Distinguished psychologists, theologians and culture theorists like Jean Piaget who explored how children develop moral reasoning, rejected the ideas that children learn and internalized the rules and moral of society by being given the rule and forced to adhere to them (Miller,1992).

Miller, (1992) therefore recognized that children learn morality best by having to deal with other groups. Therefore, there is a process by which children conform to societal norms of what is "right" and "wrong" and that the process was active rather than passive, but this might not be applicable to every society, because in recent times media also play an important role in modelling the child either negatively or positively. There is the need for good guidance from parents and educators. Piaget in his theory also found two main differences in how children thought about moral behaviour. Very young children’s thinking is based on how actions affected them or what the results of an action are. For instance, breaking 10 cups is more offensive than breaking one. That they recognized the sanctity of rules meaning that they can’t make up new rule to a game; they have to play by rule of the game or what is commonly known to be the rules. Piaget however called this moral realism with objective responsibility that explains why young children are concerned with outcome rather than intentions in adhering to rule (Robert, 1997).

Definitely individuals will differ based on hereditary and environmental factors. A child may find himself or herself and some individual children derive joy in carrying out certain task (fetching water) irrespective of outcome. Young children should be made to adhere to certain principles that will guide them in carrying out activities that will build an acceptable character in them. However, older children look at motive behind action rather than consequences of action. They are able to rule, examine, and determine whether they are in support or not. In the process of applying the rule, modifications are made to situations requiring negotiation, assuring that every one affected by the rules is treated fairly; hence, parenting styles can best assist the child in making moderate application when the need arises. Piaget however points out that moral learning can be attained easily through co-operative decision-making and problem solving events. He also believed that children develop moral reasoning quickly at early age (Robert, 1997). This could be attained in a situation where the child is faced with challenges in the environment either from parents or peer groups. Notably, the child should be properly guided and monitored at an earlier age, to attain good results, as it is commonly said “Catch them young”.

Piaget, thus posits in his two stages of moral development, that during the first stage, children believe that rules are "fixed and absolute," and they adhere to rules due to fear of consequences. At approximately eleven years of age, however, children view moral decisions more relativistically. This means that moral decisions are made relative to specific circumstances, so that something considered wrong in one situation could be considered right in a different situation. Children in Piaget's second stage (pre – operational 2 – 7yrs) are also more likely to view well-intentioned behaviour as moral, regardless of the consequences of the behaviour (Robert, 1997).

Like his predecessor, Lawrence Kohlberg believes that moral development could also be defined in stages. However, he delineated six stages rather than two. The first two stages of Kohlberg's six stages resemble Piaget's first stage. During these stages, children base their values on what is good for them. They define morality as "obeying rules and avoiding negative consequences" (Robert, 1997) which is what Piaget suggested. What Piaget did not include in his preliminary stage is that young children also begin to see morality as individualistic; they will see whatever meets their personal needs as moral as long as it does not contradict a rule. Also, unlike Piaget, Kohlberg believes that children generally advance from these early stages of moral development around the age of five and seven years. Most likely this group are pupils found in primary 1 that will be subjects for the present study. Therefore they will be guided towards attainment of good morals that will make it possible for this group of children to face challenges in the nearest future.

Furthermore, between the ages of nine and adolescence, Kohlberg believes these children’s definitions of morality shift from consequence to avoidance to successfully meeting the expectations of others. These two stages are called "conventional" because during this period children and teens are adhering strongly to social conventions and norms. However, Kohlberg's Stages 5 & 6: which he proposed as Higher-Focused Morality, maintain is that, at adulthood, individuals "have different opinions about morality" that vary from group to group and culture to culture." At these stages, independent thought creates the basis of individual moral decisions. While Carol Gilligan

(2008) in her critique of Kohlberg's theory suggests that it was biased because no girls/women had been included in his research. Based on research with girls, the researcher proposed an alternative view of moral development called "the morality of care." Gilligan's in her critique explores the theory states that there are two moralities: the one presented by her predecessors, Kohlberg which was dominant among boys, and a second morality that was dominant among girls. For boys, Gilligan defines morality as "the injunction not to treat others unfairly (justice)" and, for girls, "the injunction not to turn away from someone in need (care). Gilligan has adapted her theory to suggest that all boys and girls develop both justice-centered and care-cantered moralities as part of their ethical development, (Gilligan in Crain, 2011).

Furthermore, gender differences should be discharged when it comes to morality. When Gilligan points out that boys viewed morality in terms of “justice” don’t treat others unfairly while the girls were of the view that care be given to someone. When this is built into the child before adolescence. Definitely the child will behave in accordance to the norms of the society, as a good citizen develops good moral reasoning ability.

Similarly, at one time psychologists believed that men and women have differences in moral values and reasoning. This was based on the idea that men and women often think differently and would react to moral dilemmas in different ways. Some researchers like Gilligan Carol hypothesised that women would favour care reasoning, meaning that they would consider issues of need and sacrifice while men would be more inclined to favour fairness and right which are known as justice reasoning (Eisenberg, 2011). However some also knew that men and women simply faced different moral dilemmas on a day-to-day basis and these might be the reason for perceived difference in their moral reasoning. With these two ideas in mind, researchers like Gilligan also decided to perform experiment based on moral dilemmas that both men and women face regularly. To reduce situational differences discern on how gender use reason in moral judgments, they therefore ran the test on parenting situation, since gender can be involved in child rearing (Eisenberg, 2011). The research showed that women and men used the same form of moral reasoning as one another and the only difference is the moral dilemmas they find themselves on a day –to-day basis

Eisenberg (2011) posited that when it comes to moral decision, both men and women were faced with choice of solution as being the moral choice. It shows a gender division in terms of morality does not actually exist in every individual, that is reasoning between genders is slightly different in moral decision. In support of Gilligan's (2008), findings that emphasized that the gender difference thought to be associated with these two (male/female) orientations. The morality of care emphasizes interconnectedness and presumably emerges to a greater degree in girls owing to their early connection in identity formation with their mothers. The morality of justice, on the other hand, is said to emerge within the context of coordinating the interaction of autonomous individuals, of moral orientation based on justice was proposed more as prevalent among boys; because their attachment relationship with mother and subsequent masculine identity formation entailed that boys separate relationship, from mother, for boys this separation heighten their awareness of the difference in power relation between themselves and the adult. Hence gender is an intense set of concerns over inequalities. However due to girls continued attachment to their mothers, they are not as keenly aware, and are less concerned with fairness as an issue than boys' (Gilligan, 2008).

Although moral behaviour does not follow the distinct danger line which Gilligan and Nancy originally reported, the preponderance of evidence is that both males and females reason based on justice and care respectively, but some females are likely to be more curious than the male. Importantly Gilligan's work has contributed to an increased awareness that care is an integral component of moral reasoning despite gender debate on the issue of "moral reasoning". Nodding (1992) also emphasized effort to foster empathy and care response in students in his educational approach based on Gilligan's work. Moral behaviour is an internal factor that could influence both cognition and moral behaviour based on interaction and guidance from either an adult or teacher (educators).

2.4 Concept of Social Behaviour

Social behaviour is a term used to describe the general conduct exhibited by individuals within a society, which is essentially in response to what is deemed acceptable by a person's peer group; or avoiding behaviour that is characterized as unacceptable. This type of human behaviour primarily determines how individuals interact with one another within a group or society.

Similarly, an increasing numbers of young children enter group care, they experience increasingly intimate peer contact (Howes, 1987). By age three or four, most children are part of a social world that is truly egalitarian, a world of peers who are equals (Moore, 1982). In this world, children are expected to share and cooperate, to learn the rules and expectations. As young children go through this process of becoming socialized to the peer society, they gain skill and competence in peer interaction, enter into friendships, develop gender identity, adopt racial and cultural attitudes, form a sense of morals and values, and acquire a host of prosocial behaviours. The opportunity to develop multicultural, multiracial, and multi-economic acceptance will, to a large extent, depend on the integrality.

Similarities and differences reflect social roles within a society. In industrialized societies, women are more likely to be primary caretakers of children and men are more likely than women to be employed outside the home, especially in highly paid occupations. By observing these activities, people form gender roles, or sex-typed expectations. They believe that women are especially nurturing and caring for others.

Gender roles influence behaviour through social interactions, gender identities, and homonal fluctuations.

Gender role is a set of social and behavioural norms that are generally considered appropriate for either a man or a woman in a social or interpersonal relationship. There are differences of opinion as to which observed differences in behaviour and personality between genders are entirely due to innate personality of the person and which are due to cultural or social factors; and are therefore the product of socialization, or to what extent gender differences are due to biological and physiological differences. However, gender roles differ according to cultural-historical context, while most cultures express two genders, some express more, androgyny for example, has being proposed as a third gender. Other societies have been claimed to have more than five genders, and some non-Western societies have three genders – man, woman and third gender. Gender expression refers to the external manifestation of one's gender identity, through "masculine," "feminine," gender-variant or gender neutral behaviour, clothing, hairstyles, or body characteristics Witt, & Wood, (2010). In a classroom setting the teacher is likely to group during play based on sex but during academic activities gender differences should not play a role though there could be comparison between scores attained by each sex.

Importantly, psychosocial theory of young children's stages of development has had tremendous influence on early education. It is important to provide for children a social environment where they can safely exercise their growing independence, and many opportunities to explore and experience competence that are available. A good Early Childhood programme is built on the premise those children’s needs for trust, autonomy, initiative, and industry must be met.

In the Piagetian view of social development, social knowledge is acquired much in the same way as other knowledge. Children use their evolving social cognition, or understanding of other people's problems and how they feel, to organize and structure information about people and relationships in a way similar to the one used in organizing and structuring information about the physical properties of their world (Kholberg in Edward 1986). For instance, children classify the people they meet in relation to themselves and their own existing schema, which have, of course, been shaped by their culture. With other learning, understanding comes from the child's active involvement, not from passive transmission of information. As part of a complex world, children need to make sense of themselves and others. "Simply by being born into the human family, then, young children are challenged to understand self, others, social and moral relations, and societal institutions" (Edwards, 1986, p. 3).

Similarly, Bandura, (1977) opined that behavioural assumption in children are taught about the social world when their responses are reinforced or punished by the adults who shape their behaviour. Social learning theory, which is derived from, but goes beyond traditional behaviourism, does not consider reinforcement as always necessary for social learning. From the social learning perspective, children also learn social behaviours through observational learning; by observing, noting the behaviour of, and imitating or modelling their behaviour on that of a model. Adults and peers can be models. Research has shown that particularly nurturing and warm adult parenting models influence children's social behaviours (Shonkoff & Phillps, 2000). It is possible that children imitate those they like because they want to be like them. In addition, children are more likely to imitate models they observe being rewarded (Bandura, 1977). In essence, events are observed, retained, stored in the memory, recorded by children and they exhibit what they have observed by modelling habits imitated.

While Lev Vygotsky’s sociocultural theory **i**s particularly pertinent to a consideration of social development, it is inseparable from cognitive and language development. It is through language that the child's mind is "joined" with the minds of others to gain insight into the world. "A basic premise of Vygotsky's theory is that all uniquely human, higher forms of mental activities are jointly constructed and transferred to children through dialogues with other people" (Berk, 1994, p. 30). Vygotsky dwells on the role of adults and more experienced peers in transmitting information about the culture and about social skills and expectations. The role of teachers is particularly meaningful in the context of this theory, which underscores their contribution to children's socialization into the larger society. Within the zone of proximal development, the range of tasks that a child is not able to do alone but can be accomplished with help, as teachers are available to children as they learn a variety of skills. In Vygotsky's terms, adults provide scaffolding, an evocative term when we think about the type of support and guidance teachers offer children to help them learn socially relevant skills (Eass, 2011).Thus, exhibition of behaviour by an individual differs in terms of genes inherited from parents and the environment the individual is exposed to determine the social character either pro-social or anti-social that will be exhibited by the individual.

2.4.1 Relationship between Early Childhood Education and Social Behaviour

Social behaviour is a term used to describe the general conduct exhibited by individuals within a society, which is essentially in response to what is deemed acceptable by a person’s peer group or avoiding behaviour that is characterized as unacceptable. This type of human behaviour primarily determines how individuals interact with one another within a group or society. While social conduct is often modeled to create a comfortable social environment, anti-social behaviour such as aggression, or bullying may be defined as negative social behaviour, particularly in instances where other individuals within a peer group behave accordingly (Essa, 2011).

Similarly, positive interactions amongst individuals in a society help create a pleasant environment for citizens, activities defined by peer groups to be acceptable even if harmful to selected individuals or subgroups within a society also relate to social behaviour. Studies of massive human rights violations have helped illustrate the extent to which harmful, but socially acceptable behaviours have persisted in some societies. Examples of widespread acceptance of negative behaviour within a peer group include historical incidents of mass genocide and human enslavement (Essa, 2011).

Research within sociology and psychology have questioned whether traits, such as altruism, may be genetically influenced while, at the same time, be rooted in social psychology. For example, dodging and waving through a crowd is not social behaviour, usually. Others considered it as mere physical objects, as human barriers with certain reflexes. Neither is keeping a step in a parade a social behaviour. Other marchers are physical objects, with which to coordinate one's movements. Neither is it a surgical social behaviour, the patient is only a biophysical object with certain associated potentialities and dispositions. However, let the actor become involved with another self, as a person pushing through a crowd recognizing a friend, a marcher believing another is trying to get him out of step, or a surgeon operating on his son, and the whole situation changes (Rummel, 1976).

With this understanding of social actions, and practices a social act is any intention, aim, plan, and purpose and so on, which encompass another self. These may be affecting another's emotions, intentions, or beliefs; or anticipating another acts, actions, or practices. Examples of social acts would be courtship, helping another run for a political office, and teaching, buying a gift, or trying to embrace an enemy. Therefore social actions are directed towards accomplishing a social act. So long as the purpose is a social act, actions are social whether involving others or not, whether anticipating another's acts, or practices (Rummel, 1976).

Finally, there are social practices, these are rules, norms, customs, habits, and the like that encompass or anticipate another person's emotions, thoughts, or intentions. Shaking hands, refusing to lie to others, or passing another on the right are examples. Not all practices, however, are social. Drinking and smoking habits can be manifested while alone, and many norms can be practiced without being thought of others, such as using the proper utensils when dinning alone. Social interactions are the acts, actions, or practices of two or more people mutually oriented towards each other that is any behaviour that tries to affect or take account of each other's subjective experience or intentions. This means that the parties to the social interactions must be aware of each other and have others self in mind. This does not mean being in sight or directly behaving towards each other. Friends writing letters are socially interacting, as are enemies generally preparing opposing war plans. Social interactions are not defined by type of physical relation or behaviour, or by physical distance. It is a matter of physical subjective orientation towards each other. Thus, even when no physical behaviour is involved, as with two rivals deliberately ignoring each other's professional work, there is social interaction (Rummel, 1976).

2.5 Concept of Academic Achievement

Academic achievement is commonly measured by examinations or continuous assessment, but there is no general agreement on how it is best tested or which aspects are most important procedural knowledge that is skills or declaratives knowledge such as facts (Ward, Stoker & Murray, 1996). For the purpose of this study academic achievement will be measured by administering a standardized test, the items of which will be retrieved from (NERDC 2012 curriculum of primary school). Academic achievement is also a term used in school when students do well in academics; they achieve or do well in an area of school and do well in their studies. Individual difference in academic performance has been linked to differences in **intelligence and personality.** Students with higher mental ability as demonstrated by **IQ tests** (quick learners) and those who are higher in **conscientiousness** (linked to effort and achievement motivation) tend to achieve highly in academic settings. A recent Meta – analysis suggested that mental curiosity (as measured by typical intellectual engagement) has an important influence on academic achievement in addition to intelligence and conscientiousness. Ward et al., (1996) opined that every individual passes through cognitive developmental stages before attaining the height.

2.5.1 Relationship between Early Childhood Education and Academic Achievement

The human brain develops more rapidly between birth and age five than during any other subsequent period. The first five years of life are a time of enormous social-emotional, physical and cognitive growth. A child's ability to be attentive, focused and follow directions emerges in the early years. These early years provide a window of opportunity to "set either a sturdy or fragile stage for what follows." Structured early learning fosters these abilities for later success in school and life.

Academic refers to formal education and studies in a particular high learning or a scholarly organization. Academic achievement is therefore a term used in schools for a student performance in a classroom activity.

2.5.2 Early Childhood Education Influences on Academic Achievement in the Early Years

- Children who participate in high-quality Early Childhood Education develop better language skills, score higher in school-readiness tests and have better social skills and fewer behavioural problems once they enter school.
- Kindergarten teachers in Georgia, the first state with voluntary, universal pre-k for four-year-olds, report that children who participated in pre-k were better prepared for kindergarten, especially in the areas of pre-reading, pre-math and social skills.

- The Oklahoma universal pre-k program significantly improves children's performance in cognitive tests of pre-reading and reading skills, pre-writing and spelling skills, and math reasoning and problem-solving abilities.

Importantly, cognitive or academic achievement of an individual is determined by either environmental or hereditary factors, though provision of quality teachers, adequate instructional materials and effective teaching methods are likely to influence academic achievement of pupils, positively or negatively depending on either the teachers or the pupils ability.

2.6 Theoretical Framework of Early Childhood Education

There are various theoretical views on Early Childhood. This study found influential expression with John Lock's Eighteen Century claims, "Tabula Rasa" in which Ibn Sin (Known as Avicenna in Western world) argued that the human intellect at birth is rather a "Tabula Rasa", a pure potentiality that is actualized through education and comes to know that knowledge is attained through empirical familiarity with subjects in this world which are abstract universal concepts developed through a syllogistic method of reasoning and observation that leads to pre positioned statement which when computed leads to further abstract concept (Wikipedia, 2009).

In addition to the conceptual frameworks which indicates high quality Early childhood education, several significant theoretical perspectives regarding early development and effective practice in education which include; Principles of Learning Theory: laws of learning (Edward Thorndike) Maturation theory (Arnold Gessel), Environmentalist like Bandura, Constructivist, Piagetian development stage theory, Erik – Erikson's Social stage theory and Kholbery's Moral stage theory have been adopted as part of the theoretical framework for the study.

2.6.1 The Laws of Learning Theory

For the purpose of these research ,the first three laws of learning developed by Edward Thorndike which provide additional insight into what make pupils learn more effectively (Readiness exercise and effect) was used as the theoretical framework for study. Pupils are expected to be ready perform exercise and result of the action are made clear to improved quality for learning.

2.6.1.1 Readiness

Readiness implies a degree of concentration and eagerness. Individuals learn best when they are physically, mentally, and emotionally ready to learn, and do not learn well if they see no reason for learning. Getting students ready to learn, creating interest by showing the value of the subject matter, and providing continuous mental or physical challenge, is usually the instructor's responsibility. If students have a strong purpose, a clear objective, and a definite reason for learning something, they make more progress than if they lack motivation. In other words, when students are ready to learn, they meet the instructor at least halfway, simplifying the instructor's job.

Since learning is an active process, students must have adequate rest, health, and physical ability. Basic needs of students must be satisfied before they are ready or capable of learning. Students who are exhausted or in ill health cannot learn much. If they are distracted by outside responsibilities, interests, or worries, have overcrowded schedules, or other unresolved issues, students may have little interest in learning. For example, we may identify the situation of an academic examination of a school, in which the cause of securing good marks in various subjects leads to mentally and emotionally readiness of students to do more hard labour in acquiring knowledge.

2.6.1.2 Exercise

The principle of **exercise** states that those things most often repeated are best remembered. Through rhymes, counting Numbers, e.g 1,2 buttock my shoes It is the basis of drill and practice. It has been proven that students learn best and retain information longer when they have meaningful practice and repetition. The key here is that the practice must be meaningful. It is clear that practice leads to improvement only when it is followed by positive feedback.

The human memory is fallible. The mind can rarely retain, evaluate, and apply new concepts or practices after a single exposure. Students do not learn complex tasks in a single session. They learn by applying what they have been told and shown. Every time practice occurs, learning continues. These include student recall, review and summary, and manual drill and physical applications. All of these serve to create learning habits. The instructor must repeat important items of subject matter at reasonable intervals, and provide opportunities for students to practice while making sure that this process is directed toward a goal. But in some or many cases, there is no need for regular practice if the skill is acquired once. For instance if we have learnt cycling once, we will not forget the knowledge or skill even if we aren't exercising it for a long time.

2.6.1.3 Effect

The principle of **effect** is based on the emotional reaction of the student. It has a direct relationship to motivation. Hence teachers should motivate pupils with what captured attention easily, and use of reward and punishment that is reward good performance and punish bad behaviour the principle of effect is that learning is strengthened when accompanied by a pleasant or satisfying feeling, and that learning is weakened when associated with an unpleasant feeling. The student will strive to continue doing what provides a pleasant effect to continue learning. Positive reinforcement is more apt to lead to success and motivate the learner, so the instructor should recognize and commend improvement. Whatever the learning situation, it should contain elements that affect the students positively and give them a feeling of satisfaction. Therefore, instructors should be cautious about using punishment in the classroom.

One of the important obligations of the instructor is to set up the learning situation in such a manner that each pupils will be able to see evidence of progress and achieve some degree of success. Experiences that produce feelings of defeat, frustration, anger, confusion, or futility are unpleasant for the student. If, for example, an instructor attempts to teach advanced concepts on the initial engagement, the student is likely to feel inferior and be frustrated. Impressing upon students the difficulty of a task to be learned can make the teaching task difficult. Usually it is better to tell students that a problem or task, although difficult, is within their capability to understand or perform. Every learning experience does not have to be entirely successful, nor does the student have to master each lesson completely. However, every learning experience should contain elements that leave the student with some good feelings. A student's chance of success is definitely increased if the learning experience is a pleasant one (Murphy, 2011).

Other Related Theories That Prepares The Child For School Readiness Are:

2.6.1.4 The Maturation's Theory

The Maturation's Theory was advanced by the work of Arnold Gessell. Maturationists believe that development is a biological process that occurs automatically in predictable, sequential stages over time (Hunt, 1969). This perspective leads many educators and families to assume that young children will acquire knowledge naturally and automatically as they grow physically and become older, provided that they are healthy (Demarest, Reisner, Anderson, Humphrey, Farquhar, & Stein, 1993).

Similarly, school readiness, according to maturationists, is a state at which all healthy young children arrive at same time when they perform tasks such as reciting the alphabet, identification and counting of numbers. These tasks are required for learning more complex tasks such as reading and arithmetic. Although development and school readiness occur naturally and automatically, maturationists believe that the best practices are for parents to teach young children to recite the alphabet and count while being patient and waiting for children to become ready for kindergarten. If a child is developmentally unready for school, maturationists might suggest referrals to transitional kindergartens, retention, or holding children out of school for an additional year (DeCos, 1997). These practices are sometimes used by schools, educators, and parents when a young child’s developments lag behind his or her peers. The young child's underperformance is interpreted as the child’s needs, for more time to acquire the knowledge and skills needed to perform at this level with his or her peers. Notably, not every child of the same age will arrive at the expected level of development at the same age, due to either individual difference or inheritance influence; this plays a role in a child’s comprehension and attainment of academic excellent at this level when the foundation should be laid firmly.

2.6.1.5 Environmental Theory

Environmentalists believe the child's environment shapes learning and behaviour. In fact, human behaviour, development, and learning are thought of as reactions to the environment. This perspective leads many families, schools, and educators to assume that young children develop and acquire new knowledge by reacting to their surroundings.

Furthermore, Kindergarten readiness, according to the environmentalists, is the age or stage when young children can respond appropriately to the environment of the school and the classroom (e.g., rules, regulations, curriculum activities, positive behaviour in group settings, directions and instructions from teachers and other adults in the school and at home). The ability to respond appropriately to the environment is necessary for young children to participate in teacher-initiated learning activities. Success is dependent on child, instructions the child received from the teacher or the adult in the classroom. Many environmentalists like Skinner, Bandura, and Watson influence educators and parents believing that young children learn best by rote activities. That is, reciting the alphabet over and over, copying letters, and tracing numbers. This viewpoint is evident in kindergarten classrooms where young children are expected to sit at desks arranged in rows and listens attentively to their teachers. At home, parents may provide their young children with workbooks containing such activities as colouring or tracing letters and numbers, that requires little interaction between parents and child. When young children are unable to respond appropriately to the classroom and school environment, they are often are labeled as having some form of learning disabilities and are tracked in classrooms with curriculum designed to control their behaviours and responses (Essa, 1999).

In recent time acquisition of knowledge are better learnt through gradual to identification of letters and numbers with objects provided in the environment. That is, ensuring that the facilities and personnel are provided in line with the aim the of learning, to achieve good academic achievement than rote - learning in which the child is likely to distort with other new concepts. However, teachers / pupils participation and child centered method be initiated as the mode for teaching. Importantly environment shapes all aspects of behaviour, of consistent or positive consequence which ensure that behaviour will be repeated if desirable (Essa, 1999). Thus, teachers and parents found in these environments, (the school and home) should endeavour to be good role models that will enhance social interactions, good academic achievement and promote good moral behaviour of the child.

2.6.1.6 Constructivist

Similarly, **constructivist** perspective of readiness and development were advanced by theorists like Jean Piaget, Maria Montessori, and Lev Vygotsky. Although, their work varies greatly, each scholar articulates a similar context of learning and development. They are consistent in their belief that learning and development occur when young children interact with the environment and people around them (Hunt, 1969). Constructivists view young children as active participants in the learning process. In addition, they believe that young children initiate most of the activities required for learning and development. Because active interaction with the environment and people are necessary for learning and development. Constructivists believe that children are ready for school when they can initiate many of the interactions they have with the environment and people around them.

Furthermore, Constructivists influence on schools and educators is that lots of attention be paid to the physical environment, the curriculum, and early childhood education. In essence the classroom environment should be made conducive, provided with assorted instructional materials, educational toys and content of curriculum taught to each class should be based on “Grade level” and “age” of pupils, as illustrated by Piagetian cognitive stages. While Maria Montessori in her model is of the view that each pupils learn at his/her own pace, that is based on capabilities. And importantly, pupils are taught moral and social interaction before academic activities because; there are ample opportunities but the earlier the better for quick accomplishment of future education (Mitchell, 1980).

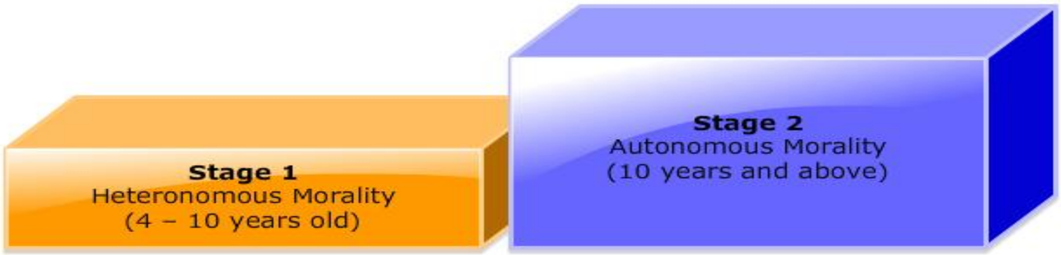
In practice Kindergarten classrooms are often divided into different learning centers and are equipped with developmentally appropriate materials for young children to play with and manipulate. Teachers and adults should have direct conversations with children, ensuring active movement from one corner to another, and daily activities should be made meaningful through the incorporation of children's experiences into the curriculum. At home, however, parents should engage young children in reading, storytelling activities and encourage children's participation in daily household activities in a way that such concepts as counting and language are introduced. In addition, parents may provide young children with picture books containing very large print, and toys that stimulate interaction (such as building blocks and large puzzles). When a young child encounters difficulties in the learning process, the constructivist approach will neither label the child nor retain him or her; instead the constructivists give the child some individualized attention and customize the classroom curriculum to help the child address difficulties.

Today, most researchers have come to understand early childhood development and the learning process as articulated by the constructivist. However, this view has not been widely translated into practice because some kindergarten teachers and parents still believe that young children are not ready for school, unless they can recite the alphabet, count, and have the ability to follow instructions from adults. Hence, parents / teachers should be aware that environment and its contents play a great role in the education of a child. A child who has an elder sibling is likely to be ready for learning earlier than the first sibling did. Likewise, individuality (that is inheritance) “genes” has a role to play in development, behaviour, interaction and acquisition of knowledge, and skills. The theory will best be justified, when translated into practice and methods of teaching in nursery and lower basic classes in primary schools. Thus, learning through social interaction and use of play method will enhance perceptions better and with the assistance of qualified teachers, provision of adequate facilities in the environment, the pupils will excel high, exhibit good, social, moral habits and attain academic excellence.

In view of the above, it is expected that at this level (primary school) pupils’ behaviour must be monitored rightly, with good behaviour, and being rewarded bad one being punished, That is, “bend a stick when it, is wet than when dry". That is to mode a child’s behaviour right from infancy, is better because when left to grow into adolescence it will be difficult to change, bearing in mind that no two individuals are same in exhibition and acquisition of skills, knowledge and behaviour. Therefore, the teacher should reinforce and reward accordingly. The teacher or early childhood educators should ensure that academic achievement, social enrichment and moral behaviour are taught side by side during learning activities. The child is not only acquiring knowledge but behaviour is modified desirably to meet up with social norms of the society.

2.6.2 Kohlberg’s Developmental Stages of Moral Behaviour

A psychologist, **Lawrence Kohlberg** did modify and elaborate Piaget’s work and determined that the process of attaining moral maturity took larger and more gradual process than Piaget had proposed. Kohlberg, however identified six stages of moral behaviour grouped into three major levels as the **first “preconvention level”** a person’s moral judgment are characterized by a concrete individual perspective. Within this level, **heteronymous orientation** focuses on avoiding breaking rules that are backed by punishment, obedience for its own sake and avoiding the physical consequences of an action. **Stage 2 moral orientations** emerges after the first stage and focuses on the instrumental pragmatic values of actions, is reciprocal in nature, that a position action is returned for another, “Scratch my back and I scratch yours”. At stage 3 “**conventional level”** of reasoning is about the situation with an understanding that norms and conventions are necessary to uphold society. With this, individual at **stage 3** conventional level identifies what is right in terms of what is expected by individual within the society and defines as being good while the **fourth stage** which is still within the conventional level marks a shift from defining what is right in terms of the local norms and rule expectations to defining right in terms of the rule and norms established by larger social system. That is a member of the society's perspective in which one is moral by fulfilling the actual duties and by defining one's social responsibilities. Lastly is the post conventional stage which consist of stage 5 and 6 that are socially contract and universal ethical principles driven and are difficult to be identified among populace in the society.



Stages of moral development

How exactly do children develop morality? This question has fascinated parents, religious leaders, and philosophers for ages, but moral development has also become a hot-button issue in both psychology and education. Do parental or societal influences play a greater role in moral development? Do all kids develop morality in similar ways? One of the best known theories exploring some of these basic questions was developed by a psychologist named Lawrence Kohlberg. His work modified and expanded upon Jean Piaget's previous work to form a theory that explained how children develop moral reasoning.

Hence, Piaget described a two-stage process of moral development. While Kohlberg extended Piaget's theory, proposing that moral development is a continual process that occurs throughout the lifespan. Similarly, Kohlberg's formulate moral stages based on Piagets work, grouped into three levels of two stages each: pre-conventional, conventional and post-conventional. Following Piaget's constructivist requirements for a stage model, as described in his theory of cognitive development, it is extremely rare to regress in stages—to lose the use of higher stage abilities. Stages cannot be skipped; each stage provides a new and necessary perspective, more comprehensive and differentiated than its predecessors but integrated with them. The understanding gained in each stage is retained in later stages, but may be regarded by those in later stages as simplistic, lacking in sufficient attention to detail.

2.6.2.1 Pre-conventional

The pre-conventional level of moral reasoning is especially common in children, although adults can also exhibit this level of reasoning. Reasoning at this level judges the morality of an action by its direct consequences. The pre-conventional level consists of the first and second stages of moral development, and is solely concerned with the self in an egocentric manner. A child with preconventional morality has not yet adopted or internalized the society's conventions regarding what is right or wrong, but instead focuses largely on external consequences that certain actions may have.

In **Stage one** (**obedience and punishment driven),** individuals focus on the direct consequences of their actions on themselves. For example, an action is perceived as morally wrong because the perpetrator is punished. "The last time I did that I got spanked so I will not do it again." The worse punishment for the act is, the more "bad" the act is perceived to be. This can give rise to an inference, that even innocent victims are guilty in proportion to their suffering. It is "egocentric", lacking recognition that others' points of view are different from one's own. There is "deference to superior power or prestige".

Stage two (self-interest driven) responses to "what's in it for me" position, in which right behaviour is defined by whatever is in the individual's best interest. Stage two reasoning shows a limited interest in the needs of others, but only point to where it might further the individual's own interests. As a result, concern for others is not based on loyalty or intrinsic respect, but rather "You scratch my back and I'll scratch yours." morality. The lack of societal perspective in the pre-conventional level is quite different from the social contract (stage five), as all actions have the purpose of serving the individual's own needs or interests. For the stage two theorists, the world's perspective is often seen as morally relative. The pre-conventional level is peculiar to the subjects of this study. At this stage the child obeys rules for fear of being punished and the child thinks of self first, that is, self interest and those certain acts for what consequence or benefit follows.

Similarly, subjects for this study are likely to be between ages 6-9 years, which could be said to coincide with the 'pre- convention level' as illustrated by Kohlberg's theory, and the heteronomous stage as illustrated by Piaget which is characterised by a child's egocentrism. This leads children to project their own thought and wishes which is associated with undirected view of rule and power. This is why children are concerned with outcomes of action rather than intention of carrying out an act. Thus pupils moral habit should be guide and corrected when the need arises, so that pupils exhibit behaviour as guided by the norms and rule of the society, which is similar to that which the present study investigated.

2.6.2.2 Conventional

At this level, internalization is intermediate. The child abides by certain standards (internal). However, these are the standards of other (external) such as parents or the laws of the society.

Stages 3: Interpersonal Reasoning children value trust, caring and loyalty to others as the basis of moral judgement. Children often adopt their parents' moral standards at this stage; seeking to be considered by parents as a "good boy" or a "good girl" is rewarding.

Stage 4: Social System Morality moral judgement are based on understanding the social order law, justice and duty. For example, a child might say that it is always wrong to steal because laws that have been developed are for the good of society. Good is defined by laws of society, by doing ones duty. A law should be obeyed even if it is not fair.

Conventional level of development morality is seen as conforming to and even maintaining the expectations, rules, and norms of the one's family, group, or society. Kohlberg referred to stage three as “good-boy-good-girl orientation” because of its emphasis on pleasing others by conforming to stereotypical images of various social roles (e.g., being a “good son” by helping your mother with chores or a “good husband” by sacrificing your own safety for that of your wife). At stage four a higher level of abstraction is achieved and employed in moral reasoning. Rather than conforming to familial roles and expectations, the emphasis is now on maintaining law and order. Right behavior consists of doing one's duty, showing respect for authority and maintaining the given social systems (e.g., legal, religious). Empirical research suggests that these two stages of reasoning are typical during late childhood (Stage Three) and adolescence (Stage Four).

2.6.2.3 The Post-Conventional

The post-conventional level, known as the principled level, which is marked by a growing realization that individuals are separate entities from society; and the individual’s own perspective may take precedence over society’s view. Individuals may disobey rules inconsistent with their own principles which are based on abstract reasoning are beyond the age limit of subjects to be used for the present study.

In any development, orderliness is vital, though there are cases when an individual could skip a step/stage due to high “Intelligent Quotients” (IQ) or in some cases its attainment is delayed due to low **Intelligent Quotients** (IQ**).** Educators / parents must take cognisance of such individuals, so that they work at their own pace and arrived at the designated level as pointed out by Maria Montessori approach (Mitchell, 1990). That in preschool, individuals should learn at their own pace with provision of adequate instructional materials and facilities, that will enhance perception of concept.

Table 2.2 Kohlberg Stages of Moral Development

Approximate Age Range	Stage	Substages
Birth to 9	Preconventional	1) Avoid punishment 2) Gain Reward
Age 9 to 20	Conventional	3) Gain Approval & Avoid Disapproval 4) Duty & Guilt
Age 20	Postconventional	5) Agreed upon rights 6) Personal moral standards

Importantly, Kohlberg's pre-conventional moral stage, is based on the cognitive abilities of a person, like Piaget's concrete operational stage. Moral decisions are **egocentric** (based on me) and **concrete.** So reward and punishment are the typical bases of reasoning in this stage. The conventional stage is based on the children's ability to **"decentre"** their moral universe and take the moral perspective of their parents and other important members of society into account. While the post conventional stage is based on the adult's ability to base morality on the logic of principled decision making, based on standards that are thought to be universalizable and not dependent on culture. Kohlberg's system was based on extensive research but the stages and ages does not correspond exactly with Piaget. There is similarity in the sense that each stage is matched with certain exhibition of moral and value, but differs in the sense that children of the same age with varied environment could differ in exhibition or behave same. This view is corroborated by Colby Kohlberg, Gibbs and Lieberman's which assertion that: "*praise is response to good behaviour may be half the battle, but our responses to bad behaviour have consequences, too. When children cause harm, they typically feel one of two moral* *emotions: shame or guilt. Despite the common belief that two of these emotions are interchangeable, research led by the psychologist June Price Tangney reveals that they have very different causes and consequences. Shame is feeling that I am a bad person, whereas guilt is the feeling that I have done a bad thing. Shame is a negative judgment about the core self, which is devastating: shame makes the children feel small and worthless"* (Colby & Kohlberg ......).

Gibbs and Lieberman (2013), corrective behaviour thus enhance better exhibition of behaviour, therefore most children would prefer being praised for good behaviour than feeling guilty or ashamed of misbehaviour being exhibited.

2.6.3 Social Theory

The role of observation and modelling in education originates with social cognitive theorists. Social cognitive theory, particularly the work of Albert Bandura (e.g Bandura, 1982; Bandura, Ross & Ross, 1961), asserts that a triadic relationship exists between human being their environments, and their behaviours. Social cognitive theorists hypothesized that individuals extract information from a variety of social experiences, such as observations of peers and adults, and verbal discourse. According to this theory, two essential components of early learning that affect the acquisition of information are observation and modeling. Research in social cognitive theory has demonstrated that children can acquire a wide range of skills simply by watching other people perform those skills, and that this approach can be a positive and effective modality for teaching (Bandura, Bellini & Akullian, 2007). In addition to observation and modelling, the concept of self – efficacy is elaborated upon in social cognitive theory. Specifically, beliefs about competency in a certain area of direct performance. Either, positive or negative feedback can have a significant impact on the outcome of one's actions (Bandura, 1982).

The application of social cognitive theory in the classroom environment places teachers in a central position as live models from which children can learn social behaviours and academic skills. Social cognitive theory also sheds light on the importance of feedback and encouragement in relation to students' performance. Research has corroborated the importance of the construct of self-efficacy by demonstrating that effective instruction provided in the classroom should be specific, encouraging, and developmentally appropriate (Bradford, Brown, & Cocking, 1999; Sandilos, 2012).

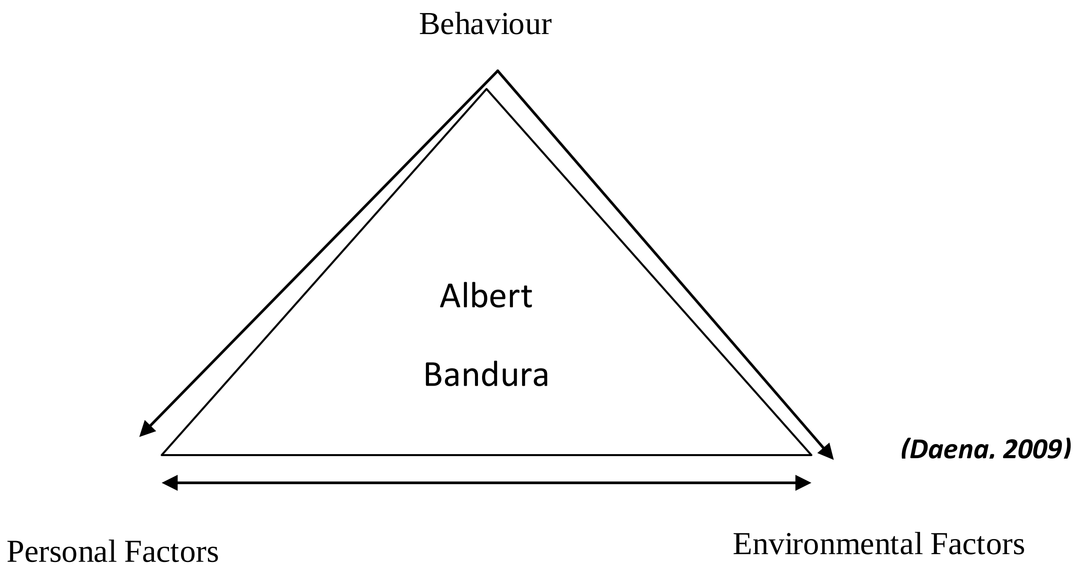
Social behaviour is learnt primarily by observing and imitating the actions of others. The social behaviour is also influenced, according to this theory, by being rewarded and/or punished for these actions. For example, if a child sees his elder brother bring home a good report card and gets a great reward for it, the child may observe this, that having a good report card will get rewarded so he should follow suit.

Bandura's (1977) in Daena (2009) social learning theory posits that people learn from one another, via observation, imitation, and modelling. The theory has often been called a bridge between behaviour and cognitive learning theories because it encompasses attention, memory, modelling and motivation. Individuals learnt through observing others attitude and outcomes of such behaviours. Most human behaviour is learnt through modelling. From observing others, individuals forms an idea of how new behaviours are performed later. For instance, coded information serves as a guide for action (Bandura, 1977 in Daena 2009) Social learning theory explains behaviour in terms of continuous reciprocal interaction between cognitive, behavioural and environmental factors.

Social learning theory revolves around the notion that learning correlates to the observation of role models. However, in teaching/learning situation, teachers play the role of a model in a child's learning acquisition likewise, parents at home. One's model could be media sources or those with whom you interact with, parents and teachers inclusive.

Effective modelling teaches general rules, regulations and strategies for dealing with different situation (George, 2008).

Bandura, (1977) in Daena (2009) illustrated acquisition of knowledge or behaviour with a complex diagram viz: behaviour "B" environment "E" and internal events that influence perception and action, that is, (Behaviour exhibited).



Social learning theory affirms that effective learning can take place when the environment is favourable and behaviour are either reinforced or punished based on what the learner exhibited, but individual differences based on genetics in most cases are considered to either hinder or enhance learning.

2.6.3.1 Erik-Erikson Developmental Stages of Social Behaviour

According to Erikson in Essa (1999), each stage of social development is defined by a conflict, which leads to opportunities for personal growth. These conflicts in addition to centering on the person alone, also revolve around relationships with others. Although they could also be affected by parenting style under which the child is been guided or brought up. These stages are conceived in an almost architectural sense: satisfactory learning and resolution of each crisis is necessary if the child is to manage the next and subsequent ones satisfactorily, just as the foundation of a house is essential to the first floor, which in turn must be structurally sound to support the second stage, and so on. Likewise certain concepts must be thought and learnt at a specific stage in preparation for the subsequent stage e.g alphabets are taught before words, then sentence making etc.

Table 2.3: Erik-Erikson Stages of Social Development

Stage	Basic Conflict	Important Events
Infancy (birth to 18 months)	Trust vs. Mistrust	Feeding
Early Childhood (2 to 3 years)	Autonomy vs. Shame and Doubt	Toilet Training
Preschool (3 to 5 years)	Initiative vs. Guilt	Exploration
School Age (6 to 11 years)	Industry vs. Inferiority	School
Adolescence (12 to 18 years)	Identity vs. Role Confusion	Social Relationships
Young Adulthood (19 to 40 years)	Intimacy vs. Isolation	Relationships
Middle Adulthood (40 to 65 years)	Generativity vs. Stagnation	Work and Parenthood
Maturity(65 to death)	Ego Integrity vs. Despair	Reflection on Life

Source: Essa, 2009

Erikson's Stages of Development related to the present study

1. Basic trust versus basic mistrust (hope) – Feeding
2. Autonomy versus shame (will) – Toilet training
3. Initiative versus guilt (purpose) – Exploration
4. Industry versus inferior (competence) – Ability – Present study group
5. Identity versus confusion.

2.6.3.1.1 Basic Trust versus Basic Mistrust (Hope) 0 – 18 Month

Chronologically, this is the period of infancy during the first one or two years of life, the child is well - handled, nurtured, and loved and he/she develops trust and security and a basic optimism. Badly handled, he/she becomes insecure and mistrustful.

Children develop a sense of trust when caregivers provide reliable care, and affection. A lack of this will lead to mistrust. For instance, when a promise is made ensure it is kept e.g. when a child's fed with a particular meal which stimulates his/her appetite such meal could be repeated. While in classroom situations, ensure the pupil is rewarded for good performance or provide variety of toys when that given earlier is not destroyed.

2.6.3.1.2 Autonomy vs. Shame (Will) 2 - 3years.

The second psychosocial crisis, Erikson believes, occurs during Early Childhood, probably between 18 months or 2 years and 3 to 4 years of age. The "well - parented" child emerges from this stage sure of himself, elated with his/her new found control, proud rather than ashamed. Autonomy is however, entirely synonymous with assured self- possession, initiative, and independence but, at least for children in the early part of this psychosocial crisis, it includes stormy self - will, tantrums, stubbornness, and negativism. For example, one may see (two) 2 year olds resolutely folding their arms to prevent their mothers from holding their hands as they cross the street. Also, the sound of "NO" rings through the house.

Children need to develop a sense of personal control over physical skills and a sense of independence. Success leads to feelings of autonomy, failure results in feelings of shame and doubt. Pupils should be made to perform class activities individually to determine ability of individual pupil than group work.

2.6.3.1.3 Initiative vs. Guilt (Purpose) 3 – 5 yrs

Erikson believes that this third psychosocial crisis occurs during what is called the "play age," or the later preschool years (from about 3 $^{1}/_{2}$ to 5 years before, entry into formal school). During this stage, the healthy child learns: (1) to imagine, and broaden his skills through active play of all sorts, including fantasy (2) to cooperate with others (3) to lead as well as to follow. Immobilized by guilt, he is: (1) fearful, (2) hangs on the fringes of groups (3) continues to depend unduly on adults and (4) is restricted both in the development of play skills and in imagination.

Children need to begin asserting control and power over the environment, success in this stage leads to a sense of purpose. Children who try to exert too much power experience disapproval, resulting in a sense of guilt. In a classroom situation pupils should be encouraged to initiate activities e.g building block, using lego to construct things like house or bus. When allowed to construct, the pupils develop self esteem instead of guilt of not able to perform certain tasks.

2.6.3.1.4 Industry versus Inferiority (Competence) 6 – 11 yrs

Erikson believes that the fourth psychosocial crisis is handled for better or worse, during what he called the "school age," presumably primary 1 up to and possibly including some of the junior high school. Here the child learns to master the more formal skills of life: (1) relating with peers according to rules, (2) progressing from free play to play that may be elaborately structured by rules and may demand formal teamwork, such as baseball and (3) mastering social studies, reading, arithmetic. Homework is a necessity, and the need for self-discipline increases yearly. The child who, because of his successive and successful resolutions of earlier psychosocial crisis, is trusting, autonomous, and full of initiative will learn easily.

Children need to cope with new social and academic demands. Success leads to a sense of competence, while failure results in feelings of inferiority.

Other Erikson stages beyond the scope of study include:

1. Identity versus role confusion (fidelity)
2. Intimacy versus isolation (Love)
3. Generality versus self absorption (Care)
4. Integrity versus despair (Wisdom)

These eight stages of man, or the psychosocial crises, are plausible and insightful descriptions of how personality develops. But for the purpose of this study, stages 1-4 are outlined because of its link with Early Childhood. These stages will enhance development of good personality in the child and to enable them face challenges ahead

Hence, conflicts with others can be valuable source of social and emotional understanding for young children. Nothing focuses a child's attention on what another is thinking or feeling more than the realization that conflict must be resolved e.g. A young boy who turns to another for comfort after a fight with his brother may learn from him, why his brother felt the way he did. With guidance, early childhood can better be comprehended and emphasized with other peoples' feelings and perspectives. This also help the children cope with their own emotions and deals with future conflicts, (Encarta, 2009). For any development to take place, the human growth and development will pass through stages during their life-time which are physical, cognitive, social and moral developments are no exceptions as posited by Piaget, Sigmoid Freud and Erikson. These will enhance the individual academic achievements, social interaction and moral behaviour from childhood to adolescence. Notably, in any development there should be concrete foundation at the beginning for future developments and physical, social, moral and cognitive development are no exception.

2.6.4 Piagetian Cognitive Developmental Stage Theory

Piagetian development stage theory had a particular impact on the way in which Early Childhood Education and child development were originally conceptualized. Piaget theorized that children's cognitive development occurred in a series of stages. He hypothesized that as children move through each distinct stage; their developmental processes, progress from being simplistic, concrete, and egocentric to being more complex, empathetic, and abstract one (Piaget, 1952). Further, through his observations of children, he concluded that cognitive development results from the interaction of environmental and genetic factors. In addition, Piagetian theory states that the degree to which individuals can learn through, and benefit from, interactions and the social transmission of knowledge is dependent upon their level of intellectual development. Therefore, children cannot learn something until they have the cognitive prerequisites to do so. Thus, children who are at one stage of development cannot be taught concepts of a higher stage (Johnson, Christie, & Wardle, 2005; Piaget, 1952; Schunk, 2008).

Although Piagetian theory was widely accepted initially, psychologists and educational researchers began to question Piaget's hypothesized stages because research indicates that children develop in a more continuous manner, as opposed to distinct stages (Woolfolk, 2008). Research indicating that preschool children understand concepts such as number, sense and object permanence has also led to the belief that Piaget underestimated the cognition of young children (Gelman, 2000; Woolfolk, 2008). Neo-Piagetians have rejected the stage – like model of development, but have retained and expanded Piaget's beliefs regarding the impact of environment and genetics on cognitive development (Ormrod, 2011; Sandilos, 2012).

Furthermore, Piaget acknowledged that some children may pass through the stages at different ages, than the averages and that some children may show characteristic of more than one stage at a given time. But cognitive development always follows this sequence that is a stage cannot be skipped, and each stage is marked by new intellectual abilities and a more complex understanding of the world meaning. Individual differences play a role.

2.6.4.1 Sensori-motor Stage (Birth to age 2)

During the early stage, infants are only aware of what is immediately/presented in front of them, they focus on what they see, what they are doing, and physical interactions with their immediate environment. Because they don't yet know how things react, they're constantly experimenting with activities such as shaking or throwing things, putting things in their mouths, and learning about the world through trial and error. The later stages include goal – oriented behaviour which brings about a desired result.

At about age 7 to 9 months, infants begin to realize that an object exists even if it can no longer be seen. This important milestone – known as object permanence – is a sign that memory is developing. After that the infant starts crawling, standing, and walking, their increased physical mobility leads to increased cognitive development. Near the end of the sensory-motor stage, infants reach another important milestone – early language development, a sign that they are developing some symbolic abilities. Children develop the concept of object permanence and the ability to form mental representations. Although, in some cases children differ in their attainment due to either health, heredity or environment exposed to facilities.

2.6.4.2 Pre-operational (Age 2 to 7)

During this stage, young children are able to think about things symbolically, the language becomes more mature. They also develop memory and imagination, which allow them to understand the difference between past and future, and engage in make – belief.

But their thinking is based on intuition and still not completely logical. They are yet to grasp more complex concepts such as effect, time and comparison. Hence children's thought is egocentric; they lack the concept of conversation and the ability to decentre. Meaning pupils at this stage think only of themselves alone and things around him/her. Any class activities should focus on independent study or work to determine ability. The subject of study is likely to be found between pre-operational and concrete stage i.e. 2 to 8 years.

2.6.4.3 Concrete Operations (Age 7 to 11)

At this time, elementary – age and pre – adolescences, children demonstrate logical and concrete reasoning. Children's thinking becomes less egocentric and they are increasingly aware of external events. They begin to realize that one's own thoughts and feelings are unique and may not be shared by others, may not even be part of reality. Children also develop operational thinking – the ability to perform reversible mental actions. During this stage, however, most children still can't tackle a problem with several variables in a systematic way. Children can decenter as they have acquired the concept of conversions, but they cannot reason abstractly or test hypotheses systematically. Though some individuals may be found testing hypotheses due to exposure to facilities. The study will identify pupils that exhibit concrete operation, making hypothesis test on academic achievement text a reality for comparison of between ECE and non – ECE primary school pupils.

2.6.4.4 Formal Stage (Age 11 or 12 and above)

The final stage is known as the **formal operational stage** (adolescence and into adulthood, roughly ages 11 to approximately 15-20): Intelligence is demonstrated through the logical use of symbols related to abstract concepts. This form of thought includes "assumptions that have no necessary relation to reality." At this point, the person is capable of hypothetical and deductive reasoning. During this time, people develop the ability to think about abstract concepts.

Piaget stated that "hypothetico-deductive reasoning" becomes important during the formal operational stage. This type of thinking involves hypothetical "what-if" situations that are not always rooted in reality, i.e. counterfactual thinking. It is often required in science and mathematics.

- Abstract thought emerges during the formal operational stage. Children tend to think very concretely and specifically in earlier stages, and begin to consider possible outcomes and consequences of actions.
- Metacognition, the capacity for "thinking about thinking" that allows adolescents and adults to reason about their thought processes and monitor them.
- Problem-solving is demonstrated when children use trial-and-error to solve problems. The ability to systematically solve a problem in a logical and methodical way emerges.

While children in primary school years mostly used inductive reasoning, drawing general conclusions from personal experiences and specific facts, adolescents become capable of deductive reasoning, in which they draw specific conclusions from abstract concepts using logic. This capability results from their capacity to think hypothetically. "However, research has shown that not all persons in all cultures reach formal operations, and most people do not use formal operations in all aspects of their lives".

2.7 Review of Empirical Studies

Several empirical studies had been conducted locally and at the international level revealed influence of early childhood education on academic achievement and social behaviour on the development of pupils now and how it's subsequently enhance education in the future. This is confirmed by the investigation by Olaleye and Omotayo

(2009) on assess and quality of Early childhood education provided to pupils. Data was collected with the use of structured questionnaire administered by researchers on teachers, and head teachers of (12) twelve private nursery schools with a sample of 120 pupils. Data obtained were on quality learning outcome, learning activities, teaching staff, environment for teaching and learning. Descriptive statistics was used to analyze results which revealed the following. The quality of learning activities were ranged average, Non – qualitative teachers (No teaching qualification) questionnaires were only administered to pupils and teachers in private schools, while the public schools were left out, which not give roomed for comparison. Adequate provision of facilities and learning environment were conducive to both pupils and teachers, which makes learning effective. However quality of teaching method in these private schools were ranked low; this is likely to be as a result of employing teachers without teaching qualifications as stipulated by the NPE: that minimum teaching qualification should be Nigeria Certificate of Education (NCE). This group (NCE) must have undergone teacher training under the supervision of professional teachers.

The present study retrieved items (Basic Science and Technology, English Studies and Mathematics) from primary school curriculum (NERDC, 2012) to measure the academic achievement of pupils which will likely reveal the quality of the products (pupils), instead of using self structured questionnaire. Notably too, inferential statistics will be used in analyzing data obtained contrary to the descriptive statistics used by Olaleye and Omotayo (2009), whose study focused on assessment of quality early childhood education which is similar to the present study which investigated the influence of early childhood education and it's subsequently influence on pupils education in the future, social and moral behaviour inclusive. In addition, validated adopted questionnaire with modification which were items retrieved from primary school curriculum (NPE, 2007), will be administered on pupils in Kano state schools by class teachers (Research assistant) to avoid fear of the unknown.

Similarly, Osakwe (2009) examine the impact of Early Childhood experience on academic performance of pupils. Scores obtained were pupil's continuous assessment and results of thirds term examination. Result revealed from the null hypotheses, one, two and three, which states that there was significant difference in cognitive activity, social and motor skills of pupils (calculated t-values values were 2:05, 2:66 and 2:49 respectively were greater than critical value of 1:96). That is there was significant difference.

Furthermore, the constructed teacher – made validated test by professional teacher in Mathematics, English Studies and Basic Science and Technology and use of check list inventory to assess social and moral behaviour, which the present study intend to conducted retrieve items from NERDC, (2012) instead of continuous assessment that could be influenced by individuals. Thus questionnaire is better administered with a research assistant (class – teacher), Although, the present study and that of Osakwe, 2009 focused on early childhood experience and academic achievement of primary school pupils; but differ on the ground of location, subjects that were used and level of education (lower basic primary school classes 1). Thus both studies share some similarities based on the fact that, academic achievement and social behaviour of primary school pupils was assessed. In determining the influence of early childhood education on the pupil's performance, using pupils C/A and end of last term's results, while the present study used class activities with item obtained from primary school syllabus, result to determined the influence of ECE on academic achievement of pupils. Standard's (2006), study revealed that pupils who were poor reader in the early years of school were assessed by their teachers as more aggressive, good social skills in kindergarten and first grade were good readers in later years. Likewise social behaviour of children can prompt or undermine their learning and academic achievement.

Miles and Stipek, (2006) examined the importance of attending to social skills of pupils in early childhood (elementary school) even when academic success is the primary goals. Contemporaneous and Longitudinal studies for assessing both social behaviour and literacy achievement of 400 pupils (boys and girls) in urban and rural as sample for collection of data and the assessment were conducted in these sequences;

1) Beginning of Early Childhood

2) Primary level of education

The questionnaires were administered by class teachers to assess aggressive and pro-social behaviour of different pupils.

The result reveals that children who were rated relatively aggressive in the early years were rated as relatively aggressive in the later years. Similarly poor reading in early years also predicted poor reading in higher class (primary school). Likewise, relatively low literacy achievement predicted relatively high aggressive behaviour in later years and good skills were associated with good reading scores. However, Miles and Stipek (2006) concluded that social development and academic performance are inextricably connected. Similarly the present study assessed academic achievement scores, moral and social behaviour of pupils but differ on the ground that anti – social behaviour of pupils was not assessed rather pro – social behaviour was focused sectional studies that is, pupils of different age but same class was used in collecting data within a short period of two weeks.

Chnadran, Chem, Lim, Ong and Poh, (2010), study was conducted with the purpose of identifying factors associated with poor academic achievement during the early school years, a cross sectional study of urban, primary school children. Socio-demographic and medical data were obtained through questionnaire and interview. Achievement was based on marks obtained in the core subjects of primary one examination which the researcher does not have control over. Hence, teacher – made test could also be used in addition. Raven’s standard progressive matrices test was used to measure cognitive ability of pupil in contrast to the present study which used t-test inferential statistic test to compare the two group’s scores, ECE and non ECE pupils.

Results reveal that 14% of the ECE participants had poor academic achievement compared to 17.2% of the non – participants. Nevertheless cognitive ability, pre-maturity and social factors were stated to have contributed to poor academic achievement during the early years. Similarly the present study investigated academic achievement, social and moral behaviour of primary school pupils.

Kasonde (2010) conducted a research titled “Lack of Social Adjustment of primary school pupils as it affects academic achievement in Zambia. The goals of the study were: -

1) To compare academic performance of pupils who have lost one or both parents
2) To examine behaviour problems of pupils who have lost a parent and their peers with both parents
3) To identify differences in intelligent test of pupils in rural and urban areas
4) To assess social competence and behavioural problems

Kasonde (2010) used quasi experimental method with sample population of 800 pupils (subjects); 400 who lost one or both parents against 400 pupils in same class with both parents. Result revealed that pupils who have lost one or both parents exhibit more behaviour problems than their peers, as measurement signified by Child behaviour checklist (CBCL.) scored them low in selected subjects test than their peers. There was also association between behaviour problems and school performance but those in rural areas exhibited fewer problems compared to those in urban areas. This could be attributed to social amenities at the urban pupils’ disposal such as (media). Although there are similarities in Kasonde’s (2010) and the present study, which are both on impact of ECE and academic achievement, but differ in the background of subjects and design used for the research. Kasande (2010) subjects are from upper basic, while the present study used lower basic pupils irrespective of gender, orphans and pupils with both parents; and use of quasi experimental approach by reviewed study in contrast to the present study which to used ex-post facto because the subjects were exposed to treatment, that is, “ECE” experience but similar in the use of child behaviour checklist (CBCL) in assessing behaviour of pupils.

Fagbeminiyi (2011) also conducted a study which focused on the role of parents in Early Childhood Education in the south western (Lagos) State of Nigeria. The aim of the study is to serve as an eye opener to both parents and society on modifying or re-adjusting them to a mode for achieving better future. However, Fagbeminiyi’s (2011) study was concerned with one variable, that is, role of parents on early childhood education, which makes it differ from the present study, that is more comprehensive, considering several variables that early childhood education could have influence on; which include academic achievement, location, moral and social behaviour.

In addition Fagbeminiyi (2011), was restricted only to parents of pupils in Ikeja local government area of Lagos, while the present study considered pupils in 10 local government areas (3 senatorial districts) of Kano state, which gave for generalization to other L.G.A areas within and outside the state after completion of study. Importantly, Fgbeminiyi’s variable “the parents” will be relevant in discussing the role of parenting skills on the social and moral behaviour of pupils, whom subjects will look up to as role model and for guidance.

Bibi and Ali (2010) research study showed the impact of pre-school education on the academic achievement of primary school pupils in Khyber Pukhtunkhwa in Pakistan. The research was survey and descriptive in nature. The population for the study comprises of all primary school pupils from semi government and private schools of Peshawar district. The sample size used for the study were 100 pupils from three semi –

government and two private schools they were selected on the basis of purposive sampling technique, that is establishing relationship between the school and the research work. Data used for the study were obtained from pupils annual results of the top four pupils of class one to five. A questionnaire was designed for teachers of each school to obtain information about pupils with and without the pre-school experience. Result shows that ECE pupils perform better than the non-ECE pupils. Bibi and Ali (2010)'s study shares some similarities with the present research. One of such is the impact of ECE on academic achievement. In obtaining data Bibi et al's study used annual results of pupils which may not be the true assessment of the pupils, while the present study conducted class activities using items retrieved from standardized primary school curriculum (NERDC, 2012), which were validated by qualified professionals in related fields in Mathematics, English studies and Basic science.

However, the reviewed study also differs in the use of research design and descriptive statistics. While the present study used ex-post factor research design based on the exposure pupils had earlier, that is, the ECE experience. The sample size differ 100/440, as against the present study though similar in the type of schools, government and private owned schools from three senatorial district of the state.

The results analysis was only based on comparison between ECE and academic achievement of the pupils in Mathematics; while the present study went further, in seeking ECE impact on moral and social behaviour of pupils in primary one who are the immediate beneficiary of ECE experience. Unlike Bibi et al., (2010) whose subjects comprises of primary 1 – 5 pupils, the present study used random sampling technique in selecting samples from primary one (1). Importantly both studies are primarily concerned with the Early Childhood Education impact on academic achievement scores of pupils. In addition the present study investigated ECE influence on moral and social behaviour of primary school pupils.

Similarly, Marturano, Gardinal, Pizato and Fontaine (2012) conducted a research titled Access to early childhood education and academic achievement in elementary school". The purpose of the research was to assess how early childhood education positively affects academic progress of pupils within the time – span of exposure to ECE experience. The research is similar to the present study but differ on the ground of longitudinal research design contrary to the ex-post facto design that was used by the present study. Notably too Marturano et al., (2012) spent three years to study the pupils, in other to monitor progress from primary 3, 4, 5 grade with the three groups based on year of ECE experience as shown below: -

Group 0 (with no ECE experience)

Group 1 (With ECE experience for one year)

Group 2 (With 2 years ECE experience)

Although the present study had two groups which were based on ECE impact on academic achievement scores, social and moral behaviour, of pupils but differs on the ground of groups (ECE and NECE) locality, the reviewed study was conducted in the municipal area while the present study was conducted in both rural and urban areas of Kano State.

Flynt (2008) reported on predicting achievement from classroom behaviour of pupils in first, third and eighth grades on reading and Mathematics achievement who are two racial culture African – American versus. White male and female pupils make up the subjects of study in assessing pupils. Classroom Behaviour Inventory (CBI) was used to measure student's behaviour in contrast to the adopted scale with slight modifications (MBS) Moral Behaviour Scale and Social Behaviour Scale (SBS) which were used by the present study. Reading and Mathematics subjects from the Woodcock – Johnson Psycho educational Battery, the Peabody Picture Vocabulary Test (PPVT) and Wechsler intelligence Scale for children revised WISC – R were used as standardized measure of intelligence, which is similar to the present study whose item was retrieved from Mathematics, Basic Science and English Studies Standardized Curriculum for primary 1 school pupils (NERDC, 2012).

Flynt's (2008) research could be said to be longitudinal in nature which is in contrast with ex-post – facto that the present study used, based on the previous ECE experience. Results obtained reveals that pupils rated higher on positive behaviour were equally rated higher in achievement score than those with negative behaviour in class behaviour gender and race had slight difference, African American were rated dependent and hostile and this might be linked with the exposure at home before school. Contrary the present study which did not sought difference between ECE experience on gender, type of school attended and race.

Rashid, Sanaaullah Igbal and Khalid (2013) compared the academic achievement and social skills of pre-school attendees and non-preschool attendees, which coincides with the current study. Pupils were observed and tested in English Studies, Mathematics and Science subjects in order to explore impact of social skills and academics learned in the pre-school on the further performance in subsequent learning situation like the current study too. Though the study differs from the present on the ground of exploring the impact of moral behaviour of pupils. Quantitative and qualitative design was used and data were obtained from pupils in both public and private primary school which is similar with the present study. Difference was also observe in the study, achievement test items that were structured by the researcher, while the current study used items retrieved from standardized syllabus of primary schools NPE 2007 which were validated by professionals in the related field and teachers teaching the pupils currently in order to obtain true performance of pupils at this grade level (1). Rashid and Sanaauallah,Igbal and Khalid, (2013) did not report on location where the research was conducted. Though the result of the study was relevant in supporting the discussion of the current study.

Bhamanai, Abdulaziz and Rehman (2012) reported on differences in early school behaviour of Riley Child Center (RCC) and non-Riley Child center (non-RCC) which is the difference in early school behaviour of RCC (children under an RCC ECE intervention) and non RCC (children under non RCC ECE intervention). The study was conducted on a two level sampling (convenient sampling for choosing the RCC and Non RCC schools and purposive sampling for recruiting teachers and children). The data of 100 children were collected from 10 schools across Pakistan. There were three major objectives set to carry out the research: (i) To explore the reliability of the scale in Pakistani context; (ii) Explore differences in early school behaviour of male and female children, and (iii) Explore the differences in early school behaviour of the RCC and non RCC children in Pakistan. The Cronbach's Alpha Reliability Analysis and Independent t-test was applied for analysis like the present study. The study has similarities with the present research work in terms of early school years experience, that is, impact on behaviour, use of research assistant and conduction of reliability test to measure reliability of instrument but differs as regards to the impact on academic achievement scores in core subjects and the sample size which is not comprehensive enough like the present study that used 27 schools with 440 samples from 44 Local Government Areas of Kano state. The data analysis reveals that the scale is statistically reliable in the context of study also; the data analysis reveals that, there is a statistically significant difference in the early school behaviours of RCC and non RCC with regards the internalization (home) problems. Likewise, there is no significant difference with regards the internalization problem between male and female children in the study.

Nafiu (2001) Comparison of Academic Achievement, Personality and Personal Social Adjustment of Islamic and Secular Nursery School Pupils in Kano, Kano State Nigeria. Masters in Educational Psychology. The study investigated Academic Achievement, personality and personal social adjustment of Islamic and secular nursery school pupils in Kano metropolitan area. The population of study was 400 (pupils) subjects were selected using systematic random sampling 200 secular and 200 Islamic nursery schools. A pilot was conducted using 2 schools that is secular and Islamic nursery school to test reliability of the instrument. Results obtained revealed no statistical significant in difference the Academic Achievement "t" = 1.01 < 1.960, df 258. Personal social adjustment revealed x^2 = 0.568 < 3.84, df = 2.58 df 380 secular and Islamic nursery schools pupils.

Recommendations were made as follows. It is essential to expose pupils to Early Childhood Education to enhance moral, religious and Academic Achievement. Academic achievement taught side by side with habit formation and attitude. The study is similar to the present study in view of emphasizing on benefit of Early Childhood Education to the populace but Contrary to the present study which investigation comprehensive that not only the influence of Early Childhood Education on academic achievement but Social and Moral behaviour inclusive.

2.8 Summary and Uniqueness of the Study

The review of the related literature associated with the present research accentuates the key areas that are germane to the present study and help to situate it within ECE literature. Specifically, the study enunciates significant contribution of early childhood education (ECE) programme to the physical, psychomotor, cognitive, social and emotional development of the child, including acquisition of language and early literacy. In relation to the independent variables, the concept early childhood education, (ECE), is considered as that education which takes place before formal compulsory education, which includes services, provided in kindergartens, nurseries and pre-school classes. Academic achievement is the level of pupils/students performance in classroom activity in a particular subject; while scores attainment indicates better performance, lower scores attainment reveals poor achievement. Moral behaviour refers to the process through which children develop proper attitudes and behaviour towards other people, which is concerned with the child's ability to distinguish between right and wrong. On the other hand, Social behaviour is a term which describes the general conduct exhibited by individuals within a society; by avoiding unacceptable behaviour which determines how the individual child interact with peer-group.

The review further focused on Cognitive, Social and Moral theoretical framework where theories of Piaget, Erick-Erickson and Kohlberg were fully reviewed. Piaget theorized that children's cognitive development occurred in series of stages (sensory-motor, pre-operation, concrete and formal). Erick-Erickson viewed social development as a conflict which leads to opportunities for personal growth (feeding, toilet training, exploration and school age). Kohlberg however, viewed morality as shifts from consequences to avoidance to successfully meeting the delineated. He categorized morality into three stages pre-convectional, convectional and post-convectional.

Empirical studies on early children education (ECE) conducted within and outside Nigeria were reviewed; most studies conducted focused on one or two variables thus narrowing the scope of the study. Though that conducted by Kasoda (2010) and Miles and Stipek (2006) were comprehensive with the use of large sample, still moral behaviour was left out which the present study resolved. On the other hand, Flynt (2008) whose longitudinal study was on predicting achievement in classroom, but social development was not tackled which is expected to enrich pupil's behaviour.

The present study attempts not to discriminate in choice of schools. Pupils who attend either private or government owned schools in Kano State constituted sample size, provided ECE is available in such schools within the three senatorial districts. Parametric test, which is independent sample t-test was used to test the hypotheses unlike previous studies reviewed which were limited to descriptive statistics of mean. The present study used scores obtained in academic achievement test conducted for pupils instead of continuous assessment scores used by previous studies which are likely to be influenced by teachers and subjectivity in scoring. Worthy of note is the gap created by empirical studies reviewed specific attention was not given to primary school pupils ‘moral and social behaviour in conjunction with academic achievement, as illustrated by Bandura (2009) theory which posits that people learn from one another via observation, imitation, attention and modelling. Bandura (2009) theory which is often referred to as bridge between behaviour and cognition. Academic achievement aim at social and moral primary level was the gap that was created by previous studies, which the present study filled. In addition, the sample size of the present research was larger than those conducted by the studies reviewed and this gives room for generalization.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes the design and procedures that were used for the study. Detailed description of the design and procedure of study were presented under the following sub-headings: research design, population for the study, sample and sampling procedure, instrumentation, scoring procedures, validity of the instrument, reliability of instrument, procedure for data collection and procedure for analysis of data.

3.2 Research Design

This study adopted “ex-post facto” research design which simply compares pre-existing differences between the groups. The design is a type which looks at differences “after the fact”, the differential research design makes no attempt to control the threat of assignment bias: It is a non-experimental research design that stimulates the results of an experiment. The design uses participants’ characteristic such as gender, class, race, participation or personality which automatically assigns participants to groups. Participants were not randomly assigned to a group, instead the class register was used. The dependent variable was then measured for each participant to obtain set of scores within each group. The present study compares the difference between ECE and non ECE participation (independent variable) while the dependent variables in this study were academic achievement, social and moral behaviour of pupils. Importantly, the goal of the study was to determine whether the scores for one group were constantly different from the scores of another group (Gravetter & Forzano 2006).The researcher compared groups differences on the independent variable to determine its influence on the dependent variables without manipulation of the independent variable (Anikweze, 2009).

3.3 Population of the Study

The population of the study is made up of the primary one school pupils with total number of 2,242,000 (Kano state school census 2011 – 2012), within the three senatorial districts: North, Central and South in Kano State.

Table 3.1: POPULATION OF LOWER BASIC CLASSES OF PRIMARY ONE (1)

LGEA	CLASS1			LGEA	CLASS1		
	BOYS	**GIRLS**	**TOTAL**		**BOYS**	**GIRLS**	**TOTAL**
AJINGI	2808	2762	5570	AJINGI	0	0	0
ALBASU	3128	2764	5892	ALBASU	0	0	0
BAGWAI	2354	1384	3738	BAGWAI	0	0	0
BEBEJI	3481	3097	6578	BEBEJI	41	42	83
BICHI	8312	7638	15950	BICHI	118	115	233
BUNKURE	5116	4168	9284	BUNKURE	30	40	70
DALA	11016	10889	21905	DALA	1191	1299	2490
DAMBATTA	3420	2970	6390	DAMBATTA	59	66	125
DAWAKIN KUDU	6811	9001	15812	DAWAKIN KUDU	85	58	143
DAWAKIN TOFA	4056	3179	7235	DAWAKIN TOFA	83	62	145
DOGUWA	5534	4796	10330	DOGUWA	25	23	48
FAGGE	7681	7673	15354	FAGGE	813	819	1632
GABASAWA	3416	3121	6537	GABASAWA	34	41	74
GARKO	2499	1974	4473	GARKO	15	8	23
GARUN MALLAM	3332	3428	6760	GARUN MALLAM	17	20	37
GAYA	4454	3736	8190	GAYA	0	0	0
GEZAWA	7188	6536	13724	GEZAWA	25	21	46
GWALE	9847	10454	20301	GWALE	1142	1165	2307
GWARZO	5424	3911	9335	GWARZO	56	66	122
KABO	4849	4389	9238	KABO	0	0	0
KANO MUNICIPAL	8050	8092	16142	KANO MUNICIPAL	1789	1981	3770
KARAYE	4260	4001	8261	KARAYE	70	46	116
KIBIYA	2082	1675	3757	KIBIYA	58	23	81
KIRU	6240	5527	11767	KIRU	105	110	215
KUBOTSO	10443	10172	20615	KUMBOTSO	850	861	1711
KUNCHI	2425	3148	6573	KUNCHI	0	0	0
KURA	4403	4361	8764	KURA	184	154	338
MADOBI	3595	2987	6582	MADOBI	18	14	32
KARAYE	2350	2134	4484	MINJIBIR	23	21	44
KIBIYA	7089	7259	14348	NASSARAWA	2134	2097	4231
NASSARAWA	12428	13039	25467	RANO	88	61	149
RANO	2965	2720	5685	RIMIN GADO	5	6	11
RIMIN GADO	3241	3273	6514	ROGO	217	170	387
ROGO	7476	7299	14775	SHANONO	8	4	12
SHANONO	4592	3569	8161	SUMAILA	0	0	0
SUMAILA	3089	2404	5493	TAKAI	0	0	0
TAKAI	3494	2932	6426	TARAUNI	322O	3374	6594
TARAUNI	9785	10364	20149	TOFA	33	30	63
TOFA	3058	3009	6067	TSANYAWA	5	8	13
TSANYAWA	3854	4015	7869	TUDUN WADA	152	215	367
TUDUN WADA	6026	4385	10411	UNGOGO	406	380	786
UNGOGO	9599	9775	19374	WARAWA	35	14	49
WARAWA	3117	3034	6151	**GRAND TOTAL**	13259	13481	16740
WUDIL	4814	4981	9795				
GRAND TOTAL	234201	222025	456226				

Source: Kano State School Census 2011 – 2012.

3.4 Sample and Sampling Technique

Sample size used (440) were selected from the population 2,242,000 of the entire primary one school pupils. A stratified random sampling techniques was used to select pupils from 27 schools within three senatorial districts. Number of pupils selected from the school was based on the population of pupils in primary one in specific school. Schools were selected from the following local government areas: Bichi, Rimi Gado and Dambatta (Kano North) Mingibir, Tarauni and Kano Municipal (Kano Central) Takai, Wudil and Tudun – Wada (Kano South). Sample sizes of 440 pupils used was based on Krejcie and Morgan (1970), Vernia and Barnett (1996). Hence, in deciding the samples size it is not the size, but the extent to which the sample is truly a representative of the characteristics of the population that was used. Selection was made through the class register in alphabetically sequential order as shown in the table 3.2.

1 **Table 3.2: Distribution of Respondents Based on Sample Size**

SENATORIAL	LGA	NAME OF SCHOOLS	TYPE	SAMPLE SIZE
North Senatorial District	Bichi	1.Hagagawa Primary School Bichi	NECE	15
		2. Baba Memorial Nursery and Primary Bichi	ECE	15
		3. Bichi Academy Nursery and Primary School Bichi	ECE	20
	Dambatta	4. Adamu Namura Nursery and Primary School Dambatta	ECE	15
		5.Barde Special Primary School Dambatta	NECE	15
	Rimin Gado	6.Model Primary School Rimin Gado	NECE	30
		7.Royal Academy Rimin Gado	ECE	15
Central Senatorial District	Kano municipal	8.Gidan Makama Special Primary School Kano	NECE	30
		9.Mahe Islamiyya School Kano	NECE	20
		10. Hudaibiyya Academy School Sharada Kano	ECE	30
		11. Yan Dutse Nursery and Primary School Kano	ECE	30
	Munjibir	12. Minjibir Special Primary School Sarari	NECE	20
		13.FGGC Staff Nursery and Primary School Minjibir	ECE	30
	Tarauni	14.Aisha Lamido Nursery and primary School Kano	ECE	15
		15.Babban Giji Special Primary School Kano	NECE	30
South Senatorial District	Takai	16. Unique Nursery and Primary School Takai	ECE	20
		17.Takai Special Primary School	NECE	20
	Tudun Wada	18.Ideal Community Nursery and Primary School	ECE	15
		19. Model Primary School Tudun Wada	NECE	25
	Wudil	20.Child Friendly Initiative School Wudil	NECE	15
		21.University of Science and Tech, Staff School Wudil	ECE	15
TOTAL				440

3.5 Instrumentation

Instruments for data collection for the purpose of this study include, three sets of scale tagged Moral Behaviour Scale (MBS) Social Behaviour Scale (SBS) and academic achievement test (AAT) which was a self designed test with items from primary school curriculum (NERDC, 2012). MBS and SBS were adapted, based on the Likert scale and in line with what the study is expected to measure. However, the self-designed Academic Achievement Test (AAT)was tailored towards assessing the pupil's academic ability, based on the primary school curriculum (NERDC, 2012), in core subjects: - Mathematics with 25 items, English Studies with 25 items while Basic Science and Technology contained 50 items. See appendix for details.

3.5.1 Moral Behaviour Scale (MBS)

Moral Behaviour Scale (MBS) is an instrument that consists of items that were retrieved from Moral Behaviour Instrument Scale that was adapted to assess behaviour exhibited by pupils in classroom which was in conformity with accepted norms of the society. The Moral Behaviour Scale questionnaire focused on how pupils build up an acceptable moral standard, which includes differentiating between right and wrong, telling the truth, imitating parents/teachers as role models. (Items contained in the questionnaire, see appendix 2), (Philips, 2010).

3.5.2 Social Behaviour Scale (SBS)

Social Behaviour Scale (SBS) is an instrument that consists of items which described interactive activities that enhanced social interaction amongst peer group in classroom. These attributes were used to assess and measure Social Behaviour of individual pupils. It centered on strategies of individuals' interactions with others both in class and at home. Such attributes were: cooperative / solidarity player, being attentive to others' reaction, choice of friends and ethical way of approaching others for assistance or ask for favour with expression like "please may I use your pencil". Similarly, the instrument was designed to test attitudes and find out how socially an individual pupil was, see appendix (2): - Section B (SBS) items were adapted (www.bbc.co.uk/science/humanbody/survey_on_social)

3.5.3 Academic Achievement Test (AAT)

The academic achievement test is an instrument that consists of test items in core subjects used in assessing pupil's ability in Mathematics, English Language and Basic Science and Technology. The items were retrieved from standardized primary school syllabus (NERDC, 2012), and were validated by specialists in the related fields and teachers presently teaching in primary schools. In this study, scores obtained in these core subjects were computed and analysis. To compute responses, the sum of weight on all items was computed with descriptive statistics to find the mean and independent sampled't' test.

Table 3.3: Percentage Category

Category	Percentage
Excellent	70 – above
Good	60 – 69
Average	45 – 59
Poor	0 – 44

Source: (Wiat II Wechseler, 2005, Bailur, 2006). See appendix for detail items

3.5.4 Scoring Procedures

Three scales used for data collection included: -

Social/Moral Behaviour Scale (SBS) and (MBS) with 10 items each, using 4 - Likert Scale Rating Order to assess; telling truth, caring, taking responsibilities, tolerance, harmful, keeping promise, making peace, embracing responsibility, reliable, courageous, generosity, forgiveness, attentiveness, courageous, politeness, kindness, friendliness, independent, sympathy, quietness. E.g. Always [“4”], Sometimes [“3”], Rarely [“2”], Never [“1”].

Academic Achievement Test (AAT) scoring, scores obtained for each subjects were computed by adding up the scores attained. Importantly parametric independent sampled‘t’ – test was used analysis the level of significant difference between scores attained by ECE and Non ECE pupils.

3.5.5 Validation of Instrument

Two sets of structured 4 point Likert scale questionnaire with ten items on Moral Behaviour Scale (MBS) and ten items for Social Behaviour Scale (SBS) were vetted for predictive validity by experts from Educational Psychology and Counseling department, within the Faculty of Education A.B.U Zaria. Academic Achievement Test (AAT) items in Mathematics with 25 items, English Studies 25 items and Basic Science and Technology with 50 items were vetted for content validity by professionals in Science Education ABU Zaria and teachers teaching in nursery /primary schools who were familiar with the items. Corrections made were integrated into the instrument in order to provide clarity and relevance of measuring instrument and to assess appropriateness for measuring the variables they were purported to measure.

The validity of an item for predicting the particular external criterion measure may be determined by computing the correlation between scores on the item and scores on the context. This is called the point – biserial coefficient.

The instrument was meant to assess pupils ability in the core subjects during class activities, Scores obtained for each subject was total all over expected scores multiply by a hundred to determine the percentile for each pupil before analysis.

3.5.6 Pilot Test

The pilot test was conducted to establish the reliability of the instrument. Pupils from Federal College of Education (Technical) Bichi Demonstration Staff Primary School were basically used for the test. This school was not within the scope of schools that were used for the present study; though it shared similar characteristics of the study area. Questionnaire test items were distributed to 25 ECE and 15 N-ECE bring the total to 40 which forms 10% of the total sample size of 440 that was used for the present study.

The aim of the pilot study is to test the instrument for its appropriateness clarity and to identify difficulty index with any of the items. Similarly, items difficulty analysis was carried out to determine difficult items. Items in which pupils scored low marks or were unable to attempt were discarded and reconstructed for the purpose of the main study. Furthermore, items in which pupils scored75% were tagged easy, 70-50% tagged moderate while score below 30 were rated difficult for pupils.

Item analysis was carried out for the purpose of determining the difficulty level of test items with the primary one pupils using the recent primary school curriculum, which was released by NERDC, (2012) to schools for onward implementation after organising a workshop that was attended by professionals in various fields of study.

After a test was administered and scored, a post analysis is often performed in order to evaluate the test's effectiveness. This procedure often involves an analysis of the individual items on test. One primary goal of item analysis is to help improve the test by revising or discarding ineffective items. Another important function is to ascertain what test takers do and do not know.

In determining the usefulness of an item as a measure of individual differences in ability or personality assessment, the tester needs some external criterion measure of the characteristic.

For example, if a test is being constructed to predict performance in a job or at school, then possible external criteria might be an index of job performance (such as supervisor's ratings) or an index of school achievement (such as grades assigned by teachers).

The first is the **item-difficulty index (p)**. This index is determined by calculating the proportion of examinees that answered the item correctly. The second index is called the **item-discrimination index (d).** For the purpose of this study **item-difficulty index** was carried out to find out how difficult the items were for the pupils used for pilot testing to predict real study group, where N_p indicates the number of test takers in the total group who passed the item, and N indicates the total number of test takers in the group.

Item-difficulty index analysis was conducted in three core subjects Mathematics, English Studies and Basic Science and Technology. Hence, items or questions found to be difficult for the pupils because of the low scores obtained in these numbers were discarded and other questions reconstructed to replace the discarded ones. vix: items analysis for English Studies No, 7, 9, 13, and 19. Items for Mathematics No, 5, 7, 14, and 16 and Items for Basic Science and Technology No, 9, 11, and 12 scores obtained in the above numbers were between 20 and 50 marks (for item analysis, see appendix ix page 190 -196).

The aim for which the item analysis was carried out was to determine the difficult, average and easy level of the items administered to pupils and also to determine their academic achievement scores in Mathematics, English Studies and Basic Science and Technology.

3.5.7 Reliability of Instrument

To obtain reliability for the instrument, pilot test was conducted using primary school one (1) pupils within a senatorial district with population of 440 pupils 10% of sample size (40) using 40 primary school pupils for the pilot testing in a school, Federal College Education (Technical)

Bichi (FCE.T.) Staff Nursery and Primary school with similar nature to that of the study group, but not part of the study group. Reliability of an instrument is the extent to which the instrument yields consistent (same) result when repeated each time the test was carried out (Howell, 2005, Gravetter & Forzano, 2006).

The data collected from the pilot test was statistically analyzed. For the purpose of reliability co-efficient, the Cronbachs reliability coefficient was used for social & moral questionnaire. Consequently, reliability co-efficient level of .760 and .878 were obtained for *x* and *y* for the questionnaire analysis of the Early Childhood Education pupils and non Early Childhood Education pupils respectively, while the co-efficient level of .695 and .683 were obtained for moral of *x* (ECE) and *y* (N-ECE) respectively. Similarly, the test -retest statistics reliability for the Academic Achievement Test (AAT) scores using Pearson Product Moment Correlations were 0.74 and 0.84 obtained for early childhood education pupils and the non early childhood education pupils respectively. These reliability co-efficient were considered adequate for the internal consistencies of the instruments. This was a confirmation of test reliability by (Spiegel, 1992; Stevens 1986). According to them, an instrument is considered reliable if it lies between 0 and 1, and that the closer the calculated reliability coefficient is to zero, the less reliable the instrument is and the closer the calculated reliability co-efficient is to 1, the more reliable the instrument is this therefore confirms the reliability of the data collection instruments for both the Early Childhood Education pupils and the non Early Childhood Education pupils used as appropriate for the main work.

3.6 Procedure for Data Collection

To enhance the smooth administration of the instrument for data collection, a letter was collected from the Head of Department, Educational Psychology and Counselling, Faculty of

Education, Ahmadu Bello University Zaria, introducing the researcher to the Headmaster/Headmistress for permission to conduct test with starting the purpose of the study and nature of assistance (that is with regards to distribution and collection of items). The researcher did solicit the co-operation of the class teachers, who served as research assistant within the schools. The research instruments were administered personally by the researcher with the assistance of the research assistant. The Academic Achievement Test items involves class activities, each pupil provided answers to the questions and solved sums within the time allocated to each core subject: - Mathematics 30 minutes, English studies 30 minutes while Basic science and Technology 45 minutes, a break time of 10 minutes interval for items to be distributed after each subject. Data retrieved from each pupil by the research assistant after completion were marked and scores were awarded to pupils; items for Mathematics were 25, English studies 25 while Basic Science and Technology was 50 totaling 100%. Similarly for Moral Behaviour Scale (MBS) and Social Behaviour Scale (SBS) which contain items that were awarded scores using the 4 Likert Scale Rating 4 3 2 1 total scores of 40 was awarded for the highest, 30 moderate, 20 average, and 10 was for low. Distribution of the questionnaire and test items was in three phases. The researcher and research assistant went through the test items (AAT) before distribution which was done personally by the researcher while the research assistant scored MBS and SBS items for each pupil because the class teacher was familiar with the pupils.

3.7 Procedure for Data Analysis

This section of the study is concerned with the analysis and interpretation of data collected. The analysis of the data collected was based first and foremost on the five research questions as indicated in 1.4 of this study. The analysis of the research questions were done through the use of descriptive statistics that is, means standard deviation and standard error. Computation was based on scores obtained by each pupil in Mathematics, English Studies, Basic Science and Technology for Academic Achievement Scores; while scores obtained through observation using the Moral Behaviour Scale and Social Behaviour Scale which were modified and scored based on 4 likert scores of always “4” sometime “3” rarely “2” and never “1” .

The Second phase of the analysis was based on results obtained from the five hypotheses being tested with inferential statistics, that is parametric independent “t” test, to test null hypotheses at 0.05 Alpha level of significance to determine the influence of Early Childhood Education on academic achievement scores in Mathematics, English Studies, and Basic Science Technology, of ECE and non – ECE pupils. Social and Moral Behaviour were also tested with independent sample “t” test in other to determine the influence that existed between Early Childhood Education and Moral and Social behaviour of ECE and Non-ECE pupils. Moral Behaviour Scale (MBS) and Social Behaviour Scale (SBS) questionnaire items were adapted to assess behaviour exhibited by pupils using the Likert scale 4, 3, 2, 1 at a decision level of 2.50 that is (4 + 3 + 2 + 1 = 10) divided by 4 and equals 2.50. decision mean. When the cumulative mean is higher than the 2.50 decision mean, therefore there is difference in mean scores of the pupils. Example MBS = 3.178 for ECE and 3.072 for Non-ECE at a decision mean level of 2.50. SBS 3.294 for ECE while 3.144 for Non – ECE at a decision mean level of 2.50.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

The main purpose of the research was to investigate the influence of Early Childhood Education experience on the academic achievement scores in Mathematics, English Studies, Basic Science and Technology, Moral and Social behaviour of primary school pupils within the three senatorial districts of Kano State, with a sample size of 220 pupils for each group ECE and NECE bringing the totaling to 440. The analysis was based on the main objectives of the study. The first main objective was to investigate the influence of Early Childhood Education on academic achievement scores on Mathematics, English Studies and Basic Science and Technology of ECE and NECE primary school pupils. While the second objective was to assess the influence of Early Childhood Education on social and moral behaviour of ECE and non – ECE primary school pupils. The results obtained from the data collected were presented and discussed in (4; 2, 4; 3 and 4; 4)The distribution of respondents was presented in 4;2,Mean scores influence of Early Childhood Education on academic achievement on Mathematics, English Studies, Basic Science and Technology, Moral and Social behaviour of ECE and Non-ECE Pupils were presented section 4;3.In section 4;4 Statistical Significant Influence of Early Childhood Education on academic achievement scores in Mathematics, English Studies, Basic Science and Technology, Moral and Social Behaviour ECE and Non- ECE pupils was presented.

4.2 Analysis of Data

This section focuses on presentation of data collected. First and foremost the descriptive statistics of the sample were presented accordingly, the distribution of respondents by school type, and group of subjects (pupils) and senatorial districts followed by answers to Research Questions and Hypotheses testing.

Table 4.1 Distribution of Respondents based on Frequency and Percentile

SENATORIAL	LGA	NAME OF SCHOOLS	TYPE	Frequency	Percentage
North Senatorial District	Bichi	1.Hagagawa primary school Bichi	NECE	15	3.409
		2. Baba memorial Nursery and primary Bichi	ECE	15	3.409
		2. Bichi Academy Nursery and Primary School Bichi	ECE	20	5.045
	Dambatta	4. Adamu Namura Nursery and primary school Dambatta	ECE	15	3.409
		5.Barde Special Primary School Dambatta	NECE	15	3.409
	Rimin Gado	6.Model Primary school Rimin Gado	NECE	30	7.018
		7.Royal Academy Rimin Gado	ECE	15	3.409
Central Senatorial District	Kano municipal	8.Gidan Makama Special Primary School kano	NECE	30	7.018
		9.Mahe Islamiyya School kano	NECE	20	4.545
		10. Hudaibiyya Academy School Sharada kano	ECE	30	7.018
		11. Yan Dutse Nursery and Primary School kano	ECE	30	7.018
	Munjibir	12. Minjibir Special Primary School Sarari	NECE	20	4.545
		13.FGGC Staff Nursery and Primary School Minjibir	ECE	30	7.018
	Tarauni	14.Aisha Lamido Nursery and primary School kano	ECE	15	3.409
		15.Babban Giji Special Primary School Kano	NECE	30	7.018
South Senatorial District	Takai	16. Unique Nursery and Primary School Takai	ECE	20	5.045
		17.Takai Special Primary School	NECE	20	5.045
	Tudun Wada	18.Ideal Community Nursery and Primary School	ECE	15	3.409
		19. Model Primary School Tudun Wada	NECE	20	5.681
	Wudil	20.Child Friendly Initiative School wudil	NECE	15	3.409
		21.University of Science and Tech, Staff School wudil	ECE	15	3.409
Total				440	100%

Total population was 2, 242, 000, of primary one school pupils while the sample size was 440 based on (Krejcie & Morgan, 1970).

The above table shows the distribution of respondents based on frequency and percentage (pupils), and schools used. Namely: Gidan Makama Special School Kano, Hudaibiyya Nursery and primary School, Sharada Kano, Yan-dutse Nursery and primary school Kano, FGGC Staff Nursery and primary school Minjibir, Babban Giji Special primary school Kano with 30 each that is 6.81%, While Bichi Academy, Mahe Islamiyya Kano, Minjibir Special Sarari, Unique Nursery and Primary School Takai and Takai Special had, representative of 20 each that is 5.0% totaling 22.7%.

Finally Hagagawa and Baba Memorial Bichi, Adamu Namura and Barde Special Dambatta, Royal Academy Rimi Gado, Aisha Lamido Kano, Ideal Community Primary, Child Friendly Initiative Wudil and KUT Staff School had 15 that is 3.40% respectively totalling 31

Table 4.2: Distribution of Respondents by Sample Size and Group

GROUPS	Frequency	Percentage
ECE	220	50%
Non-ECE	220	50%
Total	440	100%

Table 4.2.2 indicated that there were equal proportions of the sample 220 for ECE which represent 50%and 220 for Non ECE which equally represent 50% with a total sample size of 440 representing 100%.

4.3 Hypotheses Testing

Hypothesis testing analysis was used to analyze the corresponding Research Questions as illustrated on the tables below;

Hypothesis 1: There is no significant difference in academic achievement scores in mathematics between ECE and Non-ECE primary school pupils. To test the Mean and Hypothesis Early Childhood Education (independent variable) influence on academic achievement scores in Mathematics (dependent variable) of ECE and Non-ECE pupils. Results were showed below:

Table 4.3.1: Summary of 't'-test Analysis in Mathematics of ECE and N-ECE Pupils.

Variable	N	Mean	SD	DF	Calculated(t)	Significant level
ECE	220	17.527	4.339			
				438	1.984	0.048
Non-ECE	220	16.600	5.403			
Total	440					

Calculated "t" =1.984, P=0.048<0.05, at df 438.

Table 4.3.1 showed that significant difference existed in the calculated mean of Academic Achievement scores in Mathematics of ECE and non-ECE primary one schools pupil in which ECE pupils attained 17.527 and non ECE attained 16.600 mean scores respectively ("t" =1.984, P=0.048<0.05, df 438). This indicates that statistically significant difference existed in the academic achievement scores in Mathematics of ECE and non-ECE pupils. The mean score reveal that pupils who had ECE experience, had better performance in mathematics than their NECE counterparts. The hypothesis that states that there is no significant difference in academic achievement scores in Mathematics of ECE and NECE primary school pupils is hereby rejected.

Hypothesis 2: There is no significant difference in academic achievement scores in English Studies between ECE and Non-ECE primary one school pupils. To test the, independent variable of Early Childhood Education influence on the dependent variable that is academic achievement scores in English Studies ECE and N-ECE primary school pupils.

Table 4.3.2:'t'-test Statistical analysis in English Studies of ECE and Non-ECE primary school pupils

Variable	N	Mean	SD	Df	Calculated "t"	Sign p value
ECE	220	17.572	4.737			
Non-ECE	220	15.659	5.850	438	3.770	0.001
Total	440					

Calculated "t" = 3.770 P=0.001<0.05 at df 438

Table 4.3.2 shows significant mean difference existed between academic achievement scores in English Studies between ECE and non-ECE pupils in primary schools. The calculated mean of academic achievement scores in English Studies were 17.572 and 15.659 for ECE and non-ECE pupils respectively. Information on table 4.3.2 also revealed the result of analysis was ("t" = 3.770, P=0.001<0.05, df 438) from the results, it is obvious that statistically significant difference existed in the academic achievement scores in English studies of ECE and non ECE pupils in primary school. Thus, the calculated P value of 0.001 is lower than the 0.05 level of significance while the calculated "t" value was 3.770 is higher than the critical value of 1.960, df: 438. The null hypothesis is hereby rejected.

Hypothesis 3: There is no significant difference in academic achievement scores in Basic Science and Technology of ECE and N- ECE primary school pupils. To determine the influence of independent variable "Early Childhood Education" on the dependent variable "Academic Achievement Scores in Basic Science and Technology".

Table 4.3.3: Summary of t'-test Analysis in Basic Science and Technology of ECE and Non-ECE primary school pupils.

Variable	N	Mean	SD	DF	Calculated "t"	Sign p value
ECE	220	37.986	9.407		4.360	0.001
Non-ECE	220	30.940	22.047	438		
Total	440					

Calculated "t" = 4.360, P=0.001 < 0.05, df = 438

The result from table 4.3.3 showed that the calculated mean of academic achievement scores on Basic Science and Technology are 37.986 and 30.940 of ECE and non-ECE pupils respectively. This indicates that the ECE pupils performed better in academic achievement test in Basic Science and Technology than their non-ECE Pupils counterpart. The result obtained from table 4.3.3 on hypothesis testing ("t" = 4.360, P=0.001 < 0.05, df = 438,) which showed that statistically significant difference existed with the calculated P value of 0.001 which is lower than 0.05 level of significance while the calculated t- value was 4.360 at df 438; this signifies a statistically significant difference between the ECE and non-ECE pupils academic achievement scores in Basic Science and Technology. The ECE pupils obtained higher academic achievement scores in Basic Science and Technology than their non - ECE pupil's counterparts. The null hypothesis is hereby rejected.

Hypothesis 4: There is no significant difference between Moral behaviour scores of ECE and ECE primary school pupils. To test influence Early Childhood Education on moral behaviour of ECE and Non –ECE primary school pupils.

Table 4.3.4: ‘t’-test Statistical Significant Analysis of Moral Behaviour of ECE Non-ECE primary school pupils

Variable	N	Mean	SD	Df	Calculate “t”	Sign (p) value
ECE	220	33.5500	4.1985	438	0.127	
Non-ECE	220	33.3455	23.485			0..899
Total	440		1			

Calculated ‘t’ 0.127, < 1.96, P= 0.899 > 0.05, at df 438

The table 4.3.4 showed that the calculated mean difference of moral behaviour of ECE was 33.5500 while that of non-ECE is 31.813. This section indicates that ECE pupils had higher moral scores in each of the ten items of moral behaviour than their non-ECE counterparts. In summary the cumulative mean of moral behaviour level of the ECE pupils was 3.178 while that of the non-ECE was 3.072 at decision mean (see appendix for table on moral behaviour items). Each of these means is higher than the decision mean of 2.50 indicating a positive moral behaviour.

The independent sample t-test was used to analyze the moral behaviour of ECE and non-ECE pupils which shows that significant difference mean did not exist between the ECE and non-ECE pupils. The reason being that, the calculated “t” value of 0.127 was also found to be lower than the 1.960 critical “t” value, the calculated while the P= value of 0.899 was found to be higher than the 0.05 level of significance at df 438. Therefore the null hypothesis which states there is no significant difference in the moral behaviour scores of ECE and non-ECE primary school pupils is hereby retained.

Hypothesis 5: There is significant difference between Social behaviour ECE and N-ECE primary school pupils. To test influence of the independent variable Early Childhood Education on Social behaviour of ECE and N-ECE primary school pupils. The results of the analysis were showed in Table 4.3.5.

Table 4.3.5: 't'-test Statistical significant analysis of Social Behaviour Assessment of ECE and N-ECE Pupils in social behaviors

Variables	N	Mean	SD	Df	Calculate "t"	Sig (p)
ECE	220	32.4091	4.02684			
Non-ECE	220	31.6213	4.79032	438	2.853	0.035
Total	440					

Calculated "t" 2.853 > 1.96, P=0.035 < 0.05, at df 438

The Table 4.3.5 showed mean scores of the pupils' social behaviour to be 32.4091 and 31.6213 for ECE and non-ECE pupils respectively. This indicates that ECE pupils had significantly higher mean difference of social behaviour than their non-ECE counterparts.

Similarly, **decision mean** of Social behaviour results indicated that, the ECE pupils had higher social interaction than their non-ECE counterparts in each of the ten items of social behaviour. In summary the cumulative mean of social behaviour of the ECE pupils is 3.294 while that of the non-ECE was 3.114. Each of these means is higher than the decision mean of 2.50 indicating a positive Social behaviour from each group. See Appendix for Table 4.3.5 on mean of social behaviour items.

The results of the above independent t-test statistics shows that significant influence existed in the mean social behaviour scores of ECE and non-ECE pupils in primary schools, reason being that the calculated t value of 2.853 is higher than the 1.96 critical t values calculated while the P value of 0.035 is lower than the 0.05 level of significance, at df 438. Therefore, the null hypothesis which states that there is no significant difference in the social behaviour scores of ECE and non-ECE primary school pupils, is hereby rejected.

4.4 Summary of Major Findings

The following were the major findings of the study:

- Statistically significant difference does exist between the academic achievement scores in mathematics of ECE and Non – ECE primary school pupils

  [‘t’ = 1.984, $P=0.035 < 0.05$ at df 438] that is ECE pupils performed better in Mathematics as compared to their Non – ECE counterparts.

- Statistical significant difference also existed in academic achievements scores in English studies of ECE and Non – ECE primary school pupils

  [‘t’ = 3.770, $P=0.001<0.05$ at df 438]. This signifies that the ECE pupils outperformed their Non – ECE counterparts in English studies and communication skill.

- Similarly, the results revealed statistical significant difference with

  [‘t’ = 4.360, $P=0.001<0.05$ at df 438] which signifies that ECE pupils attained higher academic achievement scores in Basic science and Technology than their Non – ECE counterparts.

- On the contrary, the results revealed no statistical significant difference in Moral behaviour of ECE and Non – ECE primary school pupils. The differences was not significant with [‘t’ = 0.127, $P=0.899>0.05$, at df = 438] level of significant. Which indicates that the ECE and Non – ECE primary schools did not indicate any significant difference in their moral behaviour.

- Furthermore, results revealed statistical significant difference in social behaviour between ECE and Non – ECE primary school pupils with ['t' = 2.853, P = 0.035 <0.05, df = 438] level of significance difference, which indicated that ECE pupils exhibited better social interaction than their Non – ECE counterparts.

4.5 Discussion of Findings

This study revealed Statistically Significant difference between the academic achievement scores in Mathematics, English Studies, Basic Science and Technology of ECE and non ECE pupils (Calculated t. 1984, P=0.048<0.05, at df 438 for Mathematics, calculated "t" 3.770, P=0.001<0.05, df 438 for English studies calculated "t"= 4.360, P=0.001< 0.05 df 438 for Basic science and Technology. It further suggested that ECE pupils performed better academically than their non-ECE counterparts which could be attributed to the learning environment, provision of quality teachers and instructional materials that enhanced good participation during learning Process.

The study reveals that there is statistically significant difference between the academic achievement scores in Mathematics of ECE and Non - ECE pupils in primary schools. This view is corroborated by Wordu (2012), Bernard (2001), Miedd and Reynold (1999) whose study claimed that early childhood education has significant impact on academic performances of pupils in, spoken English, Mathematics, Integrated Science and Social Studies. That is, ECE enhance subsequent learning. Consistent with this study is Taiwo and Toyolo (2002) study which revealed that pupils with pre-school education experience, significantly outperformed their counterparts without such experience in all three school subjects areas surveyed in primary school in Botswana. This finding concludes that pre-school education equips children with pre-requisite skills which make learning in grade one easier and faster for children. Also supporting the position above, Curi, and Menezefilo (2006) submits that, the subjects primary four [4] pupils who began their study in the nursery – school (pre- schoolers) scored higher in

Mathematics test compared to those who did not have similar experience. To buttress the finding of the study, Osakwe (2009) opined that there is significant difference in the cognitive ability of those with ECE experience in subsequent learning than those without the pre – primary education experience.

This study found out that there is Statistically Significant difference in academic achievement scores in English Studies of ECE and non- ECE pupils. This was asserted by Anderson (2002) who posits that, when children are exposed to early childhood education, they develop superior communication skills necessary for physical ability and social unity needed in adult life, and increased cognitive and effective education balance. In furtherance to the above Bibi and Ali (2012) emphatically showed that there is significant difference in academic performance of pupils, who attended early childhood education with a remarkable impact on pupils' future achievement and excellent performance in major and fundamental subjects, Mathematics and English Studies were passed though the work varied slightly with the present study, which also tested pupils in Basic Science and Technology. In consonance with the present study. Bernard, Miedel and Reynold, (2001), pointed out that Early Childhood Education has been observed to have and influenced pupils' performance in spoken and written English, Mathematics, Social Studies and Integrated Science. This could be attributed to the experience in the early years, before formal education where quality teachers were found to teach small size population of pupils in class, and probably there was individual contact between the teacher and pupils. Better performance of the ECE pupils could also be attributed to early readiness and exposure to adequate and conducive environment which enhanced good communication skills in English studies both at home and in the school environment.

The study revealed that there was a statistically significant difference in academic achievement scores in Basic Science and Technology of ECE, and non - ECE, pupils. This Statistically Significant difference could have been attributed to the prior experience the ECE pupils had before the commencement of lower Basic Education; and access to Mass media (Television and Internet Service) in adherence to pre- school objectives which state that pupils should be prepared for academic activities before formal education: That is, catch them young, which will enable quality completion of academic experience of pupils and preparation of pupils for exploration of environment (nature science) and make pupils' inquisitiveness to find out what is happening around them. In affirmation to the above, Freency, Christensen and Maravick-lasa cited in Osakwe (2009), ascertained that early childhood education enhance academic pursuit of a child in primary school and subsequent learning much more lately in life. This early experience expose the child to all fields which make pupils apt to learn in the primary levels, as the confidence in pupils' learning capabilities which was acquired from Nursery school is lifted beyond the primary school. The research also revealed significant difference between pupils who had pre- primary education as they performed better in Mathematics, Social Studies, Integrated Science, motor skills, than those without it which indicate that pupils with pre- primary education had greater tendency to perform better in technical and vocational subjects that has to do with manipulation of skills, operations of machines, drawings than their counterparts who did not have the pre- primary school experience. Notably, the ECE experience has prepared pupils for exploration of their environment. The statistically significant difference could be attributed to the prior experience the ECE pupils had before the commencement of Lower Basic Education and assess to media (television and internet services). Similarly the pre-school objectives which state that pupils be prepared for Academic activities before formal Education, that is, catch them young will enable quality completion of academic experience of pupils, and preparation of pupils for exploration of their environment (nature science) will be achieved by training the pupils not to be shy and to be very inquisitive.

The study reveals no significant difference in ECE and non – ECE pupils moral behaviour. In a similar study, Miles and Stipek (2006) revealed that children who were rated relatively aggressive in early years were also rated as relatively aggressive in the later years. Similarly poor reading in early years were predicted as poor reading in later years. Notably, low literacy achievement predicted relatively high aggressive behaviour in later years, while good skills were associated with good reading scores. This means that moral behaviour and ECE experience were inextricably connected.

Moral behaviour of the ECE and Non – ECE revealed no statistical significant differences. This could be attributed to fact that learning processes and moulding of a child and its responsibility is internally regulated by parents who are immediate model at home and externally regulated be teachers who teaches pupils either in the Islamiyya or Sunday schools similarly environmental influence in residence and peer groups would definitely contribute to exhibition of acceptable behaviour in the society.

Notably the pupils are presently under the pre-conventional stage of moral development as specified by Kohlberg stages of moral development. This level of development is characterized by largely egocentric reasoning, where good or right actions are defined in terms of their consequences to the self. At stage one, the first and most primitive form of reasoning, there is an unquestioning deference to superior power (e.g., “might makes right”) and the physical consequences of action (regardless of meaning or value) dictate whether it is good or bad. At stage two, right action consists of that which instrumentally satisfies one's own needs and the needs of others. While elements of fairness and reciprocity are present, they are construed in a physical, pragmatic manner (e.g., “you scratch my back and I'll scratch yours”) and not in terms of justice. Empirical research suggests that these two stages of reasoning are typical of children aged 4 through 10.

To buttress the above statement, Bibi and Ali (2012) results specifies that pre – primary education lead to individual pupils forming a well balance personality leading to meaningful life. Similarly, in terms of personality, Fakeye (2014) revealed that authoritative parenting style favoured cognitive ability and exhibition of acceptable behavior of pupils than permissive parenting. In other words, teachers should concentrate on other factors that could assist pupils' performance like adopting child centered strategies in order to check-mate variables like parenting styles of primary school pupils. In consonance with the above, Boyd et al., (2012) summed up that high quality pre – school education provided to small size pupils with quality teacher – student ratio, promotes opportunity for peer activities and pupils are likely to graduate with lower rates of disrupted behaviour. This also revealed that high quality pre –school education yields long term social, moral and educational benefits which involve prevention of crimes and delinquency. This is corroborates Miedel & Reynolds (1990) in Osakwe (2009) who opined that when families are involved in their children’s early education, children experience greater success as they enter primary schools and even in later life. The formal school setting in early childhood education is a supplement to the home. Similarly, Wilson (2001) pointed out that early childhood education should address the moral development of the child especially caring and compassionate aspect of morality, that is the only time when children will be given opportunity to fulfill their potentials and achieving a sense of joy and satisfaction in lives. This promotes complete development of the child that the house can easily provide. In addition to the affection and moral training practice to children in school, the parents should reciprocate this with provision of guidance and moral upbringing required of a child as the year goes by.

The study revealed that, there is statistically significant difference between early childhood education pupils and non – early childhood education pupils in social behaviour. At this level of development, pupils tends not to differentiate who to interact with in this new environment, whoever shows love, affection, accommodation and shares things with them is a friend. Likewise pupils tend to be co-operative type of player instead of solitary player. Cooperative player tends to play in turns on the play ground either during indoor or outdoor games. The pupils were found playing with each other without fear of molestation or discrimination of peer groups to identify with notably pupils interacting innocently. Similarly to this study, is Anderson (2002) as citied in Osakwe (2009) is of the opinion that early childhood education experience development in the child superior communication skills necessary for physical ability, social unity, which enhance social interaction needed in adult life and beyond. It is not surprising then, that the change is yet to be exhibited since these pupils are immediate beneficiary of the ECE experience. When given the ample opportunity, the pupils will develop socially. Furthermore, Anderson, (2002) observed that there is a significant difference between pupils who attended pre – school education and those who did not. It predicted that those with ECE lead an individual to a well balanced personality and meaningful life. When analysis predicted that there is significant difference between ECE experience and social behaviour of ECE and non – ECE primary school pupils. The ECE pupils could be perceived as individual who interact innocently which in turn would enhance good relationship and create conducive atmosphere for good study that would result in a better performance academically and socially. This must have prompted significant difference level now, though in subsequent years there is likely to be change. With time pupils will identify with a particular person or group of their choice. The ECE pupils could be perceived as individual who interact freely with most of their peer groups, which would enhance good relationship that will pave way for pupil's good academic performance by seeking peer group assistance for better performance.

Rashid, Samauilah, Igbal and Khalid (2013), findings is also in line with the present study which revealed higher performance in academic achievement and social skills for pre – school attendees (ECE) than the non – pre – school attendees in (non – ECE) English, Mathematics and Social skills. Notably, schools should be seen as a place where pupils/students learn to contribute to the world around them. To accomplish this, students/pupils should enjoy coordinated and given continuous support to strengthen their social and emotional skills and enhance positive traits. The intent is to reduce substance abuse, and bullying, and to develop positive learning environment and improve pupils/students academic performance as illustrated by Elias (2012) results, which highlighted that the imitation of school has significant effect on reducing suspension and violence, and has shown it to be effective in developing a positive climate even in difficult school context. This means that social development and academic performance are inextricably connected as analyzed by the present study; which affirmed that there is significant difference between Early Childhood Education, academic achievement scores and Social behaviour of ECE and non – ECE primary school pupils.

At this level of development, pupils tend not to differentiate who to interact with, whoever shows love, affection, accommodation and shares things, that is, a cooperative player where pupils are found to take turn on play ground, or when engaging in indoor and outdoor games is their friend. The ECE pupils' people were observed as individuals who interacted freely with most of their peer group.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter the summary of the study was presented and conclusion drawn based on the results obtained from the investigation carried out. Recommendations, suggestions for further studies and limitations of the study were also stated.

5.2 Summary

The present study was designed to investigate the Influence of Early Childhood Education on Academic Achievement Scores in Mathematics, English studies, Basic Science and Technology, Moral and Social Behaviour of Primary One School Pupils in Kano State. Research objectives, Research questions, Null hypotheses, Significance of the study, Basic assumptions were formulated to guide the research and scope within which research was carried out.

In chapter two, related literatures were reviewed on the concepts of Early Childhood Education, moral behaviour, social behaviour and academic achievement. The reviewed literature pointed out the relationship between early childhood education, moral behaviour, social behaviour and academic achievement of primary one school pupils.

The theoretical framework on early childhood education, was based on theories such as laws of learning theory on readiness by Edward Thorndike, Lawrence Kohlberg’s developmental stages of moral behaviour, Erick Erickson’s social behaviour theory, Piaget cognitive theory, Maturation’s theory, environmentalist and constructivist advanced by Piaget Maria Montessori were also reviewed in relation to early childhood education and the present study.

Importantly relevant empirical studies that were related to the present study were reviewed. Early childhood education could be said to yield positive results on pupil's subsequent learning and behaviour of those who attained ECE experience prior to primary education.

In chapter three, the study adopted ex-post facto design which simply compares pre – existing differences between the groups. Population for the study was 2,242,000 which was the entire primary one school pupils in Kano state with a sample size of 440, having equal proportion 220 ECE and 220 NECE drawn from 27 primary schools in three senatorial districts of Kano state.

To obtain the data, three instruments were used; Academic Achievement Test (AAT) which consist of items in Mathematics, English studies and basic science and technology, Moral Behaviour Scale (MBS) items, to assess moral behaviour of pupils, and Social Behaviour Scale (SBS) items to assess social behaviour of pupils.

To obtain reliability for the instrument, pilot test was conducted which revealed the test retest statistic for reliability for academic achievement test (AAT) scores using Pearson Product Moment Correlation Coefficient were 0.74 and 0.84. While for moral behaviour scale (MBS) and social behaviour Scale (SBS) the Cronbach reliability coefficient Alpha level was 0.76 and 0.87, 0.69 and 0.68 respectively the analysis of data was analyzed using the parametric inferential statistics that is independent sample 't' test statistic at 0.05 level of significance.

In the final analysis on influence of academic achievement scores in Mathematics, English Studies, Basic Science and Technology, social behaviour of primary school pupils, the study established statistically significant difference between Early Childhood Education and academic achievement scores in Mathematics, English studies, Basic science and Technology of

ECE pupils in comparison with their NECE counterparts. Likewise significant difference existed in social behaviors of the ECE and NECE pupils.

On the contrary statistically, significant difference did not exist in moral behaviours of ECE and NECE pupils which could be attributed to home influence with earlier introduction of acceptable moral behaviour by parents and attendance of either Islamiyya schools or Sunday schools.

5.3 Conclusion

Based on the research findings of the study a line of demarcation has been drawn between pupils who had attended ECE Experience and those who did not as illustrated calculated: “t” 1.984, P=0.048 at df438 Mathematics, calculated “t” 3.770, P=0.001, at df 438 English Studies, calculated “t” 4.360, P=0.001 df 438 Basic Science and Technology and calculated ‘t” 2.852, P = 0.035, at df 438 Social Behaviour. On the contrary results revealed calculated “t” 0.127, P = 0.889, at df438 which illustrated non existence of significant difference with Moral behaviour.

Early Childhood Education Experience enhanced academic achievement scores in Mathematics, English studies Basic Science and Technology of ECE and Non-ECE pupils which enhance intelligent Quotient for subsequent academic pursuits during childhood through Adolescence and Adulthood. Knowledge at youth is wisdom in old age. Hence, is better to train boys then to mend men. Academic concept correlates positively with Academic performance in Mathematical skills, Communication skills and exploration of the environment, thus, the ECE pupils outperformed their Non-ECE counterparts. However, findings of Moral behaviour did not reveal statistically significant difference, though the decision mean level the ECE pupils scores revealed higher cumulative mean 3.178 compared to their. Non-ECE counterpart with 3.072. at a decision mean of 2.50. Parents who are immediate role model, the location of residence, types of Religious schools attended (Islamic or Sunday schools) are likely to be determining factors that had made it possible for ECE and Non - ECE pupils to exhibit acceptable moral behaviour among their peer groups and within the society

The study also revealed, statistically, significant difference among ECE pupils who exhibited acceptable social skills then their Non-ECE counterparts. Earlier exposure to ECE Experience is likely to be a contributing factor to exhibition of confidence without much fear among play mates and is also attributed to affection, sympathetic attitude of teachers, adoption of co-operative play and associative play among peers are responsible for social interaction. Thus, Early Childhood Education experience is recognized as first steps to basic education, to be fully integrated into the sub-sectors of educational system within lower Basic level of learning. Emphatically, Quality early childhood education is likened to an engraved mark on a rock which is difficult to erase off when provided by quality teachers, it will enhance provision of solid academic foundation for lifelong development which will no doubt stimulate and enhance pupils mental ability, exhibition of acceptable moral behaviour and social interaction among peer groups. Conclusively pupils taught at an early age usually benefit in various ways, which includes social skills, less or no need for special education instruction during subsequent school years, with better grades and enhance attention spans, of young children who experience pre-school programmes usually graduate from high school, attend college and have fewer behavioural problems and do not get involved in crimes in their adolescent and young adult age.

5.4 Recommendations

In view of the findings and conclusion of this study the following recommendations were made to enhance the provision of quality Early Childhood Education Experience for All (EFA).

1. Every child should be given opportunity to experience Early Childhood Education which is in line, with Universal Declaration on Human Rights and the UN Convention on the rights of the child.
2. Government should ensure that services provided by teachers are incompliance with curriculum in core subjects as stated by NERDC, 2012 to enhance achievement of state objective for a specific level of education.
3. Parents and stakeholders should promote ECE by providing facilities and instructional materials infrastructure that would offer individual access to quality ECE experience that will ensure Education for All (EFA) for the benefits of the populace.
4. The results of the study revealed that ECE pupils performance in academic achievement scores in Basic science and Technology is higher than their Non – ECE counterparts. Thus Early childhood educators and teachers should ensure that syllabus is being developed in such a way that ECE or Non – ECE pupils will be given individual opportunity to explore and discover nature science in an attempt to achieve one of the primary objectives which stated that "inculcate spirit of enquiry and creativity through exploration of nature and the environment" in pupils.
5. Findings revealed that no significant difference existed between moral behaviour of ECE and Non – ECE pupils. Teachers should ensure that scheme of work is developed and adopted to give individual opportunity to develop good moral behaviour in pupils irrespective of ECE or Non – ECE pupils. Parents being the immediate custodian of pupils should ensure acceptable behaviour patterns is exhibited before the children at home, similarly likewise the teachers in school, by inculcating good moral values and formation of acceptable attitude and behaviour.

5.5 Suggestions for Further Studies

In view of the findings revealed by the present study, though there are enormous researches conducted on Early Childhood Education effects before now, the following are suggestions for further research.

1. There should be more comprehensive research analysis using larger samples that comprises three senatorial districts within the other five Geo – political zone of Nigeria (North East, North Central, South West and South-South and South East).North West Geo-political zone of Nigeria and South West Geo-political zone. Results obtained in such study will give room for comparison that will be useful for making policy concerning ECE Experience.
2. Replication of the study within same senatorial districts with assessment of teacher quality effect in teaching ECE pupils and non-ECE pupils.
3. Replication of this study within the same senatorial districts comparing public and private schools for significant difference.
4. Conducting the same type of research with sex variables (females & males inclusive) to give room for comparison of academic achievement, social and moral bahaviour of pupils who attended ECE and those who did not.
5. Replication of the study within same senatorial district comparing economic status of parents and pupils performance.

5.6 Limitations of the Study

Several limitations to this study are worthy of noting:

1. Some teachers were not cooperative initially because they saw the data collection as an assessment to evaluate their competence in the teaching sectors.

2. Teachers attempt to suggest pupils that are to be used for the exercise instead of using the class register for the stratified random sampling.
3. Limitation faced during the assessment was teachers scoring pupil indiscriminately on moral and social behaviour refusing to give the exact moral and social behaviour of their pupils initially but with the presence of the researcher the incidence was corrected.

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APPENDIX I

Department of Educational
Psychology and Counseling,
Faculty of Education,
Ahmadu Bello University, Zaria.
1st February, 2014.

Dear Respondents (Headmaster / Headmistress).

OBSERVATION OF PUPILS

I am a post graduate student of the above institution, conducting a research on the impact of Early Childhood Education on academic achievement, moral and social behaviour of pupils of primary schools in Kano State. Scores obtained in observation of pupils, class activities and results are purely an academic exercise meant to generate data for the research work. Observation scores obtained will be treated confidentially.

Thanks

Yours faithfully,

NAFI'U, KAILANI THAIBAT
Ph.D/08828/2008 – 2009

APPENDIX II (a)

ACADEMIC ACHIEVEMENT TEST (CLASS ACTIVITY)

MATHEMATICS PRIMARY ONE

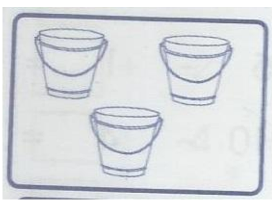
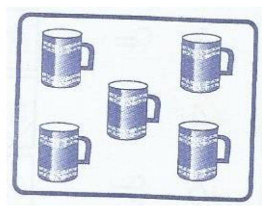
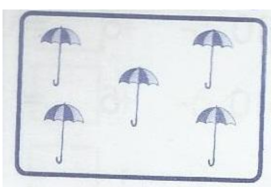
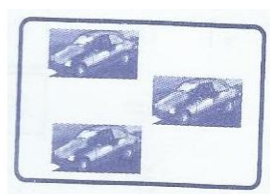
INSTRUCTIONS = ANSWER ALL QUESTIONS

TIME 30 MINUTES

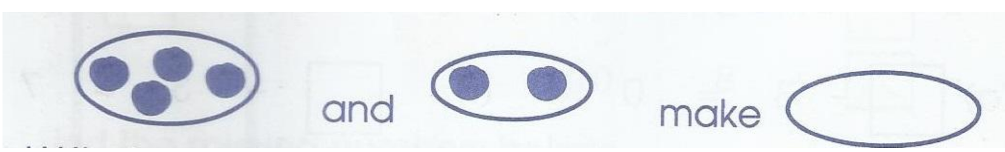
Fill in the missing numbers.

1. Fill in 29, 30, __, __, __, __, __, 36, __.

Match the same number with members.

2. Add up the items in the two circles below.



3. Write in words.________ 3 = ___________

4. Addition of numbers.

   5 4

   + 2 3

   __

5. Eight kobo plus nine kobo gives $\boxed{}$

Subtraction:

6. 54 – 23 =

   a. Ten take away seven =

7. Addition of numbers

$$\begin{array}{r} 5 \\ 2 \\ +\ 2 \\ \hline \end{array}$$

Fill in the missing numbers in the boxes below

8. + 4 = 7

9. Six plus gives ten

10. 4 tens =

Multiplication of numbers

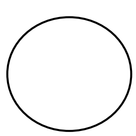
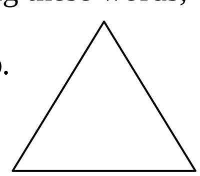
11. 5 x 2 =

12. $\begin{array}{r} 12 \\ \times\ 2 \\ \hline \end{array}$

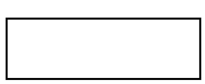
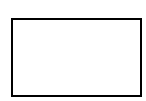
13. 15 x 3 =

14. Write out the tens and units: 59 = _____ tens and ______ units

15. Write the names of shapes beside diagram using these words; – Triangle, Circle

a.  ____________________ b.  ____________________

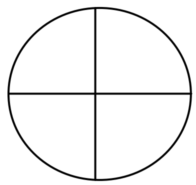
16. Write the names of each shape beside diagram using these words; Square, Rectangle

a.  ________________ b.  __________

17. Shade the fractions on each diagram

Shade

18. ½ a half



19. ¼ a quarter

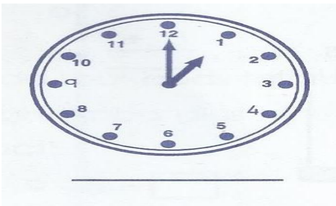
20. Write these words correctly:

dayTues = ______________ daySatur = _________________

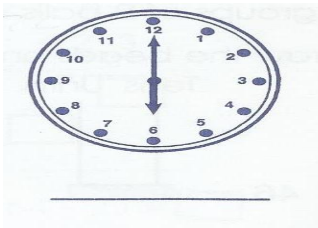
21. How many days are there in a week?_________________________

Write the correct time on the clock faces below each clock:

22.

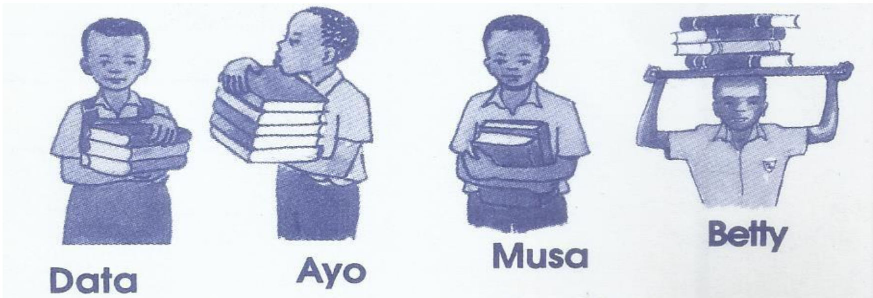


23.

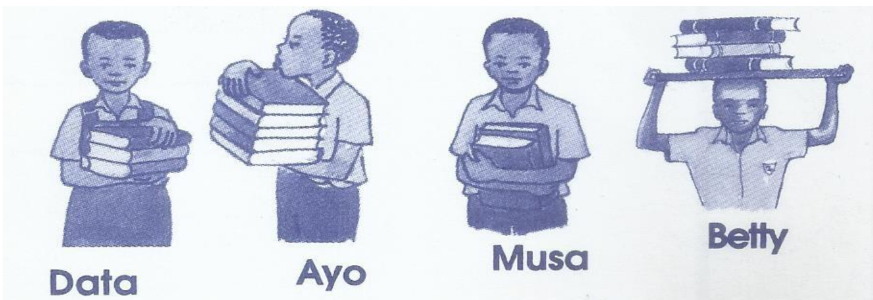


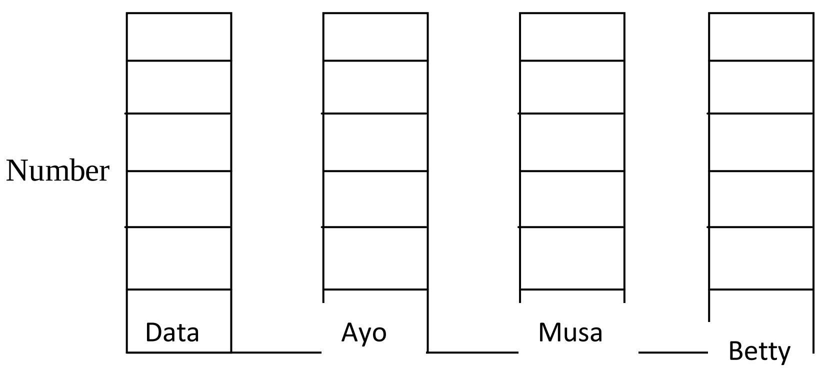
____

24. How many children are holding books below __________________



25. Shade the boxes below indicating the number of books each pupil is holding





APPENDIX II (b)

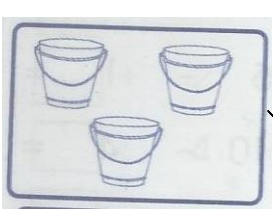
ACADEMIC ACHIEVEMENT TEST (CLASS ACTIVITY)

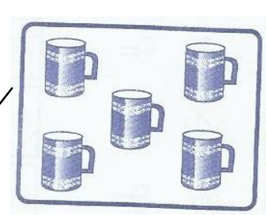
MARKING SCHEME: MATHEMATICS PRIMARY ONE

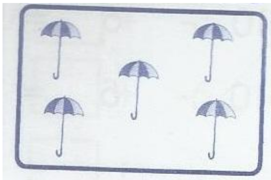
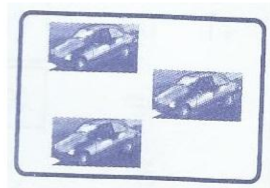
Fill in the missing numbers.

18. Fill in 29, 30, 31, 32, 33, 34, 35, 36, 37. ½ mk

Match the same number with members.

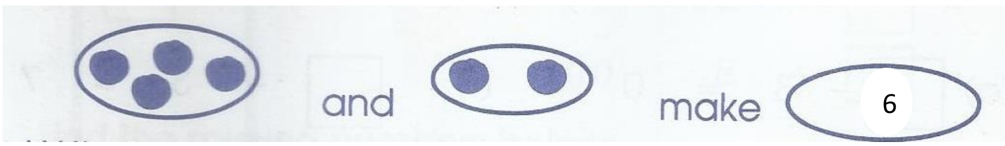




½ mk

19. Add up the items in the two circles below.



1mk

20. Write in words. 3 = Three 1mk

21. Addition of numbers.

```
  5 4
+ 2 3
  77
```

1mk

22. Eight kobo plus nine kobo gives 17 1mk

Subtraction:

23. 54 – 23 = 31 1mk

24. Ten take away seven = 3 or Three 1mk

25. Addition of numbers

```
  5
  2
+ 2
  9
```

1mk

Fill in the missing numbers in the boxes below

26. 3 + 4 = 7 1mk

27. Six plus 4 or four gives ten 1mk

40

28. 4 tens = 1mk

Multiplication of numbers

29. 5 x 2 = $\boxed{10}$ 1mk

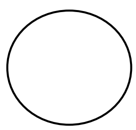
30. 1 2

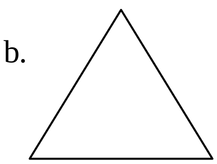
x 2
2 4 __ 1mk

31. 15 x 3 = $\boxed{45}$ 1mk

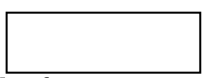
32. Write out the tens and units: 59 = 5 tens and 9 units 1mk

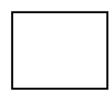
33. Write the names of shapes beside diagram using these words; – Triangle, Circle

a.  Circle ½ mk

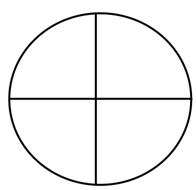
b.  Triangle ½ mk

34. Write the names of each shape beside diagram using these words; Square, Rectangle

a.  Rectangle ½ mk

b.  Square ½ mk

35. Shade the fractions on each diagram

36. Shade ½ a half  1mk

37. Shade ¼ a quarter  1mk

38. Write these words correctly:

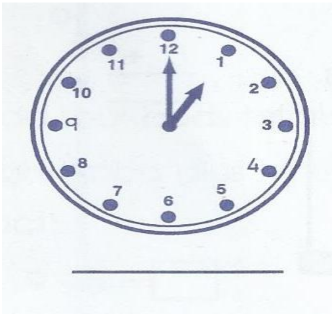
dayTues = Tuesday daySatur = Saturday 1mk

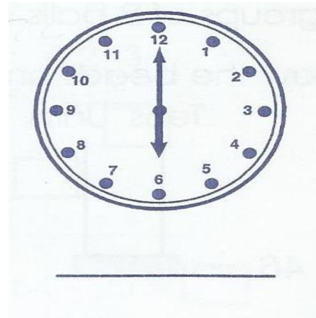
39. How many days are there in a week?_7 days 1mk

Write the correct time on under these clock faces:

22.

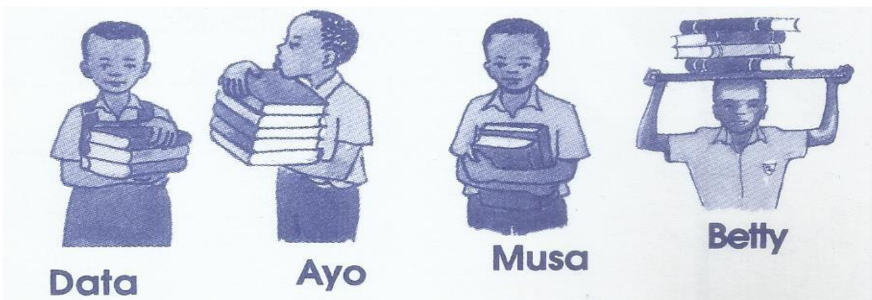
23.



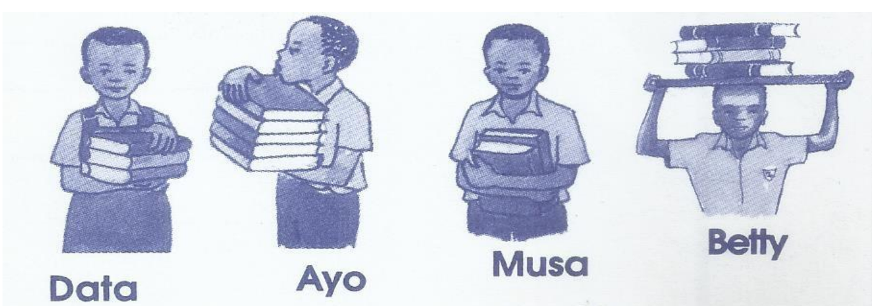


1^0. Clock ½ mk 6^0 Clock ½ mk

24. How many children are holding books below ____4____ 1mk

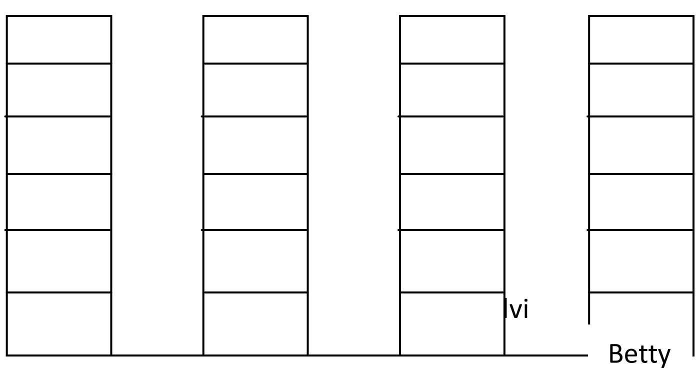


25. Shade the number of books each child is holding



1mk

Number



Data	Ayo	Musa

APPENDIX III(a)

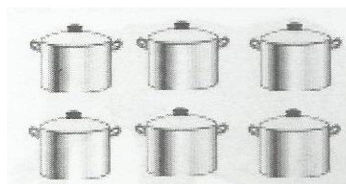
ACADEMIC ACHIEVEMENT TEST (CLASS ACTIVITY)

ENGLISH STUDIES; PRIMARY ONE

INSTRUCTIONS = ANSWER ALL QUESTIONS

TIME 30 MINUTES

1. Expressing plurals with the objects below:

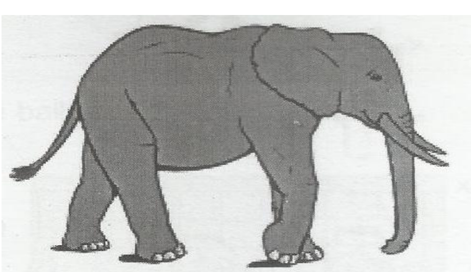


____

2. Fill in the gap with ‘a’ or ‘an’ below each animal

…………………….. dog

3. Fill in the gap with ‘a’ or ‘an’ below each animal



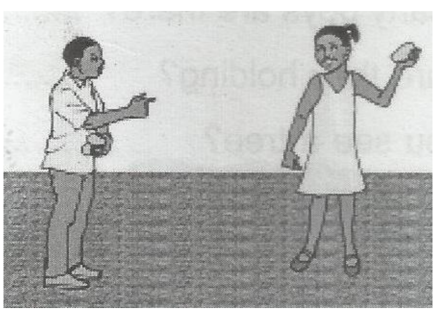
………………………. Elephant

4. How many mangoes is boy holding? …………………..

5. Who is holding some mangoes a boy or girl? ……………………

6. Fill in the gaps with the following words (this, these, that, those) to match actions in number 6 and 7.

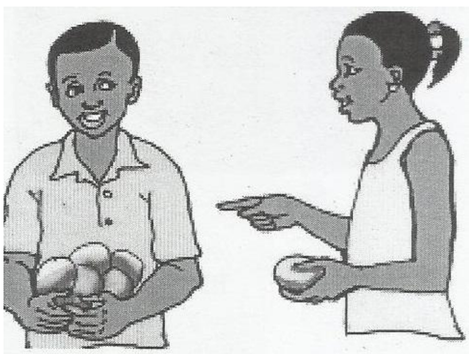
6. ………………………….. Is my mango



7. …………………… is your mango

Fill in the space with the following words (this, these, that, and those)

8. …………………… are my mangoes



9. ……………………….. are your mangoes

Fill in the space using the words in the box to indicate activities perform daily.

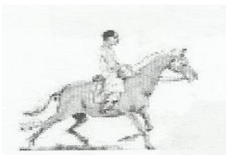
Wake, Pray, Take, Brush, Eat and Read

10. Every day, I ………………. Up by 6 am.
11. I ……………………. To God in the morning.
12. I …………………… my teeth every day.
13. I …………………… my bath every day.
14. I …………………… my breakfast every morning.
15. I …………………… my book every day

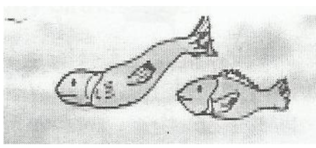
16. Match the pictures with actions indicated

Riding

Swimming

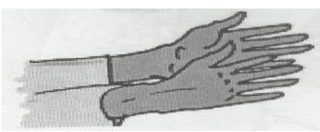


Talking



Dancing

17. Match the following words with part of the body shown below.



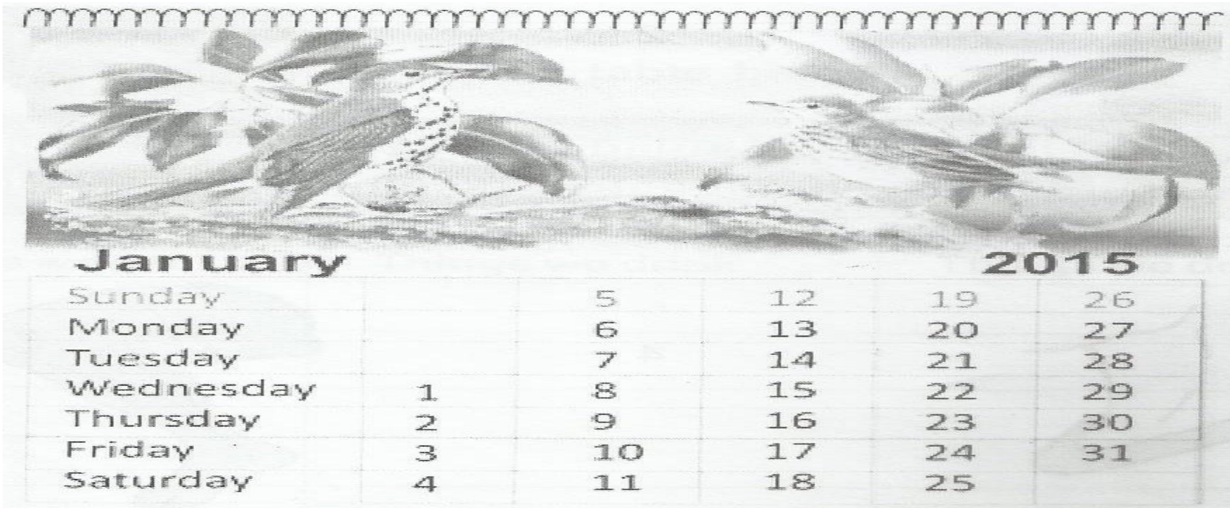
Smelling

Walking

Clapping

Seeing

Look at the calendar and answer the questions below number 18 and 19



January 2015

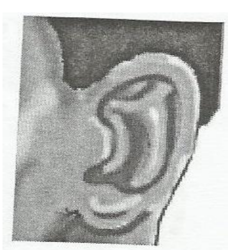
Sunday		5	12	19	26
Monday		6	13	20	27
Tuesday		7	14	21	28
Wednesday	1	8	15	22	29
Thursday	2	9	16	23	30
Friday	3	10	17	24	31
Saturday	4	11	18	25	

18. What is the year of this calendar? …………………………………….

19. What day is January 17? …………………………………….

Fill in the missing letters using a or b,.

20. He …… d



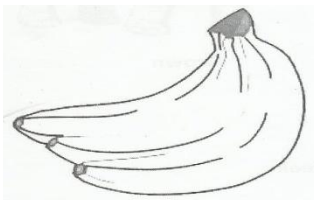
21. E ……… r

Complete the sentences using these words: (legs, hands), in the space.

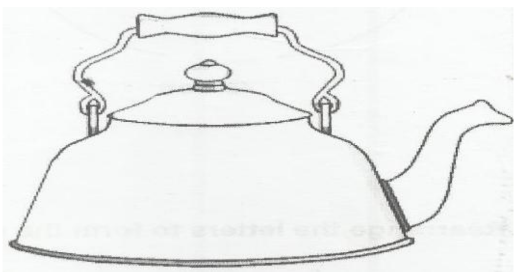
22. I walk with my ………………………………………

I write with my ………………………………………

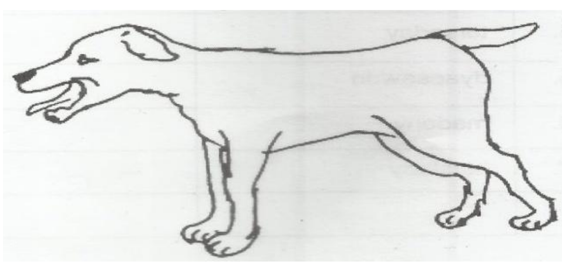
Colour each object with the colour written below it



23. Yellow



24. Black



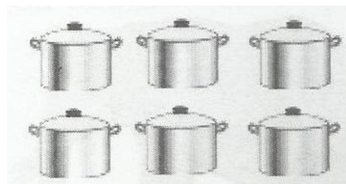
25. Brown

APPENDIX III (b)

ACADEMIC ACHIEVEMENT TEST (CLASS ACTIVITY)

MARKING SCHEME: ENGLISH STUDIES; PRIMARY ONE

1. Expressing plurals with the objects below:

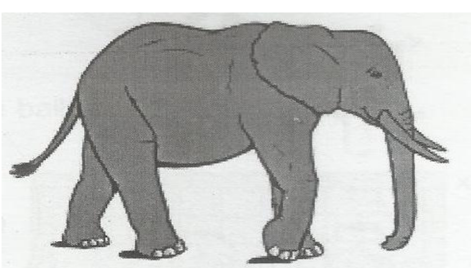


Six pots 1mk

2. Fill in the gap with 'a' or 'an' below each animal

…………A………….. dog 1mk

3. Fill in the gap with 'a' or 'an' below each animal



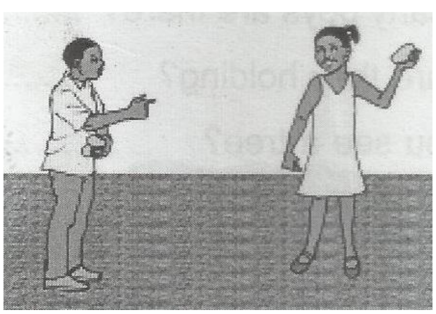
…………An……………. Elephant 1mk

4. How many mangoes is boy holding? ……6…………….. 1mk

5. Who is holding some mangoes a boy or girl? …………Boy………… 1mk

6. Fill in the gaps with the following words (this, these, that, those) to match actions in number 6 and 7.

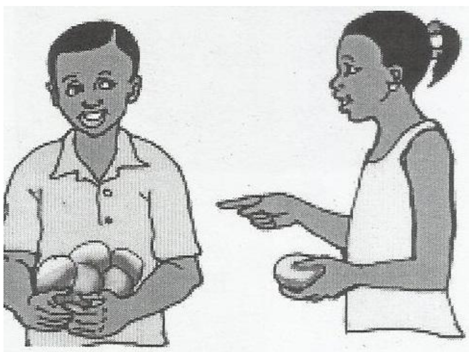
6. ……………This……………. Is my mango 1mk



7. ………That…………… is your mango 1mk

Fill in the space with the following words (this, these, that, and those)

8. ……These……………… are my mangoes 1mk



9. ………………Those……….. are your mangoes 1mk

Fill in the space using the words in the box to indicate activities perform daily.

Wake, Pray, Take, Brush, Eat and Read

10. Every day, I …wake……………. Up by 6 am. 1mk

11. I ……Pray………………. To God in the morning. 1mk

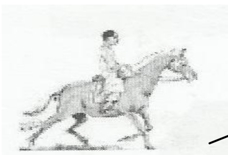
12. I …Brush………………… my teeth every day. 1mk

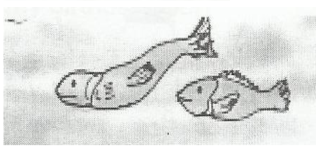
13. I ……Take……………… my bath every day. 1mk

14. I ……Eat……………… my breakfast every morning. 1mk

15. I …Read………………… my book every day 1mk

16. Match the pictures with actions indicated





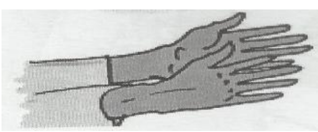
Riding

Swimming

Talking 1mk

Dancing

17. Match the following words with part of the body shown below.



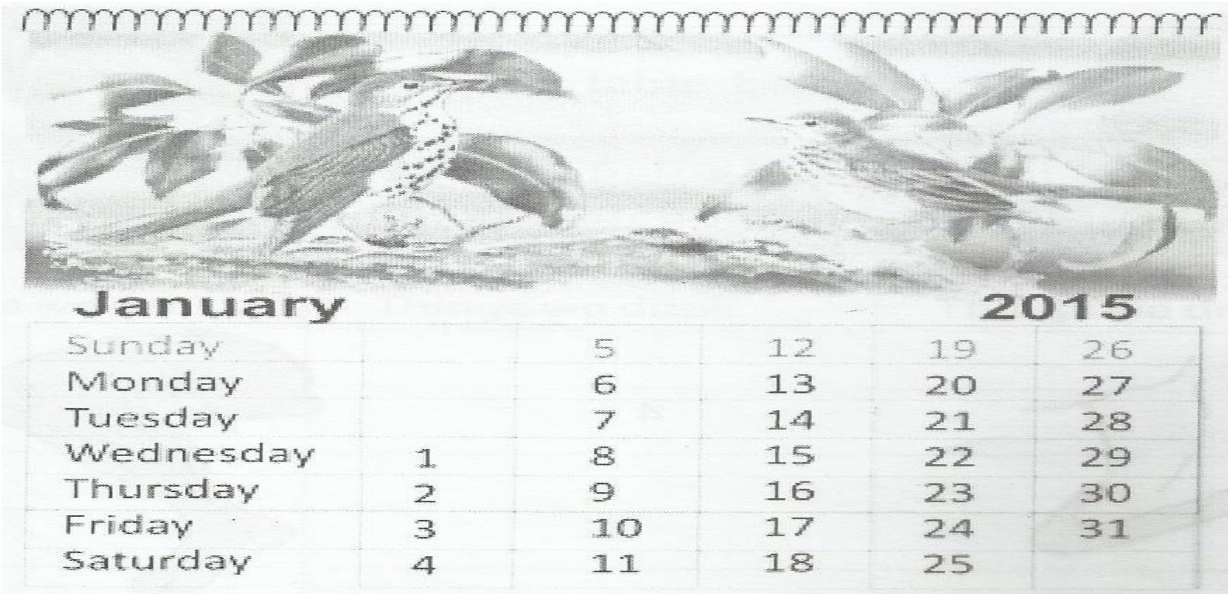
Smelling

Walking

Clapping 1mk

Seeing

Look at the calendar and answer the questions below number 18 and 19

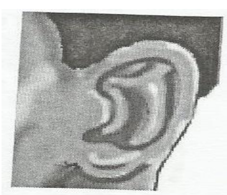


Sunday		5	12	19	26
Monday		6	13	20	27
Tuesday		7	14	21	28
Wednesday	1	8	15	22	29
Thursday	2	9	16	23	30
Friday	3	10	17	24	31
Saturday	4	11	18	25	

18. What is the year of this calendar? ………2015……………………………. 1mk
19. What day is January 17? …………………Friday…………………. 1mk

Fill in the missing letters using a or b,.

20. He …a… d 1mk



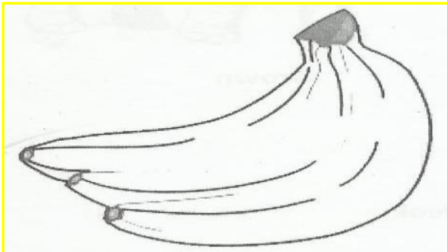
21. E …a…… r 1mk

Complete the sentences using these words: (legs, hands), in the space.

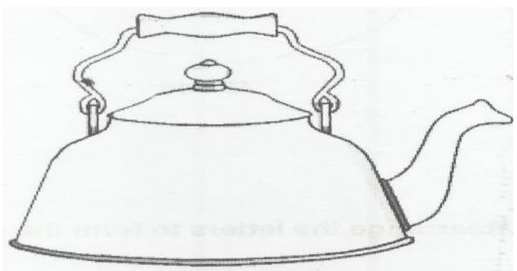
22. I walk with my ……legs………………………………… ½ mk
    I write with my ……………hands………………………… ½ mk

Colour each object with the colour written below it

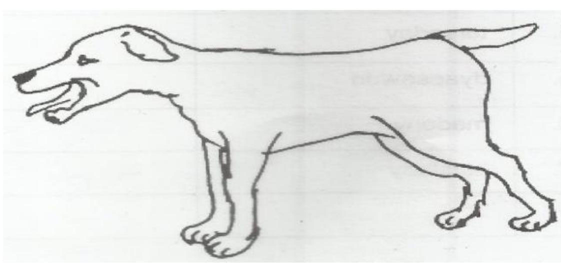
23. Yellow



24. Black



25. Brown



APPENDIX IV(a)

ACADEMIC ACHIEVEMENT TEST (CLASS ACTIVITY)

SUBJECT: BASIC SCIENCE AND TECHNOLOGY, LEVEL: PRIMARY ONE

INSTRUCTIONS = ANSWER ALL QUESTIONS

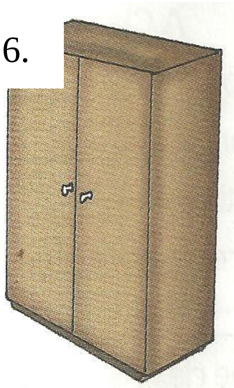
TIME 30 MINUTES

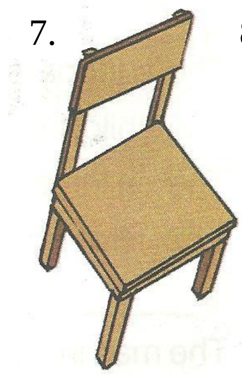
Look at the picture below. Indicate part of the arrow shows on the teacher using the words in the boxes.

1. Head	2.Mouth	3. Leg	4.Nose

Name these objects using these words Ruler, Book, Chair, Cupboard.

5. 

6. 

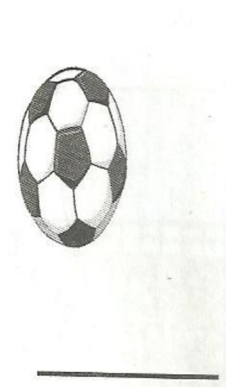
7. 

8. 

__________ __________ __________ __________

Write the names of these items below each using these words; bottle, jug, spoon, ball.

9 

10 

11 

12 

__________ __________ __________ __________

Write the name of items found below in a kitchen using these words. Stool, bucket, cup and kettle.

13 

14 

15 

16 

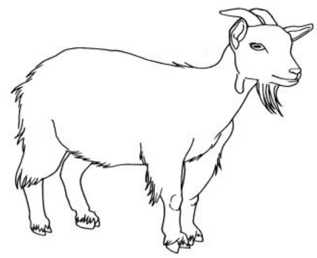
__________ __________ __________ __________

17. The Clinic

Complete the word using a, r, u,

She is a n __ se

Identify the following pictures below using these words (shoes and goat) to fill



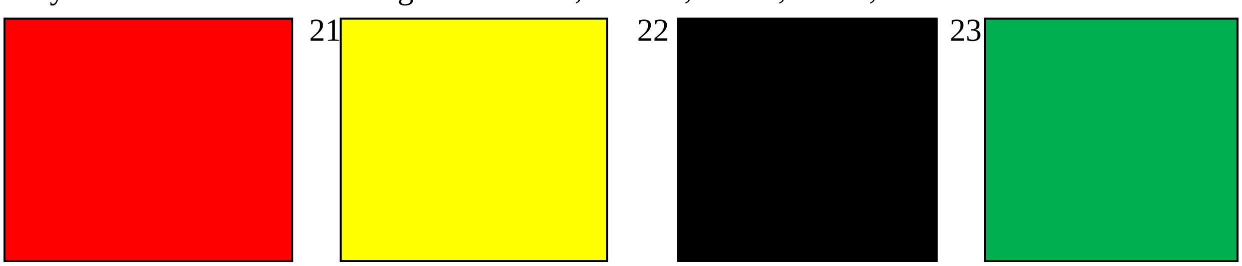
the space below.

18. Identify 1 living thing ___________

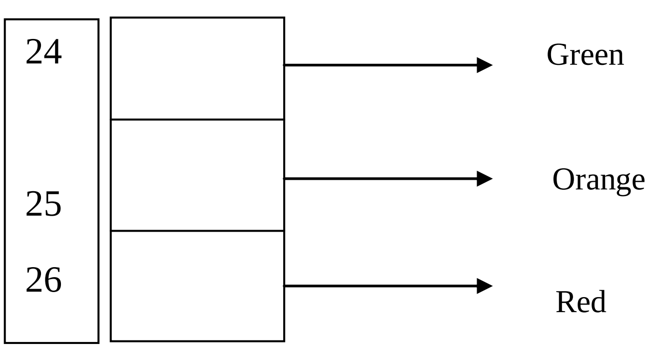
19. Identify 1 non living thing ___________

Identify colours found below using these words; Yellow, Green, Black, Red

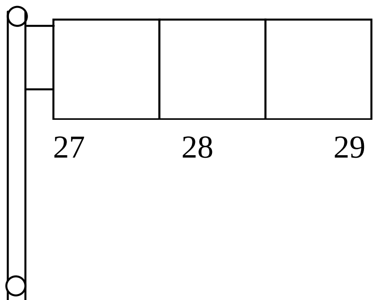
20 21 22 23



20. Identify traffic light signs by painting with colours with colours indicated beside each box.



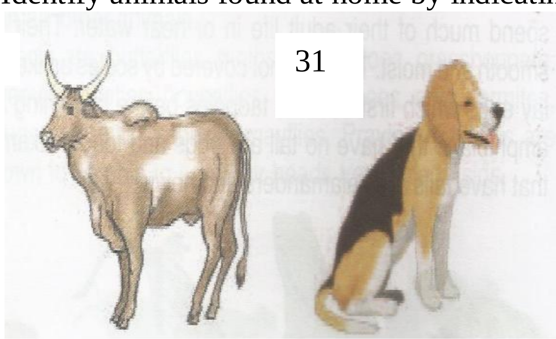
Paint the Nigeria flag with these colours White Green

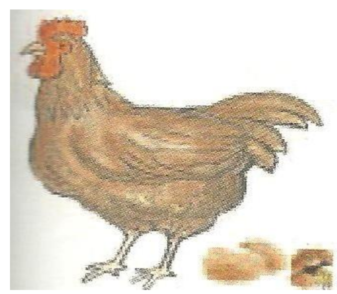


27 28 29

Identify animals found at home by indicating their names below: Hen, Cow, Dog

30 31 32

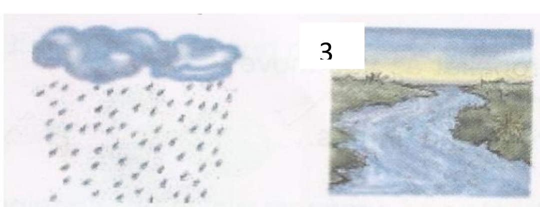


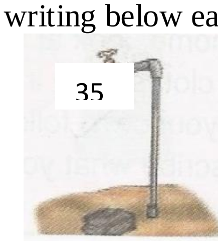


__________________ ______________ _______________

Source of water. Indentify each source by writing below each. Tap, Well Stream, Rain

33 3 35 36

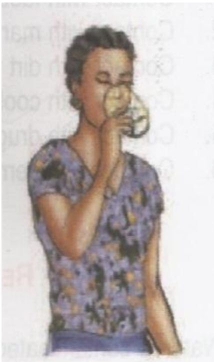




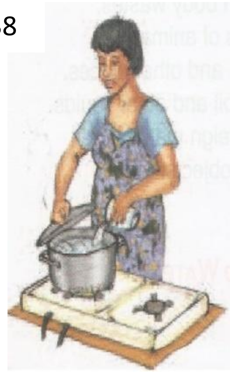
_______________________ _________________ _________________ _________________

Indetify each activities below using these words; bathing, cooking washing clothes, drinking

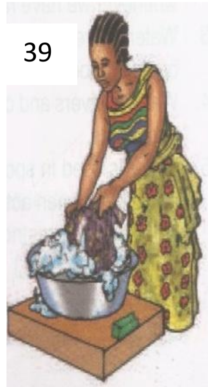
37



38



39



40

________________ ______________ ______________ _____________

Name the food crops below – Maize, Orange

41

42

______________________ ________________

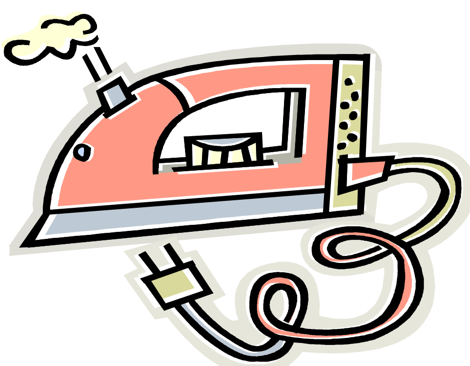
Instructions; identifying pictures of items usually found in the classrooms using these words table, chalkboard, chair.

43

44

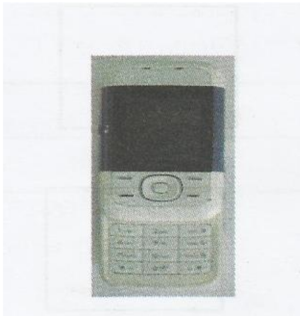
45

46. Identify object below use for ironing by filling in the missing alphabets a,o,r.



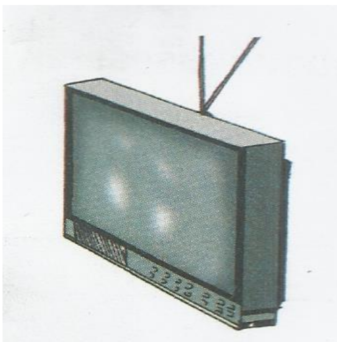
I__ __n

47. Identify object use for making calls and fill in the missing alphabets n,a,t,e.


H___ds__

Identify objects and fill in the missing letter from 48, 49 and 50.

48. Use of technology l,e,i.



T __ev__sion

49. Use of technology l,a,e,o,e

A__r__p___n__

50. Identify the Simple machine tool used at home using any of this words: Cutlass, Broom, Bucket

____

APPENDIX IV (a)

ACADEMIC ACHIEVEMENT TEST (CLASS ACTIVITY)

MARKING SCHEME BASIC SCIENCE AND TECHNOLOGY, PRIMARY ONE

Look at the picture below. Indicate part of the arrow shows on the teacher using the words in the boxes.

1. Head	2. Mouth	3. Leg	4. Nose

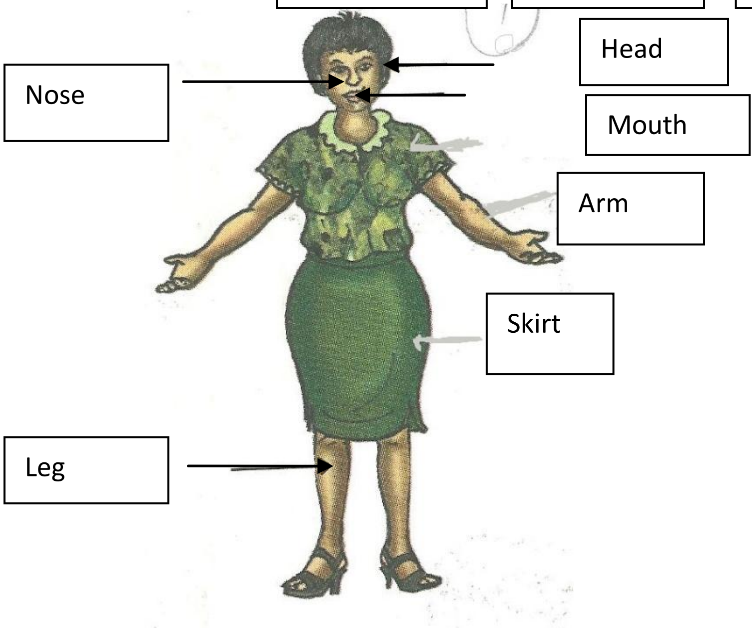
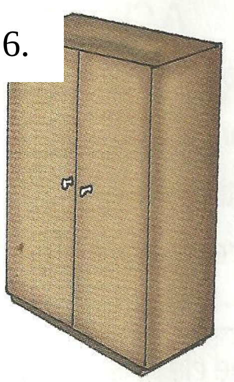


Figure 1

1mk each

Name these objects using these words Ruler, Book, Chair, Cupboard.

5. 

6. 

7. 

8. 

1mk each

Book	Cupboard	Chair	Ruler

9  10  11  12 

Spoon ______ Ball ______ Bottle ______ Jug ______ 1mk each

Write the name of items found below in a kitchen using these words. Stool, bucket, cup and kettle.

13  14  15  16 

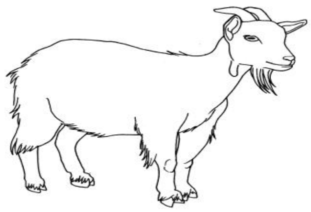
Kettle ______ Cup ______ Bucket ______ Stool ______ 1mk each

21. The Clinic

Complete the word using a, r, u,

She is a nurse 1mk

Identify the following pictures below using these words (shoes and goat) to fill the space below.

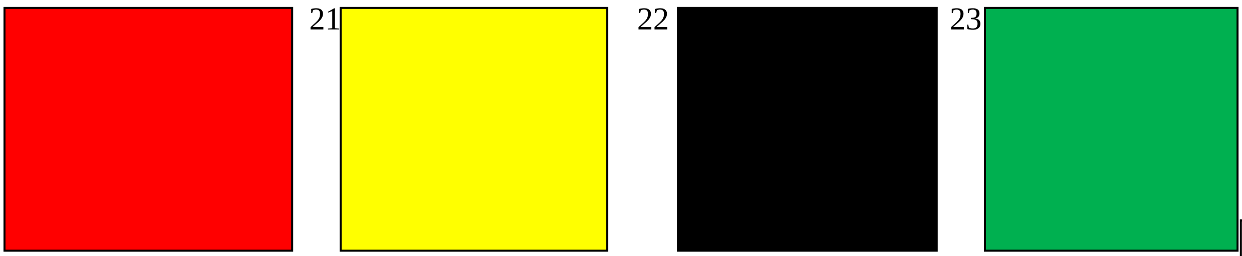


22. Identify 1 living thing __Goat________ 1mk

23. Identify 1 non living thing __Shoes________ 1mk

Identify colours found below using these words; Yellow, Green, Black, Red

20 21 22 23



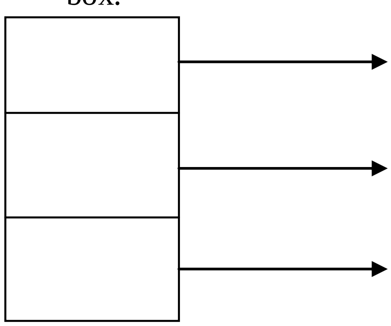
Red	Yellow	Black	Green	1mk each

24. Identify traffic light signs by painting with colours with colours indicated beside each box.

24

25

26



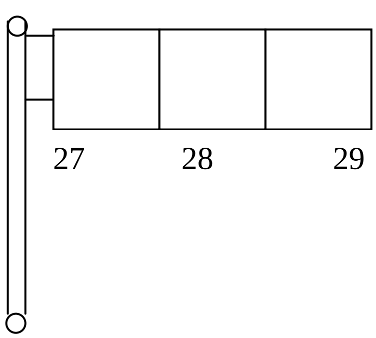
Green

Orange

Red

1mk each

Paint the Nigeria flag with these colours White Green



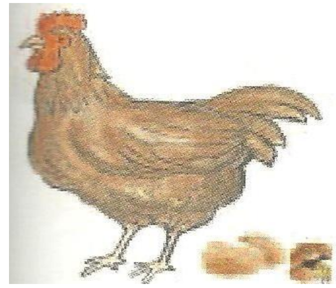
27 28 29

1mk each

Identify animals found at home by indicating their names below: Hen, Cow, Dog

30 

31 

32 

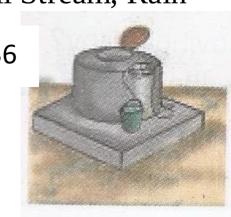
______Cow___________ ___Dog__________ ___Hen________ 1mk each

Source of water. Indentify each source by writing below each. Tap, Well Stream, Rain

33 

3 

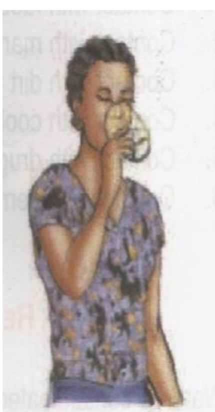
35 

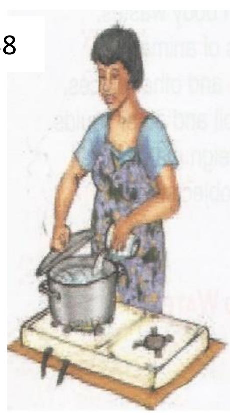
36 

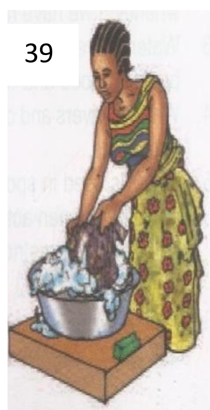
Rain Stream Tap Well

1mk each

Indentify each activities below using these words; bathing, cooking washing clothes, drinking

37 

38 

39 

40 

1mk each

Drinking Cooking Washing clothes Bathing

Name the food crops below – Maize, Orange

41 

42 

_____Orange___________________ ____Maize____ 1mk each

Instructions; identifying pictures of items usually found in the classrooms using these words table, chalkboard, chair.

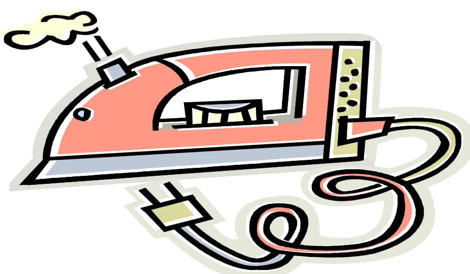
43 

44 

45 

Chalkboard Chair Table 1mk each

46. Identify object below use for ironing by filling in the missing alphabets a,o,r.



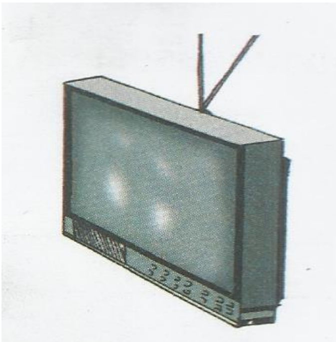
I_r o_n 1mk

47. Identify object use for making calls and fill in the missing alphabets n,a,t,e.

Handset 1mk

Identify objects and fill in the missing letter from 48, 49 and 50.

48. Use of technology l,e,i.



Television 1mk

51. Use of technology l,a,e,o,e

Aeroplane 1mk

52. Identify the Simple machine tool used at home using any of this words: Cutlass, Broom, Bucket

1mk

Broom

APPENDIX V

INFLUENUCE OF EARLY CHILDHOOD EDUCATION ON ACADEMIC ACHIEVEMENT, MORAL AND SOCIAL BEHAVIOUR OF PUPILS IN PRIMARY SCHOOL LEVEL IN KANO STATE

MORAL BEHAVIOUR SCALE

Source: (Philip W.L. 2010)

Instruction: please tick ✓ — in column on daily basis Monday, Tuesday, Wednesday, Thursday and Friday. When a pupil exhibit any of the behaviour.

The observation of pupils will be carried out by the researcher and research assistant (i.e. classroom teacher)

1. Telling truth: Ability for the child to be frank and open.

   Always ☐ 4
   Sometimes ☐ 3
   Rarely ☐ 2
   Never ☐ 1

2. Caring: Actively of embracing others, ability to share toys with peer.

   Always ☐ 4
   Sometimes ☐ 3
   Rarely ☐ 2
   Never ☐ 1

3. Taking responsibilities : Get along with peers without complain.

   Always ☐ 4
   Sometimes ☐ 3
   Rarely ☐ 2
   Never ☐ 1

4. Tolerant: Does not discriminate or restrict self to few peers.

   Always ☐ 4
   Sometimes ☐ 3
   Rarely ☐ 2
   Never ☐ 1

5. Harmful: Avoid hitting peers with harmful objectives.

   Always ☐ 4
   Sometimes ☐ 3

Rarely 2
Never 1

6. Keeping promise: Ability to do assignment, coming to school or does assignment eat the right time what asked to do.

Always	4
Sometimes	3
Rarely	2
Never	1

7. Making peace: Does things with out resorting to violence, standing up for what is right.

Always	4
Some times	3
Rarely	2
Never	1

8. Embracing responsibility: Put best effort and work hard.

Always	4
Sometimes	3
Rarely	2
Never	1

9. Reliable: Ability to do and keep to what is expected to be done

Always	4
Some times	3
Rarely	2
Never	1

10. Courageous: Ability to exhibit good character

Always	4
Some times	3
Rarely	2
Never	1

APPENDIX VI

INFLUENUCE OF EARLY CHILDHOOD EDUCATION ON ACADEMIC ACHIEVEMENT, MORAL AND SOCIAL BEHAVIOUR OF PUPILS IN PRIMARY SCHOOL LEVEL IN KANO STATE

Source: http://www.bbc.com.co.uk//science/humanbody/survbeysocial.

Instruction: pl ✓ t — in column on daily basis Monday, Tuesday, Wednesday, Thursday and Friday. When a pupil exhibit any of the behaviour.

The observation of pupils will be carried out by the researcher and research assistant (i.e. classroom teacher)

SOCIAL BEHAVIOUR SCALE

Rate the following social behaviour scale (4 point modified likert scale)

1. Generosity (share his or pencil, pen or book with peers).

Always	4
Some times	3
Rarely	2
Never	1

2. Forgiveness (say sorry when he/she step on peer's toes or pushes someone

Always	4
Some times	3
Rarely	2
Never	1

3. Attentive: (Does class work in sequential order e.g. sketch, draw or working of sums

Always 4
Some times 3
Rarely 2
Never 1

4. Courageous: Respond to questions with confidence during class

Always 4
Some times 3
Rarely 2
Never 1

5.
6.
7. Polite: Seek permission to use peers erase or pencil "please may I use your pencil

Always 4
Some times 3
Rarely 2
Never 1

8. Kindness: avoid hurting peers

Always 4
Some times 3
Rarely 2
Never 1

9. Friendliness: Ability to work or play with others peers

Always 4
Some times 3
Rarely 2

Never 1

10. Independent: Does class work and home work by self

Always 4

Some times 3

Rarely 2

Never 1

11. Sympathetic: Care for others when hurt.

Always 4

Some times 3

Rarely 2

Never 1

12. Quietness: Avoid playing with other (solitary player)

Always 4

Some times 3

Rarely 2

Never 1

APPENDIX VII (a)

Pilot test reliability of instrument

Early Childhood Education (Moral Behavior Scale)
Reliability
Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	25	100.0
	Excluded[a]	0	.0
	Total	25	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.698	.695	10

Item Statistics

	Mean	Std. Deviation	N
Thankfulness (ability to appreciate by saying thank you ma/sir)	4.5200	.50990	25
Gentleness: (does not get defensive when corrected instead he/she apologizes)	3.9200	.64031	25
Humility: Constantly consider other peer groups during class activities and outdoor games	3.6000	.70711	25
Persistence: Avoid giving up too easily, still the child keep trying (solving mathematics sums or climbing the slide or riding bicycle during outdoor games	3.9600	.73485	25
Harmony: (Avoid quarrelling or fighting with other peer groups either in class or during outdoor games)	3.9200	.95394	25
Helpful. (Assist peers when the need arise, either use of pencil or biro or purchase of biscuit)	4.1600	.62450	25
Truthfulness: (Avoid exaggeration or telling lies)	3.6400	1.03602	25
Honesty: (Keep to what is expected in class work, avoid copying peer's answers or working out assignment or home work by peers)	3.8400	.94340	25
Punctuality; (come to class early after break or when asked not to make noise in the class)	3.9200	1.18743	25
Greeting: (Always greet peers and teachers when he/she comes across anyone e.g. good morning sir or good afternoon or good bye	3.4400	1.38684	25

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.892	3.440	4.520	1.080	1.314	.092	10

Non Early Childhood Education (moral inventory behavior scale)

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	15	100.0
	Excluded[a]	0	.0
	Total	15	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.682	.683	10

Item Statistics

	Mean	Std. Deviation	N
Thankfulness (ability to appreciate by saying thank you ma/sir)	4.5333	.91548	15
Gentleness: (does not get defensive when corrected instead he/she apologizes)	3.8667	.74322	15
Humility: Constantly consider other peer groups during class activities and outdoor games	3.6667	.61721	15
Persistence: Avoid giving up too easily, still the child keep trying (solving mathematics sums or climbing the slide or riding bicycle during outdoor games	3.4667	1.12546	15
Harmony: (Avoid quarrelling or fighting with other peer groups either in class or during outdoor games)	4.6000	.63246	15
Helpful. (Assist peers when the need arise, either use of pencil or biro or purchase of biscuit)	3.4667	.83381	15
Truthfulness: (Avoid exaggeration or telling lies)	3.5333	.51640	15
Honesty: (Keep to what is expected in class work, avoid copying peer's answers or working out assignment or home work by peers)	3.8000	1.01419	15
Punctuality; (come to class early after break or when asked not to make noise in the class)	3.3333	1.29099	15
Greeting: (Always greet peers and teachers when he/she comes across anyone e.g. good morning sir or good afternoon or good bye	3.3333	1.54303	15

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.760	3.333	4.600	1.267	1.380	.213	10

APPENDIX VII (b)

Social behavior of pupils in primary school level in Kano State
Reliability

EARLY CHILDHOOD EDUCATION PUPILS

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	25	100.0
	Excluded[a]	0	.0
	Total	25	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.760	.687	32

Item Statistics

	Mean	Std. Deviation	N
Friendly with peers	4.4800	.50990	25
solitary player playing alone avoid playing with others	2.5600	1.35647	25
Share his/her pencil/biro/pen. toys exercise books, textbooks with others	3.8400	1.06771	25
use textbooks exercise book/exercise books toys alone	2.8400	1.34412	25
say sorry when he/she steps on toes of peers groups or someone	3.6400	1.03602	25
feels bad when "Lunch box is thrown on the floor /or mistakenly push off to the ground	2.9200	1.03763	25
Accept leadership roles when appointed or selected e.g. Class captain, play group leader or team	3.9600	.97809	25
Shy away from responsibility and conducting situation	2.5200	1.32665	25
Avoid rush and wait for turns during outdoor games /break	2.9200	1.28841	25
Seek for attention by screaming or crying or jumping over desks	2.6400	1.28712	25
Does class activities in sequential order. E.g sketch, draw and paint or working sums in math's class	4.1200	1.23558	25
does not follow order in carrying out class activities paint space, drawing before sketching	2.6000	1.19024	25
Avoid excess when carrying out work activities	3.6800	.94516	25
Seeks for notice and stubborn	2.2000	1.15470	25
respond to question with confidence during class activities	3.9200	.99666	25
does not respond to questions confidently during class activities	2.1600	1.21381	25
obey rules and regulations in class -keeping quite during class activities	4.1600	.80000	25
disobey rules And regulations in the class eg going out without permission	2.0000	1.19024	25
when he/she finds any lost items brings it to the teacher	4.0400	.93452	25
he/she claims ownership of other pupils things when found e.g. pencil, exercise book	2.0000	1.19024	25
seeks permission to use other pupils things(pencil, eraser, cup, please may I use your pencil, biro)	4.2800	.97980	25
snatches other pupils things (eg pencils, eraser, cup etc)	2.2000	1.44338	25
ability to appreciate by saying thank you ma, sir	4.5600	.50662	25
does not get defensive when corrected instead he/she apologizes	3.9200	.75939	25
constantly considers other peer groups during class activities and outdoor games	3.7200	.67823	25
avoid giving up too easily still the child keep trying (solving math's sums or climbing the slide or riding bicycle during out door games)	3.7600	.77889	25
avoid quarrelling or fighting with other peer groups either in class during outdoor games	3.6800	1.02956	25
assists peers when the need arises, either use of pencil or biro or purchase of biscuits	3.8800	.78102	25
avoid exaggeration or telling lies	3.9200	.95394	25
keep to what is expected in class work, avoid copying peers answer or working out assignments of homework by peers	3.8000	1.00000	25
come to class early after break or when asked not to make noise in class	3.9600	1.05987	25
always greet peers and teachers when he/she comes across anyone eg good morning sir or good afternoon or goodbye	3.7200	1.17331	25

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.394	2.000	4.560	2.560	2.280	.618	32

Reliability

NON EARLY CHILDHOOD EDUCATION PUPILS

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	15	100.0
	Excluded[a]	0	.0
	Total	15	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.878	.871	32

Item Statistics

	Mean	Std. Deviation	N
Friendly with peers	4.2667	.70373	15
solitary player playing alone avoid playing with others	2.2667	1.27988	15
Share his/her pencil/biro/pen. toys exercise books, textbooks with others	3.9333	.79881	15
use textbooks exercise book/exercise books toys alone	3.0667	1.43759	15
say sorry when he/she steps on toes of peers groups or someone	3.9333	1.09978	15
feels bad when "Lunch box is thrown on the floor /or mistakenly push off to the ground	2.6667	1.39728	15
Accept leadership roles when appointed or selected e.g. Class captain, play group leader or team	4.0000	.92582	15
Shy away from responsibility and conducting situation	2.8000	1.32017	15
Avoid rush and wait for turns during outdoor games /break	3.5333	1.24595	15
Seek for attention by screaming or crying or jumping over desks	2.6000	1.18322	15
Does class activities in sequential order. E.g sketch, draw and paint or working sums in math's class	4.1333	.74322	15
does not follow order in carrying out class activities paint space, drawing before sketching	2.4000	1.12122	15
Avoid excess when carrying out work activities	4.2667	.79881	15
Seeks for notice and stubborn	2.6000	1.63881	15
respond to question with confidence during class activities	3.8000	1.08233	15
does not respond to questions confidently during class activities	2.5333	1.35576	15
obey rules and regulations in class -keeping quite during class activities	4.2667	.70373	15
disobey rules And regulations in the class eg going out without permission	2.6000	1.18322	15
when he/she finds any lost items brings it to the teacher	3.6000	1.24212	15
he/she claims ownership of other pupils things when found eg pencil, exercise book	2.8667	1.40746	15
seeks permission to use other pupils things(pencil, eraser, cup ,please may I use your pencil ,biro)	3.6667	1.39728	15
snatches other pupils things (eg pencils, eraser, cup etc)	2.7333	1.53375	15
ability to appreciate by saying thank you ma, sir	4.2667	.70373	15
does not get defensive when corrected instead he/she apologizes	3.7333	.79881	15
constantly considers other peer groups during class activities and outdoor games	4.0000	.75593	15
avoid giving up too easily still the child keep trying (solving maths sums or climbing the slide or riding bicycle during out door games)	3.3333	.81650	15
avoid quarelling or fighting with other peer groups either in class during outdoor games	4.0000	.84515	15
assists peers when the need arises, either use of pencil or biro or purchase of biscuits	3.8000	.77460	15
avoid exaggeration or telling lies	4.0667	.59362	15
keep to what is expected in class work, avoid copying peers answer or working out assignments of homework by peers	3.7333	1.09978	15
come to class early after break or when asked not to make noise in class	3.6667	1.39728	15
always greet peers and teachers when he/she comes across anyone eg good morning sir or good afternoon or goodbye	3.7333	1.33452	15

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.465	2.267	4.267	2.000	1.882	.421	32

Appendix VIIc

EARLY CHILDHOOD EDUCATION PUPILS

Raw scores of the two sets of tests for determining the coefficient of reliability of the test instrument

S/NO	X	Y	X^2	Y^2	XY
1	62	72	3844	5184	4464
2	72	69	5184	4761	4968
3	81	74	6561	5476	5994
4	73	64	5329	4096	4672
5	79	62	6241	3844	4898
6	83	61	6889	3721	5063
7	46	69	2116	4761	3174
8	39	63	1521	3969	2457
9	52	56	2704	3136	2912
10	62	86	3844	7396	5332
11	74	74	5476	5476	5476
12	81	60	6561	3600	4860
13	93	75	8649	5625	6975
14	80	74	6400	5476	5920
15	72	92	5184	8464	6624
16	80	65	6400	4225	5200
17	89	100	7921	10000	8900
18	68	73	4624	5329	4964
19	63	73	3969	5329	4599
20	65	98	4225	9604	6370
21	66	72	4356	5184	4752
22	61	60	3721	3600	3660
23	52	50	2704	2500	2600
24	61	56	3721	3136	3416
25	57	53	3249	2809	3021
N=25	**$\sum X$=1711**	**$\sum Y$=1751**	**$\sum X^2$=121393**	**$\sum Y^2$=126701**	**$\sum XY$ =121271**

Note: x and y are first and second tests scores for early child hood education pupils

Pearson Product Moment Correlation computed for the Reliability index for the instrument used in the pilot study of the research.

The formula for Pearson Product Moment Correlation is given below:

R= N(∑xy) - (x) ∑Y

((N(X^2) - (NY^2)-$(Y)^2$)

N=Number of respondents

X is test scores at first administration

Y is test scores at second administration

∑x is scores at first administration is summed

∑y is scores at second administration is summed

$\sum x^2$ is scores at first administration is squared and summed

$\sum Y^2$ is scores at second administration is squared and summed

$(\sum x)^2$ is scores at first administration is summed and squared

$(\sum Y)^2$ is scores at second administration is summed and squared

Where

N=25	∑X=1711	∑Y=1751	$\sum X^2$=121393	$\sum Y^2$=126701	∑XY=121271

Pearson Product Moment Correlation formula is:

r= N(∑xy) - ∑ (x) ∑Y

((N($\sum X^2$) - (N*$\sum Y^2$)-($\sum Y)^2$

now substituting in the formula:

= 25*121271 - 1711*1751

25*$(121393)^2$-25*126701-$(126701)^2$

=.7437

r=.74

APPENDIX VIII

NON EARLY CHILD HOOD EDUCATION PUPILS

Raw scores of the two sets of tests for determining the coefficient of reliability of the test instrument

S/NO	X	Y	X^2	Y^2	XY
1	47	64	2209	4096	3008
2	75	33	5625	1089	2475
3	47	59	2209	3481	2773
4	72	45	5184	2025	3240
5	72	55	5184	3025	3960
6	31	41	961	1681	1271
7	50	48	2500	2304	2400
8	69	54	4761	2916	3726
9	60	45	3600	2025	2700
10	49	54	2401	2916	2646
11	29	76	841	5776	2204
12	41	59	1681	3481	2419
13	29	53	841	2809	1537
14	38	55	1444	3025	2090
15	47	44	2209	1936	2068
N=15	**∑X=756**	**∑Y=785**	**∑X2=41650**	**∑Y2=42585**	∑**XY** =38517

Note: x and y are first and second tests scores for Non early child hood education pupils

Pearson Product Moment Correlation computed for the Reliability index for the instrument used in the pilot study of the research.

The formula for Pearson Product Moment Correlation is given below:

R= N(∑xy) - (x) ∑Y

((N(X^2) - (NY^2)-$(Y)^2$)

N=Number of respondents

X is test scores at first administration

Y is test scores at second administration

∑x is scores at first administration is summed

∑y is scores at second administration is summed

$\sum x^2$ is scores at first administration is squared and summed

$\sum Y^2$ is scores at second administration is squared and summed

$(\sum x)^2$ is scores at first administration is summed and squared

$(\sum Y)^2$ is scores at second administration is summed and squared

Where

N=15	∑X=**756**	∑Y=785	$\sum X^2$=41650	$\sum Y^2$=42585	∑XY=38517

Pearson Product Moment Correlation formula is:

r= N(∑xy) - ∑ (x) ∑Y

((N($\sum X^2$) - (N*$\sum Y^2$)-$(\sum Y)^2$

now substituting in the formula:

= 15*38517 - 756*785

15*$(41650)^2$ - 15*42585-$(42585)^2$

=.841

r=.84

APPENDIX IX

Item analysis

Item Analysis for Maths Difficulty Index

1. 12+12 =24 =100%
   24 24
2. 12+12 =24 =100%
   24 24
3. 11+12 =23 =96%
   24 24
4. 12+8 =20 =83%
   24 24
5. 10+2=12 =50%
   24 24
6. 11+3=14 =58%
   24 24
7. 7+2=09 =38%
   24 24
8. 12+8=20 =83%
   24 24
9. 4+10=14 =58%
   24 24
10. 7+5=12 =50%
    24 24
11. 7+5=12 =50%
    24 24
12. 11+9=20 =83%
    24 24
13. 12+6 =18 =75%
    24 24
14. 3+2 =12 =21%
    24 24
15. 11+12 =23 =96%
    24 24
16. 5+4= 09 =38%
    24 24
17. 8+12 =20 =83%
    24 24
18. 9+10 =19 =71%
    24 24
19. 11+9 =20 =67%
    24 24

20. 11+9 = 20 =67%
24 24

21. 9+9 =18 =75%
24 24

22. 9+3 =12 =50%
24 24

23. 9+9 =18 =75%
24 24

24. 9+11 =20 =83%
24 24

25.9+9 =18 =75%
24 24

Item analysis for English studies

1. 11+9 20 = 90.9%
   24 24
2. 12+9 21 = 95%
   24 24
3. 12+6 18 = 82%
   24 24
4. 12+6 18 = 75%
   24 24
5. 9+6 15 = 63%
   24 24
6. 11+3 14 = 58%
   24 24
7. 6+4 10 = 42%
   24 24
8. 12+4 16 = 67%
   24 24
9. 8+5 13 = 54%
   24 24
10. 12+9 21 = 95%
    24 24
11. 12+6 18 = 82%
    24 24
12. 12+5 17 = 71%
    24 24
13. 12+2 14 = 58%
    24 24
14. 12+3 15 = 63%
    24 24
15. 12+5 17 = 71%
    24 24

16. $\frac{12+10}{24}$ $\frac{21}{24}$ = 95%

17. $\frac{12+9}{24}$ $\frac{21}{24}$ = 95%

18. $\frac{11+9}{24}$ $\frac{20}{24}$ = 91%

19. $\frac{9+4}{22}$ $\frac{13}{24}$ = 54%

20. $\frac{12+7}{24}$ $\frac{19}{24}$ = 79%

21. $\frac{12+10}{24}$ $\frac{21}{24}$ = 95%

22. $\frac{12+8}{24}$ $\frac{20}{24}$ = 91%

23. $\frac{12+9}{24}$ $\frac{21}{24}$ = 95%

24. $\frac{12+6}{24}$ $\frac{18}{24}$ = 82%

25. $\frac{11+9}{24}$ $\frac{20}{24}$ = 91%

Item analysis for Basic Science and Technology

1. $\frac{12 + 10}{24}$ $\frac{22}{24}$ = 92%

2. $\frac{12 + 12}{24}$ $\frac{24}{24}$ = 100%

3. $\frac{12 + 10}{24}$ $\frac{22}{24}$ = 91.6 $\longrightarrow$ 92%

4. $\frac{12 + 10}{24}$ $\frac{22}{24}$ = 91.6 $\longrightarrow$ 92%

5. $\frac{12 + 11}{24}$ $\frac{23}{24}$ = 96%

6. $\frac{7 + 8}{24}$ $\frac{15}{24}$ = 63%

7. $\frac{9 + 9}{24}$ $\frac{18}{24}$ = 75%

8. $\frac{12 + 7}{24}$ $\frac{19}{24}$ = 79%

9. $\frac{5 + 3}{24}$ $\frac{08}{24}$ = 33%

10. $\frac{12 + 7}{24}$ $\frac{19}{24}$ = 79%

11. $\frac{10 + 4}{24}$ $\frac{14}{24}$ = 58%

12. $\frac{10 + 3}{24}$ $\frac{13}{24}$ = 54%

13. $\frac{11 + 9}{24}$ $\frac{20}{24}$ = 83%

14. $\frac{8 + 4}{24}$ $\frac{12}{24}$ = 50%

15. $\frac{10 + 3}{24}$ $\frac{13}{24}$ = 54%

16. $\frac{10 + 3}{24}$ $\frac{13}{24}$ = 54%

17. $\frac{12 + 4}{24}$ $\frac{16}{24}$ = 67%

18. $\frac{12 + 3}{24}$ $\frac{15}{24}$ = 63%

19. $\frac{12 + 2}{24}$ $\frac{14}{24}$ = 58%

20. $\frac{10 + 3}{24}$ $\frac{13}{24}$ = 54%

21. $\frac{10 + 3}{24}$ $\frac{13}{24}$ = 54%

22. $\frac{10 + 4}{24}$ $\frac{14}{24}$ = 58%

23. $\frac{10 + 4}{24}$ $\frac{14}{24}$ = 58%

24. $\frac{12 + 11}{24}$ $\frac{23}{24}$ = 96%

25. $\frac{10 + 10}{24}$ $\frac{20}{24}$ = 88%

26. $\frac{12 + 11}{24}$ $\frac{23}{24}$ = 96%

27. $\frac{12 + 11}{24}$ $\frac{23}{24}$ = 96%

28. $\frac{12 + 11}{24}$ $\frac{23}{24}$ = 96%

29. $\frac{12 + 11}{24}$ $\frac{23}{24}$ = 96%

30. $\frac{12 + 10}{24}$ $\frac{22}{24}$ = 92%

31. 12 + 10	22	=	92%
24	24		
32. 11 + 9	20	=	83%
24	24		
33. 8 + 8	16	=	67%
24	24		
34. 10 + 7	17	=	70.8 → 71%
24	24		
35. 10 + 7	17	=	71%
24	24		
36. 9 + 9	18	=	75%
24	24		
37. 10 + 9	19	=	79%
24	24		
38. 11 + 11	22	=	91.6 → 92%
24	24		
39. 11 + 10	21	=	88%
24	24		
40. 12 + 10	22	=	92%
24	24		
41. 12 + 9	21	=	88%
24	24		
42. 12 + 11	23	=	96%
24	24		
43. 11 + 4	15	=	63%
24	24		
44. 11 + 7	18	=	75%
24	24		
45. 10 + 8	18	=	75%
24	24		
46. 12 + 10	22	=	92%
24	24		
47. 11 + 4	14	=	63%
24	24		
48. 11 + 8	19	=	79%
24	24		
49. 11 + 3	14	=	58%
24	24		
50. 11 + 9	20	=	83%
24	24		

APPENDIX X

RAW DATA FOR MATHEMATICS, ENGLISH STUDIES, BASIC SCIENCE AND TECHNOLOGY, MORAL AND SOCIAL BEHAVIOUR ITEMS FOR ECE (1) AND NON-ECE (2)

S/N	MATHEMATICS	ENGLISH.	SCIENCE	SOCIAL	MORAL	ECE
1	16	20	42	34	38	1
2	19	21	43	39	38	1
3	21	23	47	37	40	1
4	21	21	44	37	38	1
5	20	21	48	37	40	1
6	22	23	48	37	40	1
7	12	19	43	35	38	1
8	19	20	45	35	37	1
9	7	19	39	33	37	1
10	21	21	48	37	39	1
11	20	23	47	36	40	1
12	15	21	47	35	39	1
13	20	22	46	35	39	1
14	24	23	50	39	40	1
15	15	23	50	39	40	1
16	9	15	38	34	39	1
17	7	13	31	33	39	1
18	12	20	38	32	35	1
19	16	23	36	33	31	1
20	15	21	35	36	32	1
21	13	15	35	31	30	1
22	17	23	40	38	32	1
23	15	23	41	37	35	1
24	7	16	32	30	29	1
25	20	22	46	37	32	1
26	20	19	47	37	36	1
27	15	18	43	37	32	1
28	16	21	40	38	40	1
29	21	22	48	38	39	1
30	23	21	48	38	38	1
31	21	23	44	34	30	1
32	17	17	27	39	32	1
33	10	16	16	35	35	1

34	12	18	15	35	34	1
35	13	17	18	30	30	1
36	20	24	50	29	32	1
37	11	13	26	34	28	1
38	21	12	44	31	29	1
39	22	8	45	31	30	1
40	12	10	20	34	32	1
41	21	8	30	30	32	1
42	14	7	35	31	30	1
43	17	13	19	34	39	1
44	19	15	43	32	33	1
45	16	23	38	31	35	1
46	19	23	40	31	34	1
47	14	12	44	31	37	1
48	19	14	44	33	32	1
49	11	4	9	28	30	1
50	16	11	32	33	37	1
51	18	20	46	36	36	1
52	16	18	37	34	33	1
53	20	21	44	37	39	1
54	22	23	44	35	30	1
55	16	22	42	30	32	1
56	25	25	47	35	40	1
57	24	23	49	36	39	1
58	25	22	43	30	33	1
59	24	23	43	29	30	1
60	19	20	35	30	35	1
61	12	16	33	32	39	1
62	18	21	35	36	40	1
63	15	18	25	32	30	1
64	13	16	27	35	40	1
65	16	17	35	34	39	1
66	9	19	36	36	34	1
67	13	16	20	34	37	1
68	19	19	43	35	33	1
69	16	15	29	30	34	1
70	12	18	31	36	37	1
71	12	9	20	37	38	1
72	21	22	48	39	38	1
73	16	14	26	38	38	1
74	14	13	34	36	37	1
75	13	8	9	35	32	1
76	18	22	42	39	38	1

77	14	15	36	39	38	1
78	23	29	45	39	37	1
79	5	14	48	31	35	1
80	21	20	17	32	37	1
81	25	23	26	28	35	1
82	24	23	46	25	33	1
83	23	20	49	30	37	1
84	24	23	48	29	30	1
85	20	18	43	27	35	1
86	23	20	50	31	30	1
87	20	22	48	30	35	1
88	25	22	48	25	38	1
89	20	24	48	33	35	1
90	21	17	47	29	30	1
91	19	21	50	28	35	1
92	19	14	36	28	29	1
93	21	16	35	30	31	1
94	17	17	36	23	33	1
95	24	24	50	33	30	1
96	20	18	33	27	29	1
97	16	10	27	30	35	1
98	24	23	34	27	37	1
99	22	22	46	27	33	1
100	10	112	20	30	35	1
101	17	15	36	35	37	1
102	21	21	40	33	30	1
103	22	18	49	35	38	1
104	21	21	46	37	35	1
105	10	17	27	30	38	1
106	14	10	24	30	36	1
107	12	20	45	35	37	1
108	18	14	35	37	30	1
109	18	22	38	29	31	1
110	17	22	39	31	30	1
111	23	23	43	35	39	1
112	16	14	25	37	38	1
113	18	13	40	35	30	1
114	19	24	46	30	30	1
115	18	19	28	30	35	1
116	15	20	41	33	38	1
117	14	20	36	37	31	1
118	13	17	33	37	33	1
119	16	15	41	35	37	1

120	14	13	30	35	38	1
121	15	11	32	31	30	1
122	18	19	15	30	30	1
123	15	23	45	31	31	1
124	22	16	28	36	37	1
125	10	18	20	38	34	1
126	17	18	35	35	31	1
127	20	15	35	37	38	1
128	15	17	29	37	35	1
129	18	21	46	37	37	1
130	17	14	27	36	36	1
131	19	16	35	34	33	1
132	20	18	38	38	30	1
133	20	20	44	35	30	1
134	22	19	41	38	37	1
135	22	19	42	36	36	1
136	7	8	44	37	37	1
137	21	22	44	34	32	1
138	12	16	41	36	34	1
139	20	17	43	31	38	1
140	17	18	43	30	36	1
141	14	19	34	32	40	1
142	22	15	44	35	33	1
143	15	10	17	27	35	1
144	18	15	42	37	38	1
145	21	8	28	34	39	1
146	18	14	40	33	30	1
147	18	8	34	32	34	1
148	13	14	31	33	28	1
149	22	17	38	27	40	1
150	22	17	39	30	37	1
151	17	16	46	30	38	1
152	17	13	43	28	25	1
153	17	8	13	35	33	1
154	19	15	36	25	33	1
155	19	18	38	27	31	1
156	22	17	26	34	37	1
157	23	19	34	34	24	1
158	23	17	46	30	22	1
159	22	19	45	32	24	1
160	18	24	17	24	36	1
161	19	19	44	24	20	1
162	22	14	44	26	26	1

163	22	17	40	24	20	1
164	21	15	42	28	27	1
165	21	6	20	27	28	1
166	20	14	26	26	32	1
167	20	8	23	36	31	1
168	21	13	34	31	27	1
169	16	17	44	34	30	1
170	16	16	43	35	28	1
171	15	14	43	29	28	1
172	12	7	40	32	32	1
173	14	14	43	32	34	1
174	11	13	35	34	32	1
175	10	16	41	33	31	1
176	14	8	44	33	31	1
177	21	16	46	32	31	1
178	10	18	45	34	32	1
179	11	16	31	27	32	1
180	17	17	48	36	32	1
181	19	17	42	33	36	1
182	14	22	49	33	32	1
183	19	20	46	32	35	1
184	21	18	33	37	38	1
185	22	24	44	38	40	1
186	16	17	38	33	34	1
187	22	18	39	35	32	1
188	15	16	38	29	30	1
189	22	22	40	37	38	1
190	19	15	38	35	38	1
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192	13	14	23	35	31	1
193	18	20	30	30	34	1
194	23	25	48	32	31	1
195	16	20	39	29	31	1
196	16	17	40	26	31	1
197	10	8	36	26	27	1
198	9	10	25	28	29	1
199	18	17	40	28	30	1
200	23	24	49	34	27	1
201	18	24	49	27	34	1
202	18	24	48	29	29	1
203	14	13	39	29	29	1
204	16	23	48	22	28	1
205	8	9	17	33	25	1

206	9	16	29	34	27	1
207	17	23	50	28	34	1
208	19	20	38	31	33	1
209	24	22	50	20	26	1
210	24	25	50	28	28	1
211	20	21	47	33	36	1
212	22	23	49	24	36	1
213	20	12	41	23	25	1
214	10	6	24	29	34	1
215	16	9	37	21	27	1
216	23	24	48	30	34	1
217	20	25	45	28	29	1
218	15	17	34	29	34	1
219	24	21	50	30	34	1
220	23	20	49	27	31	1
S/N	MATHEMATICS	ENGLISH.	SCIENCE	SOCIAL	MORAL	NON-ECE
221	21	24	43	35	39	2
222	20	12	33	32	31	2
223	21	15	33	32	36	2
224	21	19	32	34	35	2
225	18	16	26	36	34	2
226	21	20	27	39	37	2
227	17	21	49	33	39	2
228	16	20	37	33	37	2
229	18	21	28	34	32	2
230	22	19	25	34	38	2
231	24	18	24	38	38	2
232	20	23	40	36	35	2
233	22	20	32	38	33	2
234	16	17	27	39	26	2
235	20	17	20	37	38	2
236	17	24	31	39	36	2
237	19	16	39	36	37	2
238	22	20	40	30	37	2
239	22	22	37	35	28	2
240	22	23	47	38	39	2
241	23	24	39	40	31	2
242	21	17	36	33	33	2
243	24	25	49	40	39	2
244	22	25	37	40	34	2
245	23	24	45	36	36	2
246	23	25	44	36	39	2
247	20	25	23	36	40	2

248	17	24	29	35	39	2
249	19	19	46	32	37	2
250	23	21	33	37	40	2
251	19	15	36	35	34	2
252	18	18	31	33	33	2
253	21	16	38	32	25	2
254	18	18	20	26	37	2
255	14	11	16	29	31	2
256	17	15	20	32	33	2
257	11	15	20	28	35	2
258	18	12	29	27	33	2
259	19	17	33	26	36	2
260	13	12	28	25	32	2
261	7	15	18	21	37	2
262	7	14	20	36	31	2
263	14	10	8	23	33	2
264	12	11	10	26	32	2
265	19	19	42	26	36	2
266	13	13	7	28	32	2
267	6	9	9	21	35	2
268	24	22	46	36	37	2
269	22	20	46	32	29	2
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271	24	24	46	26	37	2
272	24	22	34	21	30	2
273	16	17	18	31	32	2
274	14	14	13	32	32	2
275	15	7	17	30	28	2
276	14	13	13	33	32	2
277	14	19	30	27	33	2
278	16	19	24	34	30	2
279	17	8	29	29	30	2
280	18	15	34	31	27	2
281	18	13	30	32	32	2
282	17	13	31	38	29	2
283	15	12	27	27	27	2
284	19	20	34	32	29	2
285	9	9	7	34	35	2
286	10	9	34	31	29	2
287	12	8	0	32	30	2
288	10	8	16	38	29	2
289	8	7	3	29	30	2
290	20	19	40	31	31	2

291	15	13	18	30	30	2
292	22	18	28	28	23	2
293	15	19	34	31	30	2
294	11	15	20	29	32	2
295	7	7	18	30	30	2
296	14	10	40	33	30	2
297	25	24	48	29	30	2
298	16	18	39	30	30	2
299	25	25	42	29	30	2
300	25	25	41	31	30	2
301	25	20	44	32	29	2
302	25	25	47	28	29	2
303	25	25	40	30	30	2
304	24	24	14	33	30	2
305	23	23	39	38	32	2
306	24	22	44	31	29	2
307	20	13	27	31	29	2
308	15	13	45	32	27	2
309	10	7	44	31	28	2
310	14	18	41	30	34	2
311	23	16	26	36	28	2
312	13	14	12	29	32	2
313	14	14	16	30	23	2
314	8	11	8	31	30	2
315	20	23	42	32	28	2
316	17	16	23	33	26	2
317	18	10	6	32	26	2
318	6	8	27	30	35	2
319	10	11	10	30	26	2
320	15	15	39	30	31	2
321	8	16	13	31	31	2
322	7	15	10	24	26	2
323	14	8	27	27	29	2
324	16	10	33	32	30	2
325	6	7	9	27	30	2
326	9	8	9	30	29	2
327	11	14	14	31	32	2
328	22	13	41	31	31	2
329	15	10	10	31	35	2
330	5	7	7	35	31	2
331	8	9	6	31	30	2
332	18	15	46	28	31	2
333	4	8	23	30	31	2

334	4	8	23	33	35	2
335	11	17	42	34	30	2
336	18	13	36	34	37	2
337	20	20	39	35	34	2
338	13	18	49	32	28	2
339	18	17	43	22	24	2
340	12	14	42	15	30	2
341	20	7	42	30	23	2
342	16	19	44	33	30	2
343	23	14	42	22	17	2
344	22	16	44	21	31	2
345	12	21	45	31	40	2
346	22	20	43	41	34	2
347	23	17	46	44	40	2
348	10	17	44	20	24	2
349	14	16	45	44	13	2
350	16	14	33	17	17	2
351	20	18	40	34	30	2
352	19	21	49	30	22	2
353	22	16	38	21	18	2
354	22	5	2	30	40	2
355	20	15	42	37	35	2
356	12	8	8	37	36	2
357	11	6	31	38	40	2
358	16	13	22	36	39	2
359	18	15	27	38	30	2
360	19	13	34	35	40	2
361	24	17	41	38	36	2
362	21	21	40	39	37	2
363	14	16	40	40	33	2
364	17	5	20	40	34	2
365	15	6	14	40	31	2
366	14	15	22	40	34	2
367	25	16	36	38	35	2
368	19	22	49	35	32	2
369	22	22	45	30	32	2
370	9	11	22	29	33	2
371	21	25	49	33	32	2
372	13	13	42	31	35	2
373	15	13	25	31	35	2
374	17	13	26	33	34	2
375	13	13	35	34	32	2
376	13	14	26	39	33	2

377	10	11	17	36	34	2
378	12	9	29	31	33	2
379	10	9	23	29	33	2
380	13	11	33	33	30	2
381	17	11	31	37	33	2
382	13	8	7	29	33	2
383	18	21	44	32	30	2
384	22	20	33	32	36	2
385	22	19	30	31	31	2
386	23	21	42	33	30	2
387	17	18	43	30	36	2
388	9	12	27	32	33	2
389	12	7	14	29	30	2
390	23	22	40	27	33	2
391	17	22	37	31	26	2
392	21	23	34	25	35	2
393	22	25	40	28	29	2
394	21	25	42	30	27	2
395	18	22	22	25	25	2
396	18	23	33	25	25	2
397	21	23	40	27	29	2
398	19	22	28	35	24	2
399	10	15	11	33	30	2
400	23	24	38	30	30	2
401	15	22	22	28	28	2
402	23	21	40	23	32	2
403	23	25	19	24	37	2
404	21	22	36	29	31	2
405	16	11	29	33	32	2
406	21	13	37	34	34	2
407	20	14	43	31	35	2
408	19	24	37	29	33	2
409	14	14	34	34	37	2
410	6	15	13	36	34	2
411	4	12	10	34	37	2
412	8	8	18	31	33	2
413	5	6	16	35	30	2
414	11	6	15	35	29	2
415	5	5	10	31	33	2
416	17	9	32	33	31	2
417	13	11	19	36	32	2
418	9	5	10	34	34	2
419	7	7	10	35	33	2

420	18	16	42	34	33	2
421	18	16	41	30	32	2
422	9	2	7	35	34	2
423	8	4	6	29	34	2
424	13	9	19	36	34	2
425	18	9	11	34	33	2
426	17	12	37	34	37	2
427	14	4	16	29	34	2
428	22	7	31	38	34	2
429	13	19	37	29	28	2
430	12	5	6	25	34	2
431	20	21	34	28	30	2
432	24	21	47	25	28	2
433	18	20	46	27	30	2
434	25	21	47	24	32	2
435	12	10	10	27	31	2
436	24	12	33	26	27	2
437	16	12	15	28	27	2
438	19	24	42	29	28	2
439	22	24	36	29	30	2
440	10	24	38	25	25	2

KEYS

1. **Early Childhood Education pupils (ECE) (1).**
2. **Non- Early Childhood Education pupils (NECE) (2).**

APPENDIX XI

"t"-Test Mathematics

Group Statistics

	Status	N	Mean	Std. Deviation	Std. Error Mean
Scores	ECE	220	17.5273	4.33992	.29260
	NECE	220	16.6000	5.40370	.36432

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
scores	Equal variances assumed	13.257	.000	1.984	438	.048	.92727	.46727	.00890	1.84564
	Equal variances not assumed			1.984	418.513	.048	.92727	.46727	.00879	1.84576

Hypothesis Two
"t"-Test English Studies

Group Statistics

	Status	N	Mean	Std. Deviation	Std. Error Mean
Scores	ECE	220	17.5727	4.73780	.31942
	NECE	220	15.6591	5.85027	.39443

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
scores	Equal variances assumed	15.464	.000	3.770	438	.000	1.91364	.50755	.91611	2.91116
	Equal variances not assumed			3.770	419.862	.000	1.91364	.50755	.91599	2.91128

Hypothesis Three

"t"-Test Basic Science and Technology

Group Statistics

	Status	N	Mean	Std. Deviation	Std. Error Mean
Scores	ECE	220	37.9864	9.40731	.63424
	NECE	220	30.9409	22.04750	1.48644

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
scores	Equal variances assumed	11.816	.001	4.360	438	.000	7.04545	1.61610	3.86918	10.22173
	Equal variances not assumed			4.360	296.184	.000	7.04545	1.61610	3.86496	10.22594

APPENDIX XII

Table 4.2.1 Moral behaviour of pupils that went through Early Childhood Education and those that did not.

S/NO	ITEM	Type of school programme	RESONSE CATEGORY				Mean	STD.D
			A	S	R	N		
1	**Telling truth: Ability for the child to be frank and open**	ECE	118	51	48	3	3.29	.853
		NON-ECE	98	72	46	4	3.20	.830
2	**caring: Actively embracing others, ability to share toys with peer**	ECE	112	54	45	9	3.22	.911
		NON-ECE	101	73	26	20	3.15	.959
3	**Taking responsibilities: Get along with peers without complain**	ECE	112	84	15	9	3.35	.784
		NON-ECE	86	70	48	16	3.02	.950
4	**Tolerant: Does not discriminate or restrict self to few peers**	ECE	113	54	14	39	3.09	1.132
		NON-ECE	85	93	18	24	3.08	.949
5	**Harmful: Avoid hitting peers with harmful objects**	ECE	112	12	30	66	2.77	1.342
		NON-ECE	45	32	33	110	2.05	1.211
6	**Keeping promise: Ability to do assignments, coming to school or does thing right time what asked to do**	ECE	124	33	51	12	3.22	.984
		NON-ECE	85	115	20	0	3.29	.625
7	**making peace: Does things without resorting to violence, standing up for others**	ECE	127	30	45	18	3.20	1.034
		NON-ECE	96	93	23	8	3.26	.788
8	**Embracing responsibility: Put best effort and work hard**	ECE	88	111	15	6	3.27	.709
		NON-ECE	95	85	40	0	3.25	.744
9	**Reliable: Ability to do and keep to what is expected to be done**	ECE	88	72	57	3	3.11	.839
		NON-ECE	90	72	50	8	3.10	.879
10	**Courageous: Ability to exhibit good character**	ECE	115	51	51	3	3.26	.861
		NON-ECE	137	33	34	16	3.32	.984
	Cumulative mean						3.178	
	Cumulative mean						3.072	

Decision mean = 2.50

Key: A=Always; S=Sometimes; R=Rarely; N=Never.

ECE = Early Childhood Education. **NECE** = Non – Early Childhood Education

Hypothesis Four

Frequencies ECE Moral Behaviour

Statistics

		Telling truth: Ability for the child to be frank and open	caring: Actively embracing others, ability to share toys with peer	Taking responsibilities: Get along with peers without complain	Tolerant: Does not discriminate or restrict self to few peers	Harmful: Avoid hitting peers with harmful objects	Keeping promise: Ability to do assignment, coming to school or does thing right time what asked to do	making peace: Does things without resorting to violence, standing up for others	Embracing responsibility: Put best effort and work hard	Reliable: Ability to do and keep to what is expectede to be done	Courageous: Ability to exhibit good character
N	Valid	220	220	220	220	220	220	220	220	220	220
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		3.2909	3.2227	3.3591	3.0955	2.7727	3.2227	3.2091	3.2773	3.1136	3.2636
Std. Deviation		.85309	.91184	.78406	1.13273	1.34238	.98409	1.03452	.70900	.83900	.86195

Frequency Table

Telling truth: Ability for the child to be frank and open

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	3	1.4	1.4	1.4
	RARELY	48	21.8	21.8	23.2
	SOMETIMES	51	23.2	23.2	46.4
	ALWAYS	118	53.6	53.6	100.0
	Total	220	100.0	100.0	

caring: Actively embracing others, ability to share toys with peer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	9	4.1	4.1	4.1
	RARELY	45	20.5	20.5	24.5
	SOMETIMES	54	24.5	24.5	49.1
	ALWAYS	112	50.9	50.9	100.0
	Total	220	100.0	100.0	

Taking responsibilities: Get along with peers without complain

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	9	4.1	4.1	4.1
	RARELY	15	6.8	6.8	10.9
	SOMETIMES	84	38.2	38.2	49.1
	ALWAYS	112	50.9	50.9	100.0
	Total	220	100.0	100.0	

Tolerant: Does not discriminate or restrict self to few peers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	39	17.7	17.7	17.7
	RARELY	14	6.4	6.4	24.1
	SOMETIMES	54	24.5	24.5	48.6
	ALWAYS	113	51.4	51.4	100.0
	Total	220	100.0	100.0	

Harmful: Avoid hitting peers with harmful objects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	66	30.0	30.0	30.0
	RARELY	30	13.6	13.6	43.6
	SOMETIMES	12	5.5	5.5	49.1
	ALWAYS	112	50.9	50.9	100.0
	Total	220	100.0	100.0	

Keeping promise: Ability to do assignment, coming to school or does thing right time what asked to do

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	12	5.5	5.5	5.5
	RARELY	51	23.2	23.2	28.6
	SOMETIMES	33	15.0	15.0	43.6
	ALWAYS	124	56.4	56.4	100.0
	Total	220	100.0	100.0	

making peace: Does things without resorting to violence, standing up for others

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	18	8.2	8.2	8.2
	RARELY	45	20.5	20.5	28.6
	SOMETIMES	30	13.6	13.6	42.3
	ALWAYS	127	57.7	57.7	100.0
	Total	220	100.0	100.0	

Embracing responsibility: Put best effort and work hard

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	6	2.7	2.7	2.7
	RARELY	15	6.8	6.8	9.5
	SOMETIMES	111	50.5	50.5	60.0
	ALWAYS	88	40.0	40.0	100.0
	Total	220	100.0	100.0	

Reliable: Ability to do and keep to what is expectede to be done

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	3	1.4	1.4	1.4
	RARELY	57	25.9	25.9	27.3
	SOMETIMES	72	32.7	32.7	60.0
	ALWAYS	88	40.0	40.0	100.0
	Total	220	100.0	100.0	

Courageous: Ability to exhibit good character

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	3	1.4	1.4	1.4
	RARELY	51	23.2	23.2	24.5
	SOMETIMES	51	23.2	23.2	47.7
	ALWAYS	115	52.3	52.3	100.0
	Total	220	100.0	100.0	

Frequencies non ECE Moral Behaviour

Statistics

		Telling truth: Ability for the child to be frank and open	caring: Actively embracing others, ability to share toys with peer	Taking responsibilities: Get along with peers without complain	Tolerant: Does not discriminate or restrict self to few peers	Harmful: Avoid hitting peers with harmful objects	Keeping promise: Ability to do assignment, coming to school or does thing right time what asked to do	making peace: Does things without resorting to violence, standing up for others	Embracing responsibility: Put best effort and work hard	Reliable: Ability to do and keep to what is expectede to be done	Courageous: Ability to exhibit good character
N	Valid	220	220	220	220	220	220	220	220	220	220
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		3.2000	3.1591	3.0273	3.0864	2.0545	3.2955	3.2591	3.2500	3.1091	3.3227
Std. Deviation		.83091	.95905	.95045	.94931	1.21133	.62591	.78871	.74408	.87945	.98409

Frequency Table

Telling truth: Ability for the child to be frank and open

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	4	1.8	1.8	1.8
	RARELY	46	20.9	20.9	22.7
	SOMETIMES	72	32.7	32.7	55.5
	ALWAYS	98	44.5	44.5	100.0
	Total	220	100.0	100.0	

caring: Actively embracing others, ability to share toys with peer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	20	9.1	9.1	9.1
	RARELY	26	11.8	11.8	20.9
	SOMETIMES	73	33.2	33.2	54.1
	ALWAYS	101	45.9	45.9	100.0
	Total	220	100.0	100.0	

Taking responsibilities: Get along with peers without complain

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	16	7.3	7.3	7.3
	RARELY	48	21.8	21.8	29.1
	SOMETIMES	70	31.8	31.8	60.9
	ALWAYS	86	39.1	39.1	100.0
	Total	220	100.0	100.0	

Tolerant: Does not discriminate or restrict self to few peers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	24	10.9	10.9	10.9
	RARELY	18	8.2	8.2	19.1
	SOMETIMES	93	42.3	42.3	61.4
	ALWAYS	85	38.6	38.6	100.0
	Total	220	100.0	100.0	

Harmful: Avoid hitting peers with harmful objects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	110	50.0	50.0	50.0
	RARELY	33	15.0	15.0	65.0
	SOMETIMES	32	14.5	14.5	79.5
	ALWAYS	45	20.5	20.5	100.0
	Total	220	100.0	100.0	

Keeping promise: Ability to do assignment, coming to school or does thing right time what asked to do

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RARELY	20	9.1	9.1	9.1
	SOMETIMES	115	52.3	52.3	61.4
	ALWAYS	85	38.6	38.6	100.0
	Total	220	100.0	100.0	

making peace: Does things without resorting to violence, standing up for others

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	8	3.6	3.6	3.6
	RARELY	23	10.5	10.5	14.1
	SOMETIMES	93	42.3	42.3	56.4
	ALWAYS	96	43.6	43.6	100.0
	Total	220	100.0	100.0	

Embracing responsibility: Put best effort and work hard

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RARELY	40	18.2	18.2	18.2
	SOMETIMES	85	38.6	38.6	56.8
	ALWAYS	95	43.2	43.2	100.0
	Total	220	100.0	100.0	

Reliable: Ability to do and keep to what is expectede to be done

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	8	3.6	3.6	3.6
	RARELY	50	22.7	22.7	26.4
	SOMETIMES	72	32.7	32.7	59.1
	ALWAYS	90	40.9	40.9	100.0
	Total	220	100.0	100.0	

Courageous: Ability to exhibit good character

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	16	7.3	7.3	7.3
	RARELY	34	15.5	15.5	22.7
	SOMETIMES	33	15.0	15.0	37.7
	ALWAYS	137	62.3	62.3	100.0
	Total	220	100.0	100.0	

“t”-Test

Group Statistics

	status	N	Mean	Std. Deviation	Std. Error Mean
Moral behaviour scores	ECE	220	33.5500	4.19853	.28306
	NECE	220	33.3455	23.48513	1.58337

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Moral behaviour scores	Equal variances assumed	1.034	.310	.127	438	.899	.20455	1.60847	-2.95673	3.36583
	Equal variances not assumed			.127	232.984	.899	.20455	1.60847	-2.96446	3.37355

APPENDIX XIII

Table 4.2.2: Social behaviour of pupils that went through Early Child education and those who did not.

S/No	Item	Type of School Programme	Response Category				Mean	STD.D
			A	S	R	N		
1	Generosity: (Share his/her pencil, pen or book with peers	ECE	148	48	21	3	3.56	.723
		NON-ECE	105	73	40	2	3.28	.788
2	Forgiveness (say sorry when he/she step on peers toes or pushes someone)	ECE	157	54	9	0	3.67	.551
		NON-ECE	122	76	22	0	3.45	.671
3	Attentive (does class work in sequential order e.g sketch, draw or working of sums)	ECE	129	43	30	18	3.29	.986
		NON-ECE	84	78	43	15	3.05	.923
4	Courageous: respond to questions with confidence during class	ECE	99	82	30	9	3.23	.836
		NON-ECE	56	84	58	22	2.79	.937
5	Polite: Seek permission to use peers eraser or pencil "please may I use your pencil	ECE	139	60	9	12	3.48	.813
		NON-ECE	95	76	40	9	3.17	.867
6	Kindness: Avoid hurting peers	ECE	126	46	36	12	3.30	.932
		NON-ECE	100	59	51	10	3.13	.924
7	Friendliness: ability to work or play with other peers	ECE	152	14	48	6	3.42	.820
		NON-ECE	118	44	50	8	3.24	.926
8	Independent: Doers class work and homework by self	ECE	134	71	12	3	3.53	.665
		NON-ECE	87	83	42	8	3.13	.847
9	Sympathetic: care for others when hurt	ECE	133	45	36	6	3.39	.855
		NON-ECE	92	82	41	5	3..19	.815
10	Quietness: Avoid playing with others (solitary player)	ECE	22	69	32	97	2.07	1.074
		NON-ECE	52	91	38	39	2.71	1.019
	Cumulative mean						3.294	
	Cumulative mean						***3.114***	

Decision mean = 2.50

Key: A=Always; S=Sometimes; R=Rarely; N=Never.

ECE = Early Childhood Education

NECE = Non – Early Childhood Education

Hypothesis Five

Frequencies ECE Social Behaviour

Statistics

		Generosity: (Share his/her pencil, pen or book with peers	Forgiveness (say sorry when he/she step on peers toes or pushes someone)	Attentive (does class work in sequential order e.g sketch, draw or working of sums)	Courageous: respond to questions with confidence during class	Polite: Seek permission to use peers eraser or pencil "please may I use your pencil	Kindness: Avoid hurting peers	Friendliness: ability to work or play with other peers	Independent: Doers class work and home work by self	Sympathetic: care for others when hurt	Quiteness: Avoid playing with others (solitary player)
N	Valid	220	220	220	220	220	220	220	220	220	220
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		3.55	3.67	3.29	3.23	3.48	3.30	3.42	3.53	3.39	2.07
Std. Deviation		.723	.551	.986	.836	.813	.932	.920	.665	.855	1.074

Frequency Table

Generosity: (Share his/her pencil, pen or book with peers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	3	1.4	1.4	1.4
	RARELY	21	9.5	9.5	10.9
	SOMETIMES	48	21.8	21.8	32.7
	ALWAYS	148	67.3	67.3	100.0
	Total	220	100.0	100.0	

Forgiveness (say sorry when he/she step on peers toes or pushes someone)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RARELY	9	4.1	4.1	4.1
	SOMETIMES	54	24.5	24.5	28.6
	ALWAYS	157	71.4	71.4	100.0
	Total	220	100.0	100.0	

Attentive (does class work in sequential order e.g sketch, draw or working of sums)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	18	8.2	8.2	8.2
	RARELY	30	13.6	13.6	21.8
	SOMETIMES	43	19.5	19.5	41.4
	ALWAYS	129	58.6	58.6	100.0
	Total	220	100.0	100.0	

Courageous: respond to questions with confidence during class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	9	4.1	4.1	4.1
	RARELY	30	13.6	13.6	17.7
	SOMETIMES	82	37.3	37.3	55.0
	ALWAYS	99	45.0	45.0	100.0
	Total	220	100.0	100.0	

Polite: Seek permission to use peers eraser or pencil "please may I use your pencil

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	12	5.5	5.5	5.5
	RARELY	9	4.1	4.1	9.5
	SOMETIMES	60	27.3	27.3	36.8
	ALWAYS	139	63.2	63.2	100.0
	Total	220	100.0	100.0	

Kindness: Avoid hurting peers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	12	5.5	5.5	5.5
	RARELY	36	16.4	16.4	21.8
	SOMETIMES	46	20.9	20.9	42.7
	ALWAYS	126	57.3	57.3	100.0
	Total	220	100.0	100.0	

Friendliness: ability to work or play with other peers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	6	2.7	2.7	2.7
	RARELY	48	21.8	21.8	24.5
	SOMETIMES	14	6.4	6.4	30.9
	ALWAYS	152	69.1	69.1	100.0
	Total	220	100.0	100.0	

Independent: Doers class work and homework by self

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	3	1.4	1.4	1.4
	RARELY	12	5.5	5.5	6.8
	SOMETIMES	71	32.3	32.3	39.1
	ALWAYS	134	60.9	60.9	100.0
	Total	220	100.0	100.0	

Sympathetic: care for others when hurt

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	6	2.7	2.7	2.7
	RARELY	36	16.4	16.4	19.1
	SOMETIMES	45	20.5	20.5	39.5
	ALWAYS	133	60.5	60.5	100.0
	Total	220	100.0	100.0	

Quietness: Avoid playing with others (solitary player)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	97	44.1	44.1	44.1
	RARELY	32	14.5	14.5	58.6
	SOMETIMES	69	31.4	31.4	90.0
	ALWAYS	22	10.0	10.0	100.0
	Total	220	100.0	100.0	

Frequencies non ECE Social Behaviour

Statistics

		Generosity:(Share his/ her pencil, pen or book with peers	Forgiveness (say sorry when he /she step on peers toes or pushes someone)	Attentive (does class work in sequential order e.g sketch, draw or working of sums)	Courageous: respond to questions with confidence during class	Polite: Seek permission to use peers eraser or pencil "please may I use your pencil	Kindness: Avoid hurting peers	Friendliness: ability to work or play with other peers	Indepenent: Doers class work and homework by self	Sympathetic: care for others when hurt	Quiteness: Avoid playing with others (solitary player)
N	Valid	220	220	220	220	220	220	220	220	220	220
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		3.28	3.45	3.05	2.79	3.17	3.13	3.24	3.13	3.19	2.71
Std. Deviation		.788	.671	.923	.937	.867	.924	.926	.847	.815	1.019

Frequency Table

Generosity: (Share his/her pencil, pen or book with peers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	2	.9	.9	.9
	RARELY	40	18.2	18.2	19.1
	SOMETIMES	73	33.2	33.2	52.3
	ALWAYS	105	47.7	47.7	100.0
	Total	220	100.0	100.0	

Forgiveness (say sorry when he/she step on peers toes or pushes someone)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RARELY	22	10.0	10.0	10.0
	SOMETIMES	76	34.5	34.5	44.5
	ALWAYS	122	55.5	55.5	100.0
	Total	220	100.0	100.0	

Tentative (does clas work in sequential order e.g sketch, draw or working of sums)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	15	6.8	6.8	6.8
	RARELY	43	19.5	19.5	26.4
	SOMETIMES	78	35.5	35.5	61.8
	ALWAYS	84	38.2	38.2	100.0
	Total	220	100.0	100.0	

Courageous: respond to questions with confidence during class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	22	10.0	10.0	10.0
	RARELY	58	26.4	26.4	36.4
	SOMETIMES	84	38.2	38.2	74.5
	ALWAYS	56	25.5	25.5	100.0
	Total	220	100.0	100.0	

Polite: Seek permission to use peers eraser or pencil "please may I use your pencil

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	9	4.1	4.1	4.1
	RARELY	40	18.2	18.2	22.3
	SOMETIMES	76	34.5	34.5	56.8
	ALWAYS	95	43.2	43.2	100.0
	Total	220	100.0	100.0	

Kindness: Avoid hurting peers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	10	4.5	4.5	4.5
	RARELY	51	23.2	23.2	27.7
	SOMETIMES	59	26.8	26.8	54.5
	ALWAYS	100	45.5	45.5	100.0
	Total	220	100.0	100.0	

Friendliness: ability to work or play with other peers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	8	3.6	3.6	3.6
	RARELY	50	22.7	22.7	26.4
	SOMETIMES	44	20.0	20.0	46.4
	ALWAYS	118	53.6	53.6	100.0
	Total	220	100.0	100.0	

Independent: Doers class work and homework by self

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	8	3.6	3.6	3.6
	RARELY	42	19.1	19.1	22.7
	SOMETIMES	83	37.7	37.7	60.5
	ALWAYS	87	39.5	39.5	100.0
	Total	220	100.0	100.0	

Sympathetic: care for others when hurt

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	5	2.3	2.3	2.3
	RARELY	41	18.6	18.6	20.9
	SOMETIMES	82	37.3	37.3	58.2
	ALWAYS	92	41.8	41.8	100.0
	Total	220	100.0	100.0	

Quiteness: Avoid playing with others (solitary player)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	39	17.7	17.7	17.7
	RARELY	38	17.3	17.3	35.0
	SOMETIMES	91	41.4	41.4	76.4
	ALWAYS	52	23.6	23.6	100.0
	Total	220	100.0	100.0	

“t”-Test

Group Statistics

	status	N	Mean	Std. Deviation	Std. Error Mean
Social Behaviour scores	ECE	220	32.4091	4.02684	.27149
	NECE	220	31.6273	4.79032	.32296

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Social Behaviour scores	Equal variances assumed	1.909	.168	2.853	438	.035	.78182	.42191	-.04741	1.61105
	Equal variances not assumed			2.853	425.430	.065	.78182	.42191	-.04748	1.61112

APPENDIX XIV

Letters of Students' Field Research to schools, primary schools board and National Educational Research Development Council

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING
FACULTY OF EDUCATION,
AHMADU BELLO UNIVERSITY, ZARIA

Our Ref: ______________ Date: 9/5/2014

Director Statistics
Primary School
Board Kano
Kano State

Dear Sir,

STUDENTS' FIELD RESEARCH

The Department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria requires each student working for a Degree to complete a research project/ Thesis/Dissertation. They are therefore required to collect data for the research studies.

Most of them will need to be allowed access to certain relevant documents and some valuable information which you may have.

Please accord them all the necessary assistance.

TOPIC OF RESEARCH:

INFLUENCE OF EARLY CHILDHOOD EDUCATION ON ACADEMIC ACHIEVEMENT, MORAL AND SOCIAL BEHAVIOUR OF PUPIL IN PRIMARY SCHOOL IN KANO STATE NIGERIA

Thank you for your continued cooperation.

Yours Sincerely,

Research Adviser

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING A.B.U ZARIA

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING
FACULTY OF EDUCATION,
AHMADU BELLO UNIVERSITY, ZARIA

Our Ref: ____________ Date: 25/6/2014

The DIRECTOR,
NERDC
KANO, ~~State~~
STATE ROAD, Kano State

Dear Sir,

STUDENTS' FIELD RESEARCH

The Department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria requires each student working for a Degree to complete a research project/ Thesis/Dissertation. They are therefore required to collect data for the research studies.

Most of them will need to be allowed access to certain relevant documents and some valuable information which you may have.

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TOPIC OF RESEARCH:

INFLUENCE OF EARLY CHILDHOOD EDUCATION ON ACADEMIC ACHIEVEMENT, MORAL AND SOCIAL BEHAVIOUR OF PUPILS IN PRIMARY SCHOOL IN KANO STATE. NIGERIA

Thank you for your continued cooperation.

Yours Sincerely,

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING A.B.U ZARIA

Research Adviser

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING
FACULTY OF EDUCATION,
AHMADU BELLO UNIVERSITY, ZARIA

Our Ref: ______________

Date: 26/2/2015

The Headmaster/mistress
Primary Schools
in Kano,
Kano State

Dear Sir,

STUDENTS' FIELD RESEARCH

The Department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria requires each student working for a Degree to complete a research project/ Thesis/Dissertation. They are therefore required to collect data for the research studies.

Most of them will need to be allowed access to certain relevant documents and some valuable information which you may have.

Please accord them all the necessary assistance.

TOPIC OF RESEARCH:

INFLUENCE OF EARLY CHILDHOOD EDUCATION ON ACADEMIC ACHIEVEMENT, MORAL AND SOCIAL BEHAVIOUR OF PUPILS IN PRIMARY SCHOOL IN KANO STATE NIGERIA

Thank you for your continued cooperation.

Yours Sincerely,

Research Adviser

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING A.B.U. ZARIA