# TEACHERS' AND PARENTS' PERCEPTIONS OF PLAY ACTIVITIES IN PRE-SCHOOLS IN CHOMA DISTRICT, ZAMBIA

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# TEACHERS' AND PARENTS' PERCEPTIONS OF PLAY ACTIVITIES IN PRE-SCHOOLS IN CHOMA DISTRICT, ZAMBIA

A Dissertation Submitted to the University of Zambia in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Education in Educational Psychology

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## **AUTHOR'S DECLARATION**

I **Samwangala Kaumba** do declare that this dissertation is my own work and that it has not previously been submitted for a degree at the University of Zambia or any other University.

#### **DEDICATION**

This study is dedicated to my dear wife Mary Phiri Samwangala for her understanding and support during my absence from home for many months.

To my only son Mushiyi, and my daughters; Feline, Kuwaha and Chezhezhi, thanks for the love you showed me during moments when I was away at school and I shall remember with fondness moments when we could quarrel over whose time it was to use the computer, whether it was mine or yours to play computer games.

# **CERTIFICATION OF APPROVAL**

This dissertation of **Samwangala Kaumba** is approved as partial fulfillment of the requirements for the award of the degree of Master of Education in Psychology of the University of Zambia.

Signed by	Date
Signed by	Date
Signed by	Date

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# ACRONYMS

ECCDEEarly Childhood Care and DevelopmentEPPEEffective provision of Pre-school Education ProjectHLPHome learning EnvironmentMoEMinistry of EducationNAEYCNational Association for the Education of Young ChildrenOECDOrganization for Economic Cooperation and Development

UNESCO United Nations Educational, Scientific and Cultural Organization

### ABSTRACT

The purpose of this study was to explore the perceptions of early childhood teachers and parents of children in early childhood institutions on the use of play activities to enhance children's learning of literacy and numeracy skills. This study was guided by the following questions;

- **1.** What perceptions do teachers and parents of children in early childhood education have on how play activities enhance literacy and numeracy skills?
- 2. How is play used in expressive activities to stimulate children's interest in learning? literacy and numeracy skills?
- **3.** What factors enable early childhood teachers to teach children play activities well?

A descriptive survey research design US in this study. Five preschools were randomly selected for this study and a random sampling procedure was used to select twenty five teachers from the preschools and 100 parents with children in these schools were also randomly selected for the study. Data was collected through the use of questionnaires and a semi-structured interview. The research findings established that early childhood teachers perceived the use of play activities like, drawing; tracing, coloring, songs, rhymes and computer games as stimulating children's interest in literacy and numeracy skills. Parents of children in early childhood institutions also perceived helping their children in play activities to be something that assisted their children in learning literacy and numeracy skills.

The study also established that teachers and parents used play activities like drawing, tracing to teach children literacy skills like reading and writing. Songs were also use to teach children words, numbers while puzzle activities were used to teach children simple mathematic concepts in addition and subtraction. Parents also used play activities to help children in their home work. Factors like; the teachers' gender, educational attainment and teaching experience, enabled them to teach play activities better. The study recommended that the Ministry of Education, Science, Vocational Training and Early Education incorporates more play activities in the early childhood curriculum and that early childhood teachers were to be trained on how to teach children literacy and numeracy skills using play activities.

# CHAPTER ONE INTRODUCTION

#### **1.0** Overview

This chapter focused on teachers and parents perceptions of how play activities done in early childhood classes stimulate children's learning of literacy and numeracy skills. The chapter has eleven sub-sections arranged in the following order; the background of the study, statement of the problem, purpose of the study, main objective and specific objectives, research question, significance of the study, limitation of the study, theoretical framework, operational definitions and organization of the dissertation.

#### 1.1 Background

Early childhood care, development and education (ECCDE) is offered to children at three levels namely; day care, nursery and pre-school. Day care is meant for children below two years of age and nursery schools combine the provision of parental care and encouraging children between 2-4 years of age in their social, emotional and intellectual development through play activities in drawing, painting, and singing, dancing and speaking. Pre-schools provide more organized education to children between 5-6 years of age in preparation for their entry to primary education (Msango & Bauleni, 2000).

A commonality among all early childhood education is the use of play activities which serve as a means of helping children to learn about and making sense of what is around. Play is an important vehicle for developing and promoting literacy, numeracy and social competence among young children (Copple & Bredekamp, 2009).

Play is used in early childhood institutions to provide children with many opportunities to practice skills and promote mastery. Play is often a socializing event and beyond that, it provides children with a way to assimilate and integrate their life experiences (Essa, 2008). Literacy in early years is about reading, writing and speaking and listening. Reading in early childhood

education can be developed in children by allowing them to interact with children's picture books. Children should be give an opportunity to listen and also make meaning from what others say. Numeracy is about counting and also involves problem solving, organizing and measuring. Children can also be made to do measuring and pattern activities (www.education.gld.gov.au/earlychildhood).

Play in early childhood education is the core for every activity children get involved in. Play activities are taught in nursery and pre-schools through expressive art activities like; art, music, dance and drama to stimulate children's interest in activities that improve their mastery of letters and numbers, language and creativity (Steglin, 2005).

Expressive art activities like music, drama, drawing have traditionally been an important part of early childhood play programmes because these activities encourage children's full and all sided development. Early childhood teachers should be concerned with the 'all-sided' development of each child by guiding and assisting them in different art activities and also making them enjoy the art activities of others (Frobel, 1926).

Steglin (2005) makes the case that there are few play activities taught in early childhood Classrooms and he proposes that early childhood teachers need to be eloquent advocates for play based curriculum in the early years of children's learning. The quality of play activities given to children in pre-schools can contribute to children's readiness for learning literacy and numeracy skills (Bodrova & Leong, 2003).

It is stated in the Ministry of Education Strategic plan (2003) that government would work closely with the Pre-school association of Zambia and other organizations interested in early childhood education to set up a number of pre-schools and also provide quality early childhood education to expand the training of early childhood teachers (MoE, 2003). However, all these strategic plans have in the past not been fully implemented (Msango & Bauleni, 2002). The effect of early childhood development in Zambia has relatively little available evidence on children's acquisition of different learning skills (Fink, 2012).

There has been less development of infrastructures, curriculum materials and teacher training for early childhood education in Zambia as the provision of early childhood education was actively run by individuals while government had few centre which offered early childhood services as pilot projects.

A research done in the United States of America by Sara Smilansky (1968) proposed giving preschool children play activities based on their increasing cognitive abilities which are to be measured by children's ability to manipulate play materials. It is important for teachers and parents to be aware of the different types of play activities which should be given to pre-school children as they progress in learning literacy and numeracy skills. Teachers' and parents' awareness in this case implies setting appropriate expectations for young children's learning of literacy and numeracy skills.

Msango and Bauleni (2002) observe that, early childhood teachers in Zambia have been facing challenges on how to guide children in learning new concepts. They state on the quality and relevance of Early Child Care Development and Education (ECCDE), that there is lack of clarity on teachers' use of play activities in the early childhood institutions. They further state that there are no defined competencies which learners have to attain at each early childhood level of learning (Msango & Bauleni, 2002).

Munsaka and Matafwali (2013) state that evidence is there that any investment in early childhood education is rewarded by the returns it provides in a long n term to society. They further state that quality early childhood experiences lay a strong base for any academic and social success (Munsaka & Matafwali, 2013).

Although many studies have been conducted in Zambia concerning the provision of early childhood education, not much information is available on early childhood teachers' and parents' perceptions of the use of play activities for enhancing children's interest in learning literacy and numeracy skills.

A gap therefore, exists in this regard on the perceptions of early childhood teachers and parents of the use of play activities and what competencies children should attain from pre-school education hence this study.

### 2 Statement of the problem

Although play activities are taught to children in pre-schools and also in homes, not much information is known about the perceptions of early childhood teachers and parents of the use of play activities and what competencies they produce in children in relation to the acquisition of literacy and numeracy skills, hence this study.

# 2.1 Purpose of the study

The purpose of this study was to explore the perceptions of early childhood teachers and parents of the use of play activities in early childhood learning.

### **1.4.1 Specific Objectives**

The specific objectives of this study were;

- **1.** To establish perceptions of early childhood teachers' and parents' of the use of play activities in children's learning of literacy and numeracy skills.
- 2. To examine how teachers and parents use play activities to stimulate children's interest in learning literacy and numeracy skills.
- To identify factors which enable early childhood teachers and parents to teach play activities Well.

#### **1.5 Research questions**

- 1. What perceptions do teachers and parents of children in early childhood education have on how play activities enhance literacy and numeracy skills?
- **2**. How play activities are used to stimulate children's interest in learning literacy and numeracy skills?
- 4. What factors enable early childhood teachers to teach children play activities well?

### 5. 1.6 Significance of the study

It is hoped that the findings of this study may help early childhood teachers and parents to use play activities to enhance children's learning of literacy and numeracy skills. It is also envisioned that the results of this study may further help to inform early childhood teachers and parents to begin to appreciate the involvement of children with play in expressive activities for appropriation in real learning situations. Additionally, it is hoped that, the information analyzed by this study may assist in informing the Ministry of Education Science, Vocational Training and Early Education on the curriculum needs of early childhood teachers and children and consequently the wider society.

## 1.7 limitation of the study

This study was confined to a few early childhood learning institutions in Choma district. Since this study was only conducted in a few learning institutions in Choma district, it cannot be generalized to other early childhood learning centers/schools in the country.

### **1.8 Theoretical Framework**

This study is informed by vygoskian's social; cultural theory and Maria Montessori's prepared environment. Vygotsky's social cultural theory holds that, children gain knowledge and skills through shared play experiences between themselves and adults or peers who help them within the zone of proximal development (Essa, 2011). Vygotsky answers the question on how children develop complex thinking by suggesting that, the social interactions (in play activities) that take place in the nursery and pre-school classes cause the development of complex thinking in children. Skills which children develop from getting involved in play activities are as a result of guided assistance from teachers, parents and peers who adjust the play activities to children's skill level (Berk in Essa, 2011).

Another theory which has informed this study is Montessoris' theory of prepared environment in which Montessori used many learning activities in her school to help children to acquire different skills (Lascarides & Hinitz, 2000).

Montessoris' theory of prepared environment employed a technique of matching appropriate materials to children's stages of development. Montessori proposed the idea of including many learning activities in the early childhood institutions to help children in their learning. Among the skills which Montessori said children learn from play activities which they are taught in the nursery or pre-school include; "matching and sorting objects by size and shape, identification of sound, colour, smell and other practical skills such as teaching reading, writing, and math skill through hands on manipulation" (Montessori in Essa,2011: 127).

Montessori's theory has been used in this study to relate the principle of prepared environment with the play activities which teachers use in the nursery and pre-schools to stimulate children's interest for literacy and numeracy skills. It is assumed that the play activities which children do in the early childhood institutions have an influence on children's learning of literacy and numeracy skills. Montessori's approach will be of help to many Zambian early childhood teachers whom (Msango and Bauleni, 2000) observe, had in the past failed to find clarity in the activities which they teach children and the skills they expect children to acquire.

The social cultural theory by Vygotsky has been used as a basis for this study to explain how teachers can improve children's play activities thus allowing children to work within their zonal of proximal development and at the same time increasing children's' interest for learning. The guidance teachers give to children through play activities is capable of stimulating children's interest for learning different skills. Vygotsky (1978: p.5) states that, "play is included in the early childhood curricular not because children like to play, but because play activities have voluntary and experimental features". The inclusion of play in children's learning is therefore meant to foster creativity in children.

### **1.9 Operational Definitions**

**Expressive art activities**- Activities through which feelings are expressed such as; drawings, moulding, painting and sculpturing, dancing and Music.

**ECE-** Education which is formal or informal, given to children between zeros to six years. **Cognitive theories**-Learning which involves mind processes.

Doodling- Lines or figures which cannot be easily be translated.
Intellectual development- Ability to show reasoning by children.
Multitasking- Variety of tasks done at once
Play – Any activity which is physical/practical in nature and involves creativity

# **1.10** Organization of the dissertation

The dissertation has been divided in six chapters. The introduction makes the first chapter and it explains the main problem that lead to this study, the significance of the study, the theoretical framework for the study, including key words used in the study.

In chapter two, much of the literature supporting earlier efforts about the study are given in detail to show the perceptions of other researchers in relation to the use of play activities for teaching pre-school children literacy and numeracy skills.

Chapter three discusses the methodology used in the study. It constitutes the research design, target population, sample size, sampling techniques, research instruments, data collection methods, data analysis procedures and the ethical considerations.

Chapter four presents the research findings in relation to the objectives of the study. Figures and tables were used for quantitative data presentation and narratives were used to present qualitative data in the form of participant's verbatim while chapter five discusses the research findings.

Chapter six contains the conclusions and recommendations of the study and all of which germinate from the findings of the study. A couple of suggestions have been given for future research in the same field of study.

# CHAPTER TWO LITERATURE REVIEW

### 2.0 Overview

Reviewed in this chapter is relevant literature on what is known about teachers' and parents' perceptions on the use of play activities like; music, painting, tracing, dancing and drama which are taught in early childhood institutions (nursery and pre-schools) to enhance children's interest in numeracy and literacy skills. The chapter has also reviewed literature on how play activities are used to stimulate children's interest in learning of numeracy and literacy skills. Lastly, the chapter has reviewed literature on what factors assist early childhood teachers and parents to teach play activities to children well.

The review has therefore been presented in the following outlay:

- (1) Teachers' and parents' perception on the use of play activities to stimulate children's interest in learning of numeracy and literacy skills.
- (2) How play activities are used to stimulate children's interest in numeracy and literacy skills.
- (3) What Factors enable early childhood teachers and parents to teach play activities well?

### 2.1 Use of play activities in children's learning of literacy and numeracy skills.

Msango & Bauleni, (2002) state in the Education For All frame work report on basic and early childhood education in Zambia that the teaching methods at Early Childhood Care, Development and Education (ECCDE) had no clear and defined relationships between play, learning and work. It is from this perspective that Msango & Bauleni (2002) observed that there was less progress made by teachers and parents over the use of play activities in promoting children's learning of cognitive skills.

Emphasis of this research was on establishing the perceptions of early childhood teachers and parents on the use of play activities in Early Childhood Education (ECE). Early childhood education in this case refers specifically to nursery and pre-schools where the majority of the

learners are from the ages three to six years prior to their entrance to grade one. Aspects of play activities in Early Childhood Development (ECD) involve the stimulation of children's cognitive, psychomotor and social development. Early Childhood Development is a comprehensive term implying all aspects of child development and it adopts a holistic approach encompassing health, nutrition, hygiene and children's cognitive development and socio-emotional well being (UNESCO, 2007).

This research endeavored to examine how play activities were used by teachers to stimulate children's interest in learning literacy and numeracy skills. Play activities in a broad sense includes the application of creative imagination to a unique product (for example the product can be a paper, wood or clay) using a variety of modes (Essa, 2008). Play activities can therefore result in a painting, a sculpture, a collage, a song or poem in which children's creativity is likely to flourish (Braun and Edwards, 1972).

The use of play activities in enhancing children's learning has a long history dating to ancient Greeks. Both research and theory have pointed to the importance of play activities in developing children's physical, cognitive and language abilities in early childhood learning (Frost, Wortham & Reifel, 2005). Psychoanalysts like Freud (1964) and Erickson (1963) state that play activities have a therapeutical power and can be used with play materials to allow children to express their feelings and problems. Children express themselves fully in play because their verbalization is not fully developed (Landreth, 2002).

Children's negative early childhood experiences can impair their mental health as well as affect a child's cognitive behavioural and social emotional development (Copper, Masi et al 2009). Children's emotional and social skills appear to be strongly linked to their early academic standing and if children in early childhood education are found to have special needs, play therapy activities which are tailored to provide therapy to children with special needs can be used by early childhood teachers to assist children to learn literacy and numeracy skills. According to the association of play Therapy (2006), play therapy is defined as a "structured or systematic use of a theoretical model where by a trained therapist uses the therapeutic powers of play to help clients (in this case children) to prevent or resolve psychological difficulties (Landreth, 2002).

Therapeutical play is used as therapeutrical techniques to assist children with special needs and whose disability is a source of worry. Therapeutical play helps children with special needs to manage emotional stress or trauma and early childhood teachers can use this technique for less intensive problems to enable children with special needs to develop interactive abilities (Kaduson & Schaefer, 2000).

The whole essence of using play therapy with children is to strengthen their ability to communicate and this encompasses children's ability to develop literacy and numeracy skills., Another important aspect of play therapy is its ability to enhance a strong teacher-child bond in a classroom and if this relationship is fostered further, it can be a strong predictor of children's behaviours in later school years (Hamre & Pianta, 2001). According to Pianta, early childhood teachers can play a significant role in children's lives if a unique and strong interaction is established between them.

A study by Smith (2009) conducted in Denton Taxes explored teacher's believes about children's play and play therapy. The results of this study showed that play therapy improved children's classroom participation as well as a stronger teacher-child relationship (Smith, 2009). Although play therapy is much helpful to children with special needs, there is a gap of information regarding its application in the existing early childhood schools in Zambia and probably early childhood teachers have not been trained on how to teach play therapy to children with special needs.

Bennet, Wood and Rogers (1997) examined early childhood teachers' understanding of play activities by questioning teachers how they taught play activities to children in early childhood classes. Bernet et al. (1997) established in their study that teachers thought role plays were widely used in early childhood classes for children's language development. The role of play in children's education was further examined in ten primary schools in England. Results of this study showed that both teachers and parents thought play activities stimulated children's learning and cognitive development although the same study established that teachers were not exposing children to many play activities due to extra demands of the curriculum. In other circumstances, play activities did not produce expected results in children's learning because teachers used play

activities o occupy children while teachers were otherwise engaged with other tasks (Keating et al, 2000). Another kind of play which early childhood teachers can use in early childhood classes is called sociodramatic play (Kemple, 1996). Sociodramatic play gives children opportunities to try out different ways in which they can combine the elements of language in play without any worry of errors and teachers can help children through properly selected literacy-related materials to promote the development of language acquisition. Christie, Enz and Vukeliech (2007) state that children can become good readers when they develop a rich language and conceptual knowledge but this only happens when children acquire specific skills that stimulate their learning of literacy and numeracy.

Neuman and Roskos (2003) observed that rich language instructions through play can be used for sustained and in depth language learning. Early childhood teachers have faced challenges in planning and teaching key elements of language and literacy instruction.Sociodramatic play is an important component of early childhood learning as it serves as a way through which children learns literacy and language. Bruner (1983) states that children can rapidly master a language when it is situated in play activities and sociodramatic plays can help children in early childhood education to master a language. Neuman and Roskos (1988) stated that when children are exposed to play with books, they will high likely demonstrate letter recognition and letter sound knowledge. Picture cues while reading was also found to be important in helping children succeed in learning literacy and numeracy skills.

Children in pre-schools can also be involved in unstructured play activities such as playing with blocks; colourng and playing with toys. Making up games often encourage children to learn important literacy skills such as reading, writing and also some numeracy skills. Megan (2011) looked at the connection between play and emergent literacy in Universal Pre-Kindergarten in a rural school in Western New York. The results of the study were that creating literacy based play areas which had different play materials helped children to learn how to read and write. Korat, Bahar and Snapir's (2002) conducted a study on a play based literacy model which fostered children's pre-existing knowledge and assumptions of writing. The results of the study showed that teacher support, involvement and scaffolding of writing skills during play helped children to learn some writing skills.

Play activities can also strengthen the relationship between play and neurocognitve. Anthony (2004) states in a report on 'Learning Sciences and Brain Research 2<sup>nd</sup> literacy and numeracy networks meeting held in Madrid Spain that there was a relationship between the brain and mathematics learning. In every successful learning of literacy and numeracy skills by children, the brain makes a correct connection between sounds of words and there orthographic character and the connection the brain makes can be strengthened if the learners receive instructions in play form (Anthony, 2004). Play activities are encouraged to be used in children's learning of literacy and numeracy because synaptogenesis (the making of connections between neurons) occurs at a greater rate amongst children. This study looked at how the brain develops with exposure to play activities but the perceptions of teachers and parents on the use of play activities for stimulation of literacy and numeracy skills was not included.

The plan Zambia Country Programme on Early Childhood Care and Development (ECCD) was constituted with the sole objective of establishing ways to increase the number of boys and girls less than 6 years enrolling in early Childhood Care and Development. The analysis of the Plan Zambia project established that parents and care givers were not accorded with knowledge and skills on infant stimulation and access to Early Childhood Care and Development. The study also established that Early Childhood Education was limited to pre-schools and mainly to children whose parents had the capacity to pay fees Ng'andu et al. (2008). The study further established that ECCD structures had volunteer teachers and these were inadequate to an extent that most centers mixed younger children under 3 years with older ones (Ng'andu et al,2008). The information established by the Plan Zambia Project in their reviews on Early Childhood Education did not look at the perceptions of early childhood teachers and parents of the use of play activities in promoting literacy and numeracy skills in children and a gap of information has existed in this regard.

Play activities are included in early childhood programmes to give children the freedom to explore and manipulate materials and also to enhance children's interest in learning how to read, write, communicate, and learn basic mathematics and psychomotor development (Hickman, 2005). Activities such as dancing and singing are included in the nursery and pre-school curriculum because they enhance children's psychomotor, social and communication

development. Dancing, painting and singing activities also make an important part of early childhood play activities because of their voluntary and experimental features (Vygotsky, 1978). Stone (1998) states that children can succeed in their learning when scaffoldded well. The term scaffolding generally applies to the help teachers provide to learners to help them manage activities on their own. Scaffolding has been used in this research to explain the role of the preschool teacher in assisting children's learning of reading, writing communication and psychomotor skills in the classroom.

According to Ovando et al. (2003: 345), the provision of "contextual support for meaning through the use of simplified language, teacher modeling, visuals, and graphics, cooperative learning and hands-on learning," can all be considered as the different tools of scaffolding. The provision of wide-ranging play activities to children in early childhood education is important because it provides children with the opportunity to grow and develop mentally. The ages between 0-6 are years when the child's brain develops to its full capacity and this is a critical moment when children require appropriate stimulation to prepare them for future life experiences (Froebel, 1974).

Early childhood play can affect children's intellectual growth during early years. Children enrolled in the abecedarian project conducted in North Carolina, an experimental pre-school program which emphasized language and cognitive development through play activities established that children who participated in this program attained significantly higher reading and literacy scores and this achievement lasted through to grade eight (Machado, 2007).

Although children in early childhood classes are taught play activities through music, drama, painting, moulding, drawing or even cutting with a pair of scissors while parents on the other hand see some of these activities in their children's activity books and probably these parents also encourage their children to do play activities at home. It is assumed that many early childhood teachers and parents of children in pre-schools do not know the role of play activities on children's learning achievements, hence teachers and parents have failed to provide adequate assistance which is supposed to help children in learning new skills (Clement,1993).

Cognitive development in children takes place from an early age and children will show it in the expressive art activities like music, art and design and dramatic activities which teachers and parents give them to do. The stages of cognitive development are naturally distinctive from one another and they appear with progression. Each stage of cognitive development in children can be necessitated to develop by different play activities as long as the play activities are well planned and taught to children with the aid of more teaching resources and the guidance of teachers and parents. Teaching children play activities such as painting; drawing and colouring can help in developing children's writing skills. Lowenfeld (1989) classifies the stages of early childhood art to be under the scribbling stage and pre-schematic stages and any art work done by children under these stages contributes to children's mental growth. These two stages of mental growth will be discussed to show how play activities done under them can help children to accomplish different learning activities on their own.

### 2.1.1 Scribbling Stage

Lowenfeld in (Smith, 1989) observes that, the scribbling stage begins when a child is between 18 months and 2 years old and it usually ends when the child is around 4years. An important factor to be considered here is that, a child at this stage is able to recognize objects used in his or her play activities. Jerboa (1988) observes that, a child at this stage can often tell his caregiver what he or she is drawing, but if it looks like something else, the child will change the name. During the scribbling stage, a child incorporates more recognizable objects and details into his drawings. Therefore teachers and parents can use scribbling activities in form of play to introduce children to letters of the alphabet and numbers.

Learning for children in the scribbling stage can be judged from the way children apply their logic to lines scribbled with a pencil or a crayon although in many instances, teachers and parents see no immediate meaning in the scribbles children make. Scribbles are in themselves a form of communication which children use to communicate their thoughts but nursery and preschool teachers who are not trained are high likely to fail to make children move from scribbles to writing alphabet letters and numbers (Smith, 1989).

### 2.1.2 Pre-Schematic Stage

The pre-schematic stage which precedes the schematic stage occurs between the ages of 4 and 7. Children in the pre-schematic stage begin to use geometric forms in their drawings. The teacher's role at this stage is to scaffold children on how to transform the geometric symbols to construct children's ideas about numerals which could mark the child's start in learning basic mathematics (Smith, 1989). Montessori proposes the use of play activities in teaching children conceptual or academic materials. Play activities done by children in pre-schools prepare a ground work on which writing, reading and mathematics is built. The use of play activities can help children to learn important skills and also form concepts which help children in multisensory ways. Thus children can use their fingers to trace letters cut out of soft materials like clay or use moveable alphabet letters to form words (Elkind, 1983).

Early childhood teachers who use play in activities like painting, sculpturing (done on soft material like; soap), moulding with clay, cutting of paper with scissors, building figures with sticks, singing and drama, these and many more activities have significant influence on children's learning development and these activities can be a gate way to helping children to learn basic reading and writing skills (Klein, 1991; Sautter, 1994).

Play activities such as painting, sticking objects with glue, all provide children in pre- schools with an extensive pre-school education which is meant to improve children's intellectual performance during early childhood. Art activities are included in the nursery and pre-school curriculum because children take them as play activities (Schirrmacher & Fox, 2008).

For very young children, playing is a sensory exploration activity. Children for example in their play enjoy the feeling of a crayon moving across paper and seeing a blob of colored paint grows larger. Kamii and DeVries (1993) suggest that, exploring art materials is very important because it is through exploration that children build knowledge of the objects in the world around them. Klein (1991) further observes that play activities help children to acquire the ability to think critically (critical thinking is observed when children decide what to portray in their art work). Additionally, children develop the ability to choose or match objects (when children use different

media) in their work. Lastly children develop the concept of time and this is observed in how quickly or slowly children complete their play activities (Kasapo, 2007). When teachers and parents expose and assist nursery and pre-school children with play activities, they help children to develop a natural ability to complete tasks and children's ability to complete tasks is an indication of mental maturation James et al. (1998).

According to Barnard (2001), play activities done in early childhood positively affect children's later home and school involvement in education. The constructivist theory by Piaget, (1983) holds that, scaffolding children through play activities actually helps them to discover ways of doing things. Children become inventors of ideas which are used in problem solving. The construct approach also supports the idea of exposing children to play activities because these help children to be constructive in their thinking. Houstone and McCarthy (1980) observe that exposing children to play activities that may involve children handling different objects of different shapes and sizes can make children to develop concepts of size and shape which are elements used in teaching basic mathematical concepts. If children do not receive proper guidance in their play activities, play itself may cause children to fail to progress in their work and this failure, may lead to a subdued development of thinking abilities in children (Houstone et al, 1980). In these modern days, some of children's play activities involve the identification of letters and numbers can eventually make children to learn how to read and write and children can also learn some basic mathematics through computer games (Lancaster, 1990).

The Bank Street is one of the leading forces in early childhood education in the United States of America and they adopted an approach in early childhood education which places emphasis on the interactions taking place between the child and the environment in which learning takes place and how the interaction in the long run affects the child's cognitive and affective development. Children's development in the cognitive and affective domains is an interactive one. The underlying principle behind the Bank Street Approach is a strong commitment by the nursery and pre-school teacher to the promotion of the child's intellectual and social development (Shapiro & Bieber, 1972). The progressive theory on the other hand holds that play activities which are done in the nursery and pre-schools encourage children to develop a freedom of choice

within a structured setting. It is therefore necessary for early childhood teachers to teach children play activities because these activities contribute to children's cognitive development (Sovey & Stankiewicz, 1990).

The Emilia approach by Edward et al. (1993) state that play activities may act as a language which recognizes children's use of artistic media as being integral to cognitive expression involved in learning. Vygotsky (1978) observes that children construct knowledge on the basis of their experiences with play activities because through play activities, children learn to explore with materials found around them and it is such experiences with the environment that encourages learning in children. The Emilia approach thus puts emphasis on the teacher's innovative approach to teaching expressive activities in play form because this is vital in guiding children to learn different skills (Essa, 2008).

The constructivist theory on the hand supports teacher's use of play activities in promoting children's learning development. Children's self motivated actions such as, their interaction with art materials help them to become exploitative and creative. Reviews carried out in 2004 on early childhood education in Zambia MoE, (2009) shows that, Early Childhood Care and development institutions were facing challenges such as, lack of a common curriculum and inadequate trained human resource. Of late, early childhood teachers in Zambia were not innovative in their teaching of literacy and numeracy skills to children. Msango and Bauleni (2002) observed that despite emphasis being put on teaching children in pre-schools in their local languages or familiar languages in-order to enhance their literacy and numeracy skills, all Early childhood Care and Development institutions were still using English as a medium of instruction.

A report given by a Zambian representative at the Pan African Early Childhood Seminar held in Ghana in the year 2009 indicates that the provision of early childhood education in Zambia did not commit the government to provide Early Childhood Education services, thus placing the responsibility on private and church providers. Despite having the Curriculum Development Centre in Zambia, the development of curriculum materials has not been effective. Teaching materials are not readily available in many of the nursery and pre-schools in Zambia thus making teaching of play activities to children in the nursery and pre-schools difficult (MoE, 2009). The Zambia National Education Coalition (ZANEC) observed that the inclusion of the early childhood policy in the Zambian education curriculum was not fully implemented yet government had deployed many early childhood teachers to different primary schools in Zambia (Post Newspaper, Nov.14, 2013). However, there have been many strides government made towards the improvement of Early Childhood Education in Zambia.

The Ministry of Education, Science, Vocational Training and Earl Education has assisted in the development of early childhood education by training a few early childhood teachers, occasionally monitoring standards and preparing curriculum guidelines. Early Childhood Care and Development was incorporated into its National Development plan 2006-2010 as an integral part of basic education. Early Childhood Care and Development Foundation (ECCDF) and Christian Children Fund (CCF) have helped government in the implementation of ECCD in community schools where it was on trial basis (UNESCO, 2007).

Nongovernmental organizations like the Red Barn (Norwegian Save the Children) were improving the running of Early Childhood Education in the Southern province of Zambia and UNICEF was spearheading the formation of a country wide network of NGOs which was meant to promote and support the implementation of ECCD in Zambia (UNICEF,2007). UNICEF was also supporting the Ministry of Education, the Universities of Zambia and the Word Incarnate (USA) to adapt and customize Early Childhood Education developmental instrument meant for provision of ECCD in learning preparedness for school (UNICEF, 2005). Until recently, government through the Ministry of Education Science Vocational and Early Childhood Education had in the month of September, 2013 deployed many early childhood teachers to selected primary schools in Zambia to spearhead the introduction of early childhood education.

## 2.2 Use of play in expressive activities to stimulate preschool children's interest for learning

The literature in this chapter will give an understanding on how teachers and parents can use play in painting, tracing, music, drama and computer games to teach children literacy and numeracy skills. Children's learning is through play and attaching literacy and numeracy concepts to play activities results in children's learning of basic literacy and numeracy skills. Early childhood teachers can use play activities to generate ideas about writing, and reading in children (Clement, 1993). For example, a teacher can ask children to draw a house for the purpose of introducing them to the letter H. The element of play in this activity can be seen in the way children are going to enjoy drawing the house which they know and see and the teacher can use this opportunity to introduce children to letter writing. In short children use visual experiences to build upon their writing and reading experiences. In making images, children are introduced to letter recognition and word identification which later-on develops to reading and writing.

Evangelou et al. (2009) state that very young children can be taught literacy and numeracy skills through play. Teaching literacy to children in nursery and pre-schools can be facilitated through play activities like puppets which can be used for example to tell stories in a role play while relating events that happen in the story to events in the child's life. Similarly, literacy and numeracy skills can be promoted through play activities for example, by encouraging children to play with puzzles, children can learn simple addition and subtraction activities.

Play activities that involve objects that interest children can also be used to develop children's literacy and numeracy skills. Teaching children art activities such as drawing, painting, moulding, cutting, and tracing contributes to the success children make in mastering learning skills. Giving appropriate play activities to nursery school children can lead to the awakening of the learner's mind to writing, reading and basic mathematic tasks (American Academy of Pediatrics, 2007). Therefore, giving wrong activities (activities that do not match the age of learners) to learners may end up jeopardizing their chance to experience mental growth (Lowenfeld, 1987). Nursery and pre-school teachers should also know that some activities like moulding and cutting can lead to the improvement of children's gross and fine motor skills which are also vital in helping children to learn how to hold pencils and how to do the actual writing activities. Nursery and pre-school teachers should further use play activities to focus children's creative urges, personal and emotional needs (Barnes, 2000).

Adams (2002) states that drawing for example helps children to engage with experimenting, investigating, remembering or imagining. A key point from Adams' view is that, children's

drawings are evidence of their struggle to understand and to communicate. Cleveland and Krashinsky (1998) carried out a study based on a sample of 8,500 children with additional information merged in from a census of all pre- school institutions in America. The study separately assessed the effects of play activities mostly those which involved drawing, painting and tracing on cognitive and behavioral development at age 5 and 10. Based on 'analyses of variance' controlling for a number of important socio- economic and family factors, they found that play activities taught in the nursery and pre-schools generally boosted cognitive attainment at ages 5 and 10 and children who were exposed to play activities like drawing, and puzzle games learnt some simple skills in literacy and numeracy.

Cleveland & Krashinsky (1998) in their study on the benefits of early child education and care (ECEC) conducted in Ontario Canada established that good child care and play activities are beneficial for children's development both for the cognitive and language skills and they reject developmental theories which argue that children's progress in play activities, especially in art development takes place naturally through universal stages and that adult intervention or scaffolding of children in play activities does not adversely affect their reasoning development (Seedfeldt, 1999).

Gardner (1998) also disagrees with the developmental theories after establishing that in .0China play in art techniques were actually taught to children in-order to make them competent and creative in different skills which included reading and writing. Gardener (1998) further states that art activities such as painting, drawing, moulding, collage making, which are done in nursery and pre-schools are responsible for the development of thinking patterns which manifest in children and as children increase in years, their reasoning also matures (Gardner, 1989).

Music is part of play activities which children do in pre-schools because music is a powerful means of communication and children are encouraged to sing and hum because music is an important vehicle for social, cognitive and physical development in very young children (Stellaccio and McCarthy, 1999). Teaching children musical activities also provide a stimulus for perceptual, emotional, social, and creative development in children. Although it is outlined in the national policy, Educating our future (MoE, 1996) that, early childhood education was to be

encouraged through the training of early childhood teachers and also through the provision of teaching materials in the pre-schools (MoE, 2008), however, many early childhood teachers have not been equipped with skills on how to use play activities to teach children literacy and numeracy skills. It has been evidently difficult for the teachers in early childhood institutions to scaffold learners with appropriate activities that could encourage children's learning (Msango & Bauleni, 2000). Dodge (1984) states that early childhood teachers should have enough knowledge and interest in teaching play activities in order for them to manage to promote children's literacy and numeracy skills. Early childhood teachers and parents should also combine verbal and social support when teaching children in order to encourage and assist them to reach a higher level of performance and this can be done through the use of statements and questions that provide a frame, or scaffold, for children to develop a new or different type of understanding (Matoba, 1985).

Early childhood teachers who experience difficulties in understanding the complex techniques of scaffolding children with play activities often fail to make connections between theoretical explanations and the practical use of play in teaching children different skills. A growing number of educators and researchers have used the concept of play to describe and explain the role of the teacher in assisting children's learning in the classroom (Stone, 1998; Daniels, 2001).

As children grow and develop their play in art-making activities, they move beyond exploring with their senses and begin to involve the use of symbols to represent real objects, events, and feelings in their artwork. Drawing, in particular, becomes an activity that allows children to symbolize what children know and feel. Art activities for example become a communication outlet for nursery and pre-school children whose vocabulary, written or verbal abilities may be limited (Roche, 1996). The early use of symbols like lines and patterns in children's drawings also encourages the development of a foundation for children's later use of words to symbolize objects and actions in formal writing. For example young pre-school children would draw in a vigorous, uninhibited way with a pencil or large crayons as a way of exploring simple mark-makings. The uninhibited scribbles which children make can then be seen as a channel through which children express what is conceived in their minds about graphic images and concepts about objects and when early childhood teachers guide children in scribbling activities, they

actually train them on how to communicate. Lancaster (1990) observes that children's drawings can be used as a basis for evaluating their communication development.

A music and drama activity on the other hand provides children with an opportunity of self expression. Teachers and parents can use music and drama activities to assist children in learning how to communicate to others and how to express themselves freely. Scaffolding children with play activities in drama and music can also develop children's understanding and pronunciation of words and language fluency. Teachers can use play activities such as; dramatic illustrations, saying of rhymes and citing of poems as a pathway to learning literacy and numeracy skills. Susan (2007) observes that a relationship exists between art activities and the progress children make at learning how to count, read and write. Pestalozzi (in Msango et al., 2000) recommends early childhood teachers to scaffold nursery and pre-school children with practical lessons in order to enable them get direct sense impression of objects. Pestalozzi further suggests that, nursery and per-school teachers should make learning in nursery and pre-schools to be meaningful through the use of instruction in the elements of form (e.g. lines and, curves) as these elements can help children to learn how to write (Msango et al., 2000).

While Reggio teachers value the use different art materials in children's learning of writing and reading skills, the teaching of play activities with the help of different media has not been promoted in the Zambian early childhood institutions, despite having the curriculum development center and this was even stated in the draft policy on early childhood education that the development of teaching materials for early childhood education was not effective (MoE, 2009). Art teaching materials could have helped teachers in the teaching of literacy and numeracy skills in the pre-schools in Zambia but the non provision of these materials in pre-schools could probably be associated to the low reading and writing levels reported in the years between 2000 and 2006 (MoE, 2006).

# 2.3 Factors which enable early childhood teachers to teach play activities well

Different factors like the gender, training and teaching experience for early childhood teachers including the educational attainment for parents can all be used to work for the advantage of the learners when it comes to the provision of adult assistance or scaffolding of children with play
activities. The level of educational attainment for nursery and pre-school teachers and the age of teachers are some of the factors which can contribute to early childhood teacher's capability to handle nursery and pre-school children well in play activities. Teacher training and parental interest are some of the factors which assist early childhood teachers and parents in using play activities to teach children literacy and numeracy skills (Miedel & Reynolds, 1999).

Teachers who expose children to creative play activities drive children's minds towards making sense of what is taught and this makes children to develop flexible and divergent thinking. Lowenfeld (1968) advocates for art education in the nursery and pre-school curricula and he writes about early childhood teacher's experience and ability to scaffold children as an important factor towards the teaching of play in art activities. Many teachers in nursery schools have failed to assist or scaffold children well with play activities due to the their lack of understanding of the influence play activities have in stimulating children's interest for learning different skills (Lowenfeld, 1998). Early childhood teachers could teach play activities to children well with the help of teaching materials if early childhood teachers developed the interest of organizing teaching materials before play activities are taught to children. Early childhood teachers should also have an attitude of patience towards learners when teaching them literacy and numeracy skills because mental growth in children does not occur with a few play activities and neither is learning an automatic occurring process (Clement, 1990).

Lowenfeld and Britain (1987) state that pre-school teachers should possess enough knowledge on how children participate in play activities and teachers should also be well informed on play methods to use with different children. Scaffolding can become a hindrance rather than help in children's learning if taken out of its theoretical context. In short, early childhood teachers should have the ability to gain insight into children's behavior especially with regards to children's involvement with play activities. Further, early childhood teachers should develop an appreciation of the complex and varied ways in which children grow and develop intellectually and having this knowledge can help early childhood teachers to teach children appropriate play activities that can help them to develop literacy and numeracy skills (Stone, 1998). Creative play by children has to be natured because it does not happen on its own and for this reason, early childhood teachers should play an important role in fostering creative expressions in children through a variety of teaching materials which should be used in play activities (Drew and Rakin, 2004). The teaching experience for early childhood teachers is an important factor in facilitating children's creative work because experienced teachers have developed ways of how to guide children to develop divergent thinking (Schirrmacher & Fox, 2008). A major weakness of most national literacy and numeracy programmes are that there is no attempt whatsoever to diversify the contents and techniques in accordance with the needs of children in early childhood institutions. The same is taught in exactly the same way through out all schools however, this could change if early childhood teachers were appropriately trained on how to teach children different play activities (Mostert & Kasanda, 2006).

Play activities further provide nursery and pre-school children with a meaningful communication tool with self and others. There are five areas which are particularly important for early childhood teachers working with children and these are as follows; the quality of teacher to child verbal interactions, teacher's knowledge and understanding of the curriculum, teacher's knowledge of how young children learn, and the teacher's skills in supporting children in resolving conflicts, and helping parents to support children's learning in the home. An early childhood teacher who carries out these tasks can help children to develop their reasoning abilities. Kasapo (2007) observes that many teachers have failed to teach play in art activities because of the teacher's lack of appreciation for art activities and many early childhood teachers have not embraced the five areas of concern which have been stated earlier.

Home factors such as occasional encouragements from parents can also influence how children can improve mentally from play in expressive activities. Miedel and Reynolds (1999) observe that when families are involved in their children's early education, children will experience greater success with their learning. Kieras (2006) states that, evidence in children aged four to seven years who received encouragement from especially their mother, developed sustained attention in class than children who had not received encouragement from home. Parental involvement in checking and encouraging children with their work in play activities such as colouring, fixing puzzles, matching words, these and many more activities given to children make an important process of scaffolding which builds children's' learning abilities. Deviries (2002) agrees that the process of mental growth and learning through the student's active construction should be facilitated and promoted by adults.

The Zambian government's participation in the provision of early childhood education in the past years has been minimal despite placing all the activities of early childhood development like, curriculum development, materials and teacher training under the Ministry of Education, Science, Vocational Training and Early Education. Although the policy on Educating Our Future recognizes the need for early childhood education in building up "cultural capital" and to compensate for disadvantages that arose from underprivileged homes where reading, writing and other education related materials were absent, the government of Zambia was not committed to providing early childhood education may take a new turn because recently, government has been committed to its plans of promoting early childhood education by employing early childhood teachers into government schools.

Matafwali (2010) states that studies on the measure of nonverbal cognitive skills on Zambian children studied using the Pattern Reasoning scale of the Kaufman Assessment Battery (K-ABC), showed that many Zambian children were unable to read or perform well with any paperbased pattern task and it was concluded that such tasks were not suitable for Zambian children because many Zambian children were not frequently exposed to things drawn on paper but to patterns presented in three dimensional formats, many children performed well.

The reviewed literature focused on the relationships between play and children's learning, the role of therapeutical play techniques with children with special needs and the importance of sociodramatic play activities in children's learning. Further, other literature based on studies carried out in Zambia looked at parents' and care givers' knowledge on children's access to early childhood education and the measure of nonverbal cognitive skills on Zambian children.

### 2.4 Summary

This chapter has looked at existing literature on the importance of using play activities for scaffolding early childhood learners in order to help them learn some basic literacy and numeracy skills. The reviewed literature has shown that early childhood teachers and parents who scaffold children using play activities create the basis for children's learning of literacy and numeracy skills. Activities like painting, drawing, music and drama can effectively help children to experience mental growth. Therefore, nursery and pre-school teachers should adequately teach play activities to children in the Early Child Care, Development and Education institutions to help children learn skills which would prepare them for primary education.

The literature reviewed in this study established that, when children are taught play activities like; drawing, painting, computer games, rhymes, puzzles, poems and dram, there is a high likelihood that children would find it easy to learn literacy and numeracy skills. The quality of parental involvement in children's learning can also positively or negatively affect children's learning of literacy and numeracy skills. However, not much information has been generated to show the perceptions of early childhood teachers and parents of the use of play activities to enhance children's learning of literacy and numeracy skills. This lack of information could be explained from the view that the Ministry of Education Science, Vocational Training and Early Childhood were not critically involved in supervising early childhood teachers. Further, the involvement of all Zambian parents in children's learning has not been well established in the past because only well to do parents had the privilege of taking their children to early childhood institutions and these parents knowingly or un-knowingly consolidated on teachers efforts by providing their children with play activities that improved their children's literacy and numeracy skills (Education International, 2009).

Generally some of the studies that have been mentioned in the literature explored the interactions of early childhood teachers with literacy related materials, instructional strategies early childhood teachers use in early childhood classes but there has been less information in terms of teachers' and parents' perception of how children acquire key skills for literacy and numeracy learning through play activities.

# CHAPTER THREE RESEARCH METHODOLOGY

#### 3.0 Overview

This chapter presents the methodology that was used in this study. It comprises the research design, target population, sample size, sampling procedures, research instruments, data collection techniques, data analysis and ethical considerations. The chapter concludes with a summary.

### 3.1 Research design

A descriptive survey non-interventional design was employed in this study. According to Kombo and Tromp (2006), a descriptive survey is a method of collecting data through interviews or administering a questionnaire to a selected sample of individuals. This method is used to collect information about the attitudes, opinions and habits of selected participants in a study (Orodho and Kombo, 2002). This study employed a descriptive survey non-interventional design in order to establish the perceptions of early childhood teachers and parents on the use of play activities in teaching children in early childhood education literacy and numeracy skills.

This design was chosen for this study because the questions raised in the study could be answered in detail through questionnaires and interviews in which respondents gave an in-depth description of what happens when children are involved in play activities and how the aspect of learning literacy and numeracy skills takes place. The design was also suitable for this study because it did not require any systematic manipulation of the variables nor was there any need for the researcher to assess the degree of relationship between variables.

This research applied both qualitative and quantitative approaches in order to generate the required data from early childhood teachers and parents. The qualitative approach was chosen for this study because information that was generated in the study came from interviews to which early childhood teachers responded without interference from the researcher.

In the quantitative part of the research, questionnaires were applied in order to help in the analysis of data through frequency tables, charts and graphs which had data on the gender of respondents.

#### 3.1.1 Research site

The study was conducted in Choma town and selected early childhood-schools in Choma town were included for study. The site was chosen for this study firstly because all the schools were within a walk-able distance and it was thus easy to administer the questionnaires and conduct the interviews in a specified time. Secondly because the researcher assumed that, Choma being a town, had a population of people with different social status and probably many Choma residents had their children going to the nursery and pre-schools in Choma town.

#### **3.2 Target population**

A population as defined by White (2003) is the universe of units from which a study sample is selected. In this study, the population consisted of selected early childhood teachers and parents with children in early childhood schools in Choma district.

### 3.3 Sample size

A sample by definition is a number of individuals or objects from a population, containing elements representative of the characteristics found in the entire group (Orodho and Kombo, 2002). In this study, the sample consisted of 125 respondents comprising 25 pre-school teachers and 100 parents, each of whom had children in the selected pre-schools in Choma district.

#### **3.4 Sampling techniques**

Simple random sampling procedure was used to select the study participants. This method avoided biasness in the selection of participations. White (2003) defined simple random sampling as a selection technique that provides each population element an equal chance of inclusion in the sample.

# **3.4.1 Gender distribution of respondents**



Figure 3.1 below shows the distribution of respondents by their status and gender

**Figure 3.**Error! Use the Home tab to apply 0 to the text that you want to appear here.**1**: **Distribution of respondents by status and gender (n=125)** 

Figure 3.1 shows that there were 21 female teachers and 4 male teachers. Among the parents, there were 68 females and 32 males.

## **3.4.2** Distribution of respondents by age and status

Figure 3.2 shows the age and status of the respondents.





The figure shows that most of the parents (50) were aged between 23-30 years old followed by 46 who were aged between 32-40 years old. The least (four) were aged between 41-63 years old. Among the teachers, the majority of them (20) were aged between 32-40 years old followed by five of them who were aged between 23-30 years old. Non of the teachers were aged between 41-63 years old.

#### 3.4.3 Teachers and parents highest educational level

The figure below shows the distribution of teachers and parents in relation to their highest educational level of attainment.





The figure above shows that the majority (21) of the teachers had a college certificate while four of them had a grade ten level of education. Among the parents, the majority (42) had grade eleven level of education followed by 30 who had a college diploma and 14 had a college certificate. Six of the parents had grade ten level of education while two had a degree and the remaining two had a master's degree.

### **3.5 Research instruments**

Two research instruments namely; questionnaires and a semi-structured interview were used to collect quantitative and qualitative data for the study. Prior to the main study, a pilot study was conducted based on five early childhood teachers and 10 parents of children in four early childhood schools in Batoka Township in Choma district.

The main aim of piloting the research instruments was to determine whether or not the items in the instruments were going to draw out from respondents the required information. The other reason for piloting the study was to determine the best way of administering the research instruments.

Findings from the pilot study showed that the instruments were going to yield useful results for the main study although a few changes were made to the instruments in sections where respondents could not understand the questions or what was required of them.

#### **3.5.1 Questionnaires**

A questionnaire according to Kombo and Tromp (2006) is an instrument whose questions are used to solicit specific information on different topics. The research instrument was selected because it allowed respondents to give answers to the same set of questions that comprised fillins and check list responses. Further, questionnaires were used for data collection because they helped to yield primary information from early childhood teachers and parents on their perceptions of play activities in stimulating children's interest for learning literacy and numeracy skills. Questionnaires were used because they were easy to distribute as well as to collect and this saved the researchers' time.

### 3.5.2 Semi-structured interview

A semi-structured interview was used to collect data from the selected early childhood teachers and parents of children in the selected nursery and pre-schools in Choma district. Silvestri (2009) observes that, semi-structured interviews can be a list of questions on a particular topic which the researcher needs to cover. The reason for employing this instrument was to help in getting complete and detailed views from teachers and parents on how they used play activities to enhance literacy and numeracy skills.

#### 3.6 Data collection procedure

The first step to data collection was to make appointments with the relevant administrators of the selected pre-schools on appointed days. The questionnaires were administered to sampled teachers who responded to the questionnaires during their own time. Questionnaire distribution to parents was facilitated with the help of school administrators who assisted in giving the questionnaires during hours when parents brought their children to school. The parents brought back the filled-in questionnaires when they came to pick their children. The interviews were held on separate times with selected teachers and parents and a verbatim device was used to record each participant's verbatim. Open - ended questions were used in the interview to allow participants to fully explain in detail how they used play activities to stimulate children's interest for literacy and numeracy skills.

The instrument was used in this study in order to subject all respondents to similar questions and the verbatim which early childhood teachers and parents gave were recorded electronically because some of the parents responded in their local languages (mostly Chitonga) and these responses were later translated to English.

### 3.7 Data analysis

Both qualitative and quantitative methods of data analysis were applied. Qualitative data was analyzed thematically while quantitative data was analyzed with the help of the Statistical Package for Social Sciences (SPSS) to generate frequency tables, charts and graphs which were used to facilitate the presentation of data based on respondent's perceptions of the use of play activities to enhance children's literacy and numeracy skills.

#### **3.8 Ethical considerations**

Ethical issues were highly considered in this study. Participants were informed about the nature and purpose of the study. Further, informed concert was sought from the participants before commencement of data collection. In addition, the respondents were informed that the information gathered was purely for academic purposes. Participants were not forced or coerced to give information for this study and participants' views were treated with confidentiality and respect.

### **3.9 Summary**

Explained in this chapter are research methods that were used to collect data from respondents. A descriptive non interventional research design was used to collect data. Data was collected from a sample size of 25 pre- school teachers in Choma District and 100 parents who had children in these pre- schools. Data from the respondents were collected with the help of questionnaires and an interview guide. The qualitative data was analyzed thematically while quantitative data was analyzed using SPSS to generate frequency tables and graphs which were used in presenting the findings of the study.

# CHAPTER FOUR PRESENTATION OF REASEARCH FINDINGS

## 4.0 Overview

This chapter presents the findings of the research on teachers and parents perceptions of the use of play activities to assist and guide (Scaffold) pre-school children in the learning of literacy and numeracy skills. Included in this chapter are findings on play activities which pre-school teacher's use to enhance children's interest for literacy and numeracy skills. The chapter ends with factors which assist pre-school teachers in scaffolding children well when they are learning literacy and numeracy skills through play activities.

# 4.1 Teachers' and Parents' perceptions of the use of play activities in enhancing basic literacy and numeracy skills.

In order to establish the perceptions of early childhood teachers' and parents' of the use of play activities in enhancing children's literacy and numeracy skills, data was collected from the teachers and parents through questionnaires and interviews. The presentation of findings therefore begins with the teachers' perceptions followed by the perceptions of the parents of the use of play activities to enhance literacy and numeracy skills in children.

# 4.1.1 Teachers' perception of the use of play activities in enhancing basic literacy and Numeracy skills

Pre-school teachers were asked to state what their perceptions were of the use of play activities like; puzzles, drawing, tracing, colouring, moulding, paper craft, rhymes, matching of objects (Matching similar shapes/letters/numbers), computer games, building blocks, stories and role plays used to stimulate children's interest in learning literacy and numeracy skills. The distributions of responses from respondents are shown in the tables.

# Table 4.1: Frequency distribution of literacy and numeracy skills enhanced by play Activities as stated by teachers

Play activity	Skill enhanced	Frequency of responses
Puzzles	Simple mathematics/writing	20
Drawing	Writing and reading	25
Tracing	Reading, writing and simple mathematics	17
Colouring	Reading /Writing	18
Rhymes	Reading/writing	20
Matching of objects	Communication/vocabulary	20
Computer games	Non	-
Singing	Knowing letters/words / numbers	10
Role plays	Vocabulary/communication	10
Cutting papers with scissors	Psychomotor development	5
moulding	Psychomotor/writing/letters/Mathematics	2
Building blocks	Non	-
Story telling	Non	-

Since respondents were required to indicate the literacy and numeracy skills enhanced by a particular play activity, each respondent was free to state more than one literacy and numeracy skill promoted by play activities.

Table 4.1 shows the frequency distribution in a multiple response on literacy and numeracy skills enhanced by play activities and the number of responses given out on each play activity are from the total number of respondents asked. Twenty out of the twenty- five teachers stated that puzzle activities promote simple mathematics and writing skills in children while all the twenty five teachers stated that drawing activities produce writing and reading skills in children. Twenty out of the twenty- five teachers indicated that rhymes help children to develop reading and writing skills. Further, twenty out of the twenty-five teachers thought matching activities enhance reading, writing and communication skills in children. Eighteen out of the twenty- five teachers mentioned that colouring activities help children to acquire reading and writing skills and seventeen out of the twenty five teachers stated that tracing activities enhance children's interest in reading, writing and simple mathematics. All the twenty- five teachers thought building blocks and storytelling activities did not produce any literacy and numeracy skills in children. The rest of the responses are as shown in the table 4.1.

# 4.1.2 Parents' perceptions of the use of play activities in enhancing basic literacy and numeracy skills

Parents of children in the selected pre-schools were asked to state which among the following skills: reading, writing, basic arithmetic, vocabulary/communication skills, did their children learn through play activities like, puzzles, drawing, tracing, colouring, moulding, cutting letters rhymes and sorting of objects. Their responses are shown in table 4.2

<b>Table 4.7:</b>	Frequency distribution of literacy and numeracy skills enhanced by play
	ctivities as stated by parents

Play activity	Skills children learn	Frequency
Puzzles	Simple mathematics/writing	60
Drawing	Writing and reading	100
Tracing	Reading, writing and simple mathematics	70
Colouring/moulding/ cutting	Reading /Writing	80
Rhymes/computer games	Reading/writing	40
Matching of objects	Communication/vocabulary	20

The responses shown in the table are multiple because of the number of times respondents mentioned a skill which they thought was enhanced by a particular play activity did count.

Table 4.2 shows the different perceptions parents had of the use of play activities for scaffolding children in literacy and numeracy skills. The frequency distribution in a multiple response by parents shows that 60 out of 100 parents stated that puzzle activities enhance/stimulate children's interest in simple mathematics and writing skills. All parents stated that drawing activities enhance children's reading and writing skills. 70 out of 100 parents indicated that Tracing activities help to produce reading, writing and simple mathematics skills in children. 80 out of the 100 parents mentioned that colouring activities enhance children's reading and writing skills. Rhymes and computer games were mentioned by 40 out of the 100 parents that they produce reading and writing skills in children while 20 out of the 100 parents thought matching activities assist children to develop communication and vocabulary skills.

# 4.2 How teachers and parents used play activities to stimulate children's interest in learning basic literacy and numeracy skills

In order to examine how teachers and parents used play activities to stimulate children's interest in learning literacy and numeracy skills, data was collected from 4 randomly selected teachers and 6 randomly selected parents who had also answered questionnaires. Views from teachers and parents were recorded in form of verbatim. The presentation of the findings therefore, begins with the verbatim from teachers followed by the verbatim from parents.

# 4.2.1 How teachers used play activities to stimulate children's interest in learning literacy and numeracy skills

Pre-school teachers were asked to state how they used play activities to stimulate children's interest in learning literacy and numeracy skills. Their responses are as presented below in verbatim.

**Teacher 1...** In drawing activities, children are asked to trace numbers and letters and in groups, they draw anything they wish to show and children get excited with such activities as some draw their home, parents, cars and trees. Asking children to trace numbers and letters enhances their ability to learn how to read and write. I am saying so because after teaching children to trace numbers and letters of the alphabet, they eventually learn how to write the numbers and letters correctly and this in my view is the beginning of children's learning of reading and writing. So allowing children to get involved in play activities that involve drawing helps a lot in teaching child how to read and write.

**Teacher 2...** I find teaching children music to be important in helping them learn how to say some words; learn how to identify letters and also how to count. I can give an example, 'children sing short songs like, 1 2 3 4, once I caught a fish. 5, 6, 7, 8 then l let it go. Why did I let it go? because it bit my finger. Which finger? this little one on the right so. This song is going to enhance children's ability to count; they will also learn how to communicate ideas. For this reason I can say expressive art activities play a big role in children's learning of reading and some simple mathematics.

**Teacher 3**... Teaching children in pre-schools would have been difficult without teaching children play activities in expressive arts. When I ask children to paint their drawings, children will decide to use colours which suit what they have drawn for example, if I asked children to draw a tree, many of them would use green to draw leaves although other children may use other colours. This activity makes children to learn to identify objects which they are seeing and also to be able to represent them. In addition, children's psychomotor develops because the movements which their hands make, contributes to how flexible their wrist become and this also helps children to learn how to hold writing tools like pencils. I also read stories from books with the children and after reading the stories, children are given books to play with and the books have pictures in them. Children love books.

**Teacher 4.** Preparation of children in reading activities is made possible with play activities which I give children. In many of the lessons, I usually give children writing materials like crayons, pencils and sometimes we use water colours. With the help of materials, children do trace, fix puzzles and draw. Singing and role playing is also given time. I feel each play activity has a big role it plays on children's learning. What I can say is play activities encourage children's interaction and later on I think it prepares children to be ready for grade 1. Sometimes I give children cutting, paste activities and puzzle fixing activities. Children make letter cuttings out of printed texts and the cut letters are glued to form words. This activity I think develops children's imagination. Puzzle activities help children to learn some activities like addition and subtraction and when simple mathematical activities are introduced to children, they have fewer difficulties.

# 4.2.2 How parents used play activities to stimulate children's interest in learning literacy and numeracy skills

Parents were asked to state how they used play activities to stimulate children's interest in learning literacy and numeracy skills. Their responses were as presented below in verbatim.

**Parent.** A... since she entered school, she has improved in her concentration in school work especially in putting her ideas in drawing. She draws pictures of aero planes and tells stories of how she will be able to fly them one day. When she brings her home work, I usually guide her in completing her drawings and I can see that she has started even writing under her drawings what seems to be letters written up-side down.

**Parent.** B... my son has become so imaginative and creative in his colorings. He can colour different letters of the alphabet very well and he likes saying rhymes like, "Peter Pan Picked a Piece of Paper and then he goes writing the letter P in his work book". Sometimes he has written or can I say messed up the walls in the sitting room with his tracing and simple writings. I can also say that my child enjoys making animals, cups and pots from clay and he is seen putting numbers on papers to show price tags, I think the teacher in using play activities to introduce children to some form of mathematical concepts and the rhymes are building children's vocabulary. I buy for my child crayons and writing papers to draw on. I wish all

teachers in nursery and pre-schools knew how to use play activities to teach children reading and writing skills and even some mathematics.

**Parent.** C... I have come to learn that when my daughter comes back from preschool, she enjoys singing songs that involve counting and I am made to think the teacher is using songs to teach counting and it is working well for my child. Even in her drawings, she likes drawing eggs, oranges and then she would paint them and show me what she has drawn. This also tells me that the teacher is creative enough to use drawings in order to help children to learn the names of items, numbering of items, and also counting. To help her in her work, I draw circles for her and she paints them and then numbers them. Sometimes I help her to draw and I then ask her which letter to put under the drawing. This is how I contribute to my child's learning of reading and writing activities. Teachers should use play activities in nursery school I think who have been to these nursery and pre-schools can learn to read and write faster than children who have not.

#### 4.2.3 Contributions parents make to children's learning of literacy and numeracy skills

Parents were asked to mention how they contributed to their children's learning of literacy and numeracy skills and their responses are shown in the following verbatim:

**Parent. D**...My son has developed interest in playing with friends. At first I thought he was a shy boy but since he started preschool, he enjoys doing some jumping activities and when they are jumping, I hear them singing some songs which go together with the jumping. I think the physical education activities are influencing children's communication.

**Parent.** E...computer games have helped my child to learn how to do simple addition and subtraction activities. I think allowing children to play computer games that are educative can help children to learn how to write and read and also to learn the concept of adding and subtraction. I think children who are exposed to computers are sharp in their thinking.

Parent. F....I see my child paint some drawings in her book, she also sings songs where she

mentions letters and numbers and she says the teacher teaches them those songs but I am not sure how that helps her in how to read and write. She spends most of her time with her brother passing a pencil through diagrams which teachers draw for her. I have never helped her with such activities because I have no idea about writing. And I think that is for her teacher to do because the teacher understands better what children do.

## 4.3 Factors which help pre-school teachers and parents to teach children play activities well

Respondents were asked to state their views about factors which they thought help them in teaching children play activities. Among the factors which respondents mentioned were, gender, pre-school training, level of educational attainment, years of teaching experience and mere interest in children's learning.

# 4.3.1 Gender of early childhood school teachers that had more interest in children's play Activities

When early childhood school teachers were asked to state which gender of teachers had more interest in children's play activities, they gave the responses shown in Figure 4.1



# Fig 4.1: Gender of teachers who had more interested in children's play activities (n=25)

The figure above shows that eighteen out of twenty five teachers mentioned that female teachers

were more interested in children's play activities. Four teachers thought male teachers were more interested in children's play activities while three out of the twenty five teachers thought both male teachers and female were interested in children's play activities.

When respondents were asked to state why they thought female teachers were more interested in children's play activities than male teachers, and also why they thought both genders have interest in children's work, respondents gave the reasons shown in table 4.3.

# Table 4. 3: Frequency distribution of reasons why female teachers help children in play activities better than male parents

Responses	Frequency	
Female teachers have more patience working with children	5	
Female teachers enjoy working with young children	8	
Female teachers have mothers' care for children	2	
More female teachers are trained to teach young children		
Male teachers have less patience for children's play activities	4	
Both male and female teachers have interest once trained	3	
Total	25	

Table 4.3 has responses which teachers gave to show why they thought female teachers were more interested in children's play activities. Five out of the twenty- five teachers stated that, female teachers were more interested in children's play activities because female teachers have enough patience for children. Eight out of twenty -five teachers thought female teachers were more interested in children's play activities because female teachers enjoy working with children while two teachers thought female teachers have motherly care for children and that is why they get interested in children's work. Three out of the twenty- five teachers thought female teachers have interest in children's play activities because more females than males have been trained to teach children in early childhood institutions. Four out of the twenty- five teachers stated that male teachers were not much interested in children's work because male teachers have less patience to work with children but three teachers out of the twenty five teachers thought both male teachers and female teachers have interest for children's play activities.

# 4.3.2 Gender of parents that had more interest in children's play activities

Parents were asked to state which gender of parents they thought had more interest in children's play activities and figure 4.2 shows their responses.



# Figure 4.2: Gender of parents who were more interested in children's play activities

Figure 4.2 shows that the majority of parents, 80 (80.0%) indicated that female parents were more interested in children's play activities than male parents while 20 (20.0 %) of the parents felt that male parents were more interested in children's play activities.

For respondents who said that female parents were more interested in children's play activities, another question was asked to them to give reasons for their response. Table 4.4 shows reasons why parents believed that female parents are more interested in children's play activities.

# Table 4.4: Frequency distribution of reasons why female parents help children in play activities better than male parents

Responses	<b>Frequency</b>
Mother's frequently assist children in their home work	50
Mother's usually help children in drawings, cutting, music, poems	30
Male parents have less interest in children's home work	60
Mothers have patience for children	45
Mothers frequently check children's books	22
Children are most free with their mothers than fathers	56
Female parents are more friendly, gentile, nurturing	65

The responses shown in the table were multiple because respondents gave more than one response to the question on why female parents help children better than male parents.

The table shows that the frequency distribution of responses that indicated that female parents were friendly, gentle and nurturing was 50 out of 100 parents while 30 out of 100 parents stated that female parents spent more time with children than male parents. The frequency distribution of responses that indicated that children were freer with their mothers than their fathers were 56 out of 100 parents and the frequency of responses that indicated that male parents had less patience for children were 45 out of 100 parents. The rest of frequencies are shown in the table.

## 4.4 Teacher's education level

Teachers were asked to state if their level of educational attainment and training in early childhood education, contributed to how well they taught children play activities in class. All the twenty- five teachers indicated that the level of educational attainment for teachers contributed to how well they teach play activities to children.

Teachers were further asked to state their reasons for suggesting that their educational attainment and preschool training helps in teaching play activities to children better. Table 4.5 shows their responses.

Table 4.5: Importance of	f educational	attainment	and training t	for teachers	(n=25)
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Responses	Frequency
Training improves teachers' ability to understand children's thinking	4
Education improves teachers knowledge of children's education	6
Trained teachers know which activity to give children and how to assist each child	7
Training helps teachers to guide children well	1
Teachers who are trained understand children better	2
Educated teachers use teaching approaches that suit children's needs	3
Trained teachers know how to use the right teaching material and can adopt to	2
methods	-
Total	25

Respondents had different views on the importance of educational attainment and training for early childhood teachers. Four out of the twenty- five teachers stated that, training improves teacher's ability to understand children's learning while six out of the twenty- five teachers thought teachers' educational attainment improves their knowledge of children's education. Seven out of the twenty- five teachers thought, training helps early childhood teachers to know what play activities to teach children and only one teacher stated that training helps early childhood teachers to learn how to guide children. Two out of the twenty- five teachers interviewed thought trained early childhood teachers understand children better than un-trained early childhood teachers and three teachers mentioned that their educational attainment has equipped them with enough teaching methods for teaching children while two teachers out of the twenty- five teachers interviewed stated that, trained teachers know how to use appropriate teaching materials.

### 4.5 Importance of teaching experience for early childhood teachers

Teachers were asked to state if their teaching experience in early childhood education contributes to how well they teach children play activities. Twenty- one out of the 25 teachers agreed that experience plays a big part in how well teachers manage to teach children play activities while four out of the twenty- five teachers said that teaching experience among early childhood teachers did not contribute to how well they taught children play activities

When teachers were asked to explain why they thought their teaching experience helps them to scaffold children well in play activities, their responses were as shown in the table 4.6.

<b>Table 4.8:</b>	: The importan	ice of teaching ex	perience for early	v childhood	teachers (n=25)
	·				

Responses from teachers	Frequency
Experience helps teachers to know how to guide children in different activities	7
Experienced teachers know which activities help children to learn literacy and numeracy	10
Experienced teachers know a lot of activities which children like doing	5
Experienced teachers have different approaches on how to teach children	3
Total	25

Table 4.6 shows that seven teachers stated that experienced early childhood teachers were able to guide children with different play activities and ten teachers stated that experienced early childhood teachers knew which play activities helped children to learn literacy and numeracy skills. Five out of the twenty- five teachers observed that experienced early childhood teachers knew how to teach children play activities. Three teachers stated that experienced early childhood teachers were able to use different play way methods in teaching children play activities.

## 4.6 Summary

The study findings were that early childhood teachers and parents perceived play activities as necessary for teaching children literacy and numeracy skills. Both teachers and parents perceived play activities done through expressive arts like; music, singing, drawing, poetry and drama to be helpful in enhancing children's interest for literacy and numeracy skills.

The narratives generated from the interviews with teachers and parents show that although teachers and parents used play activities to help children learn some literacy and numeracy skills, many of the play activities teachers and parents gave children were repeatedly taught. It was also established in the study that parents of children in pre-schools were not actively involved in helping children with play activities at home although 50 parents stated that probably female parents sometimes checked their children's books. Both teachers and parents stated that play activities taught in early childhood-schools prepared children for grade one. Factors like the gender of teachers and parents, the age of teachers and parents, educational attainment for teachers and parents and the training of teachers for early childhood education contributes to how well teachers teach children play activities and how well parents assist their children with home work.

# CHAPTER FIVE DISCUSSIONS OF THE FINDING

### **5.0 Introduction**

This chapter presents the discussion of the findings on teachers' and parents' perceptions of the use of play activities in enhancing children's literacy and numeracy skills. Discussed also in this chapter are narratives which teachers and parents gave on how play in expressive arts is used to stimulate children's interest in learning literacy and numeracy activities which teachers and parents use to enhance children's acquisition of literacy and numeracy skills. The chapter has also discussed the factors which enable early childhood teachers to scaffold children well in play art activities.

# 5.1 Teachers and parents perceived that play activities enhance children's literacy and numeracy skills

Teachers and parents who participated in the study gave their views on how they thought play activities taught in early childhood classes stimulate children's interest for learning literacy and numeracy skills. The majority of the teachers thought teaching children play activities helped to prepare children in a great way for reading and writing readiness. The whole purpose of involving children in play activities was to enable them to express themselves nonverbally, to satisfy their sensory experiences, and also to allow children to experiment with a variety of materials which at the same time enhances children's ability to learn writing, reading and communication skills (Seefeldt, 1999). Pre-school teachers who participated in this research stated that play activities carried a big role in children's learning process. Teacher's perceptions of play activities which were given to children in nursery and preschools were that these activities stimulated children's interest for learning literacy and numeracy skills.

The use of puzzles and drawing activities ranked the most done activities and teachers stated that children freely participated in puzzle activities. Teachers said that puzzle activities helped children to learn simple mathematics and writing. Debora and Bodrova (2013) state that, puzzle activities provide children with an opportunity to learn about sizes, numbers, patterns, circles,

squares, triangles and colours. Although teachers only mentioned numeracy and literacy as two skills which children learn from doing puzzle activities. Johnson (2008) suggests that, play activities like puzzles, drawings make children to attain another skill which is visual literacy, which can be described as children's ability to talk about their art activities and understand the message conveyed in others art work.

Children can also be involved in other play activities like, play with blocks, word games, which increase children's concepts about size, numbers, patterns and problem solving. These activities further extend children's language, mathematical and spatial concepts (Johnson, 2008).

The challenges which Msango and Bauleni (2002) stated in their report on how early childhood teachers were failing to teach children new concepts due to lack of clarity on the use of play activities could be resolved if teachers could teach children defined competencies in literacy and numeracy and also if teachers could involve children in many activities that holistically should include, visual literacy, aesthetic appreciation ( appreciation of beauty related to all forms of art) and listening, such that when all these skills are combined together, they would make children sail through in their learning of literacy and numeracy skills. Other ways the research established which teachers can use to build children's literacy skills are the use of open ended questions which encourage children to practice expressing themselves and this also builds children's vocabulary. Story telling is another play activity which early childhood teachers could employ in classes to build children's language and listening skills (Bodrova & Debora, 2013).

Msango and Bauleni (2000) observe that, play activities done by children in the pre-schools actually encourage children's interest in learning and it further yields into children's intellectual development which in fact prepares them for entry in primary education. According to Aylward et al. (1999), play activities increase children's self-esteem; play also helps children to benefit in the areas of language development.

Pestalozzi (in Essa, 2008) agrees that guiding children with practical lessons can enable them to get direct sense impression of other subjects. Some of the teachers perceived teaching children

play activities to be important because, apart from children mastering the activity in which they are guided or assisted in, for example in activities like; painting, tracing or cutting, in which children apart from learning how to draw or trace, children can also end up learning how to write

with less difficult. Children's interest for play activities increase especially when the activities are done in a group. Lowenfeld and Brittain (1968) state that teachers should use appropriate teaching materials in play activities to help in stimulating children's interest in the activities. The research established that, teachers perceive that, scaffolding or teaching children with play activities in music, drama and tracing, does help children to progress in learning skills like writing, reading and communication, Bowen and James (1975) support the idea of guiding and instructing children in art elements like lines and shapes which are applied in drawing and tracing because children how to write.

Parents on the hand observed that, play activities which are taught in the nursery and preschools help to develop children's interest in learning literacy and numeracy skills. Twenty seven (27%) of the parents observed that, guiding and assisting children in play activities like drawing, colouring and cutting did help to build children's confidence in learning how to read and write. Play activities such as; counting balls, puzzles, drawing shapes like, circles and triangles, which parents give children to do at home can develop children's interest in playing with numbers and this introduces children to basic mathematical concepts. Wardle (2003) observes that, nursery and pre-schools which expose children to play activities create in children a sense of independence and a capacity for cooperation. Play activities can move children from parallel play to more advanced levels such as associative and cooperative play (plays were children are assisted). In cooperative plays, children are high likely to learn literacy and numeracy skills because children receive enough help before they are left to work alone.

Chinnappan (2003) and Rasmussen (2001) state that over the past decade, research has identified that children's play activities emphasize collaboration and dialogue between the teacher and also among learners. Children's growing sense of interest for learning is supported when they confidently get involved in play activities. The research established that, parents just like teachers perceived the teaching of play in expressive art activities did play a big role in helping children to develop creative minds. Play activities also prepared children for reading, writing,

numeracy and communication skills. Both teachers and parents perceived play activities like; drawing, cutting with a scissors, tracing, rhymes, matching of objects, and singing to be activities which promoted children's ability to excel in literacy and numeracy skills.

# 5.2 Teachers perceived that play activities stimulate children's interest for literacy and numeracy skills

Teachers were asked to state how they used play activities in stimulating children's interest for reading, writing and numeracy and from their responses, it was established in the research that, many of the play activities which teachers taught children involved play activities in drawing ,songs ,puzzles, role plays and computer games which children practiced with much help from the teacher.

The research further established from the teachers that, some of the play activities which children did in drawing involved painting shapes, whereby children got objects which they knew and traced them in their books. In other drawing activities, children put their palms on papers and they drew round all the fingers while counting them. One respondent actually stated that, songs which mention letters and numbers were taught to children so that they could become familiar with the names of the letters and numbers as well as identifying them. Kemple (2004) states that musical activities should be used as part of children's everyday play and exploration.

The element of play and exploration in music is what teachers should capitalize upon when introducing literacy and numeracy concepts to children. Teacher 1 stated in her narrative that, she usually gave children drawing and tracing activities and most often, children traced numbers and letters. Drawing activities were used to introduce children to letters and numbers which later prepared children to learn literacy and numeracy skills like reading, writing and basic addition. Teacher 2 stated in his narrative that, he used colouring and rhyme activities to teach children literacy skills. When teaching colouring activities, children were asked to colour single letters and words which in the long run stimulated their interest in reading and writing activities. The teacher also mentioned that he used song activities to teach children how to count and say some words and these activities improved children's vocabulary. For example the song, Pick -Pick I Pick It on You, I find, I pick it on you. One- two- three -four...." Has a literacy and numeracy concept in it and this play song is used to teach children the verb 'Pick' and it is also

used to teach children how to count. Copple (2009) agrees that four –year- olds actually benefit from song activities because this age group appreciates and enjoys creating songs, therefore songs should be integral parts of early childhood experiences.

Teacher -3 narrated that, he included play activities in paintings and drawings because these activities promoted children's psychomotor (for example wrist development) which in some way was related to the development of writing skills. "handedness is fairly well established around age four, although the wrist contains some cartilage that will not harden into bone until about age six, placing some constraints on fine motor capacity."

Allowing children to get involved in painting and drawing activities help to develop their wrists and it also enables children to manage to grip pencils well. Early childhood teachers should therefore emphasis on play activities that develop children's wrists before making children to attempt writing activities. Allen and Marotz (2007) observe that, the most common tool use requiring a holding grip is drawing from which writing develops. Before children have learnt to write, they have problems holding writing tools because children still use the palmar grasp (holding writing tools eg, where a pencil or crayon lies across the palm of the hand with fingers curled around it) and the difficult which children face who have not yet done many play activities that involve using their palms is that, they would often write by moving the whole arm instead of moving only the wrist (Allen & Marotz, 2007).

Teacher 4 narrated that, the play activities which she gave children included; tracing, puzzle fixing, drawing and role plays. She further stated that learning materials were used to promote play activities and also to give children enough exploration in the play activities. Rich (1985) states that children may show little interest in reading and writing activities if they have little access to materials like; pencils, crayons, glue scissors, plastic letters and stencils, tape, hole punch and ruler that promote the activities (Rich,1985). Allowing children to cut copied numbers with the help of a stencil and plastic numbers can assist children to learn number identity and the knowing of numbers can improve children's mathematical concepts such as subtraction and addition. Some play activities may involve sorting and matching missing parts of numbers and when children reach begin to identify numbers with less assistance, the teacher can then introduce counting activities to prepare children for simple mathematical concepts in addition

and subtraction.

#### 5.3 Teachers were not using enough teaching materials in children's play activities

The study established that although teachers were using different play activities to teach children literacy and numeracy skills, many of the play activities were about drawing, tracing and singing. Computer games could have contributed to children's learning of literacy and numeracy skills if early childhood classes were equipped with computers. It was also established in the research that, there was less use of materials in some of children's play activities like storytelling, which could have been better done by exposing children to many picture books.

The involvement of children in play activities did not only build children's literacy and numeracy skills as play activities also improved children's psychomotor and social development. Children's manipulation of writing tools and free association in group activities is highly developed by allowing children to get involved in controlled play activities. Teacher's also stated that they used storytelling to increase children's interest for literacy and numeracy. Schickedanz (1999) points that one important factor for early reading is story awareness. Story reading experiences give children a sense of what a story is and how it is organized. Early childhood teachers should read more books to children because it helps children to develop the sequence of how a story begins and ends and the story's sequence of events is important for literacy development (Schickedanz, 1999).

The study further established that children in early childhood classes were not being exposed to a variety of book resources to support the development of children's literacy and numeracy skills. None of the interviewed teachers and parents mentioned the use of books as part of play activities which they gave to children to help in building children's literacy and numeracy skills. Koralek (2007) state that, literacy and numeracy skills are promoted when all forms of communication including, speaking, listening, writing, reading, art, music and math are integrated in children's various play activities to increase children's interest for learning literacy and numeracy skills. Although the research established from teachers and parents that children

were exposed to different forms of play activities to increase children's interest in learning literacy and numeracy skills, the level and quality of the play activities used by the teachers could have been better with the supply of more teaching resources in the pre-schools.

#### 5.4 Fewer parents were providing children with play environments

Parents were asked to narrate how they used play activities to help children learn literacy and numeracy skills. One parent (Parent-A) stated that she provides assistance to her child in drawing activities. Helping children in their drawing activities is one way children can be stimulated to have interest in learning literacy and numeracy skills. Mavrogenes (1990) suggests that parents should provide a play environment that conveys the values of literacy and numeracy and this play environment can be enriched with materials like crayons, water colours, tracing boards and sketch pads as all these materials excite children and they love exploiting them.

The research established that not many parents were actively providing children with such play environments where learning of activities like reading, writing and counting was done actively by children. Parent-B stated that she helped her child in his play activities by providing play materials which were appropriate for stimulating the child's interest for literacy and numeracy skills. The other two parents separately mentioned that they knew their children were given home work in colouring, painting and tracing but they did not actively get involved in helping their children in those activities. One parent narrated that he had less knowledge on the play activities his child was given to do as home work and it was thus difficult to assist his child with his home work while Parent-F narrated that he allowed his child access to computer games and he observed that this helped his child to learn some literacy and numeracy skills.

The study established that, parents were not actively involved in children's play activities even though in some instances they stated that they provided children with play materials. This is also stated by Winer, (1992) who observes that home literacy activities in most homes especially (traditional African homes) have no fixed play times and also many parents think any literacy and numeracy learning is primarily a school responsibility. Children's ability to learn literacy and numeracy skills could be improved if the home environment was enriched with support for children's play activities. "A basic premise of Vygotsky's theory is that all uniquely human, higher forms of mental activity are jointly constructed and transferred to children through dialogues '' (Berk, 1994, p.30). Having discussions with children helps to build their confidence in activities which they could have been failing to on their own or in which they have no interest at all. The role of adults/parents in children's learning of literacy and numeracy skills is centered on providing children with guidance as well as the necessary materials which can help children in developing interest in activities that can influence their cognitive development.

Children cannot accomplish challenging play tasks on their own but they can do with the assistance of teachers, parents or peers (Vygotsky in NAEYC and the international Reading Association, 2000). Assisting children should involve a combination of different play approaches which can make children to develop reading and writing skills and basic mathematics where children can acquire simple concepts like addition, subtraction, and measurement. Generally, the study established that, early childhood teachers in the select pre-schools under study were using play activities which stimulated children's interest in learning literacy and numeracy skills although in many instances, teachers lacked the appropriate materials which could have helped them to teach the play activities very well. The home environment was not all that motivating for children to learn literacy and numeracy skills because either parents were not knowledgeable enough on how play activities helped in children's learning of literacy and numeracy skills or parents had less time to assist children in play activities that could have promote children's interest for literacy and numeracy skills.

The study thus established answers to the gap which Msango and Bauleni (2002) stated in their report that, pre-school teachers in Zambia were facing challenges on how to guide children in learning new concepts. Early childhood teachers were probably having these challenges because they were not well trained on how to guide children in play activities. Even though this research did not investigate the quality of early childhood teachers currently in Zambia, the research however established that early childhood teachers were not using a variety of play activities other than those shown in table 4.1 and these were play activities mostly in drawing, singing, tracing, and colouring which early childhood teachers frequently used to teach literacy and numeracy skills.

Teachers' views about play activities which were done in the pre-schools indicate that, tracing, rhymes, painting and singing emerged to be activities which were frequently done by children in the nursery schools while play activities which involved children using a computer and moulding activities were not frequently given to children probably because the schools had no computers. As for moulding activities, it could have been that teachers had no much understanding of the need why children should be allowed more play in moulding activities.

Puppetry which was supposed to play a big role in children's learning of literacy and numeracy skills was not one of the play activities which teachers and parents used to teach children with. Mayesky (1990) observes that dramatic play in puppetry is an excellent means for developing children's creativity and imagination since children have instinctive ways of dealing with reality. Dramatic play in puppetry is an important medium for language development and it also improves children's fluency in a language (Mayesky, 1990). Teachers could have been using puppets in some of children's play activities but probably many early childhood teachers were unable to produce the puppets from simple materials. Children enjoy watching cartoons on television because of the animation of cartoons catches children's attention and imagination and in the same way, had teachers and parents used cartoons in teaching children letters and numbers, it would have been amazing how much children were going acquire literacy and numeracy skills.

Other play activities like "snakes and ladders and carton box television" if used in teaching children literacy and numeracy skills can contribute to children's fast learning of words and numbers (Kasapo,2008). These are activities which teachers and parents should have been using to teach and assist children with the learning of literacy and numeracy skills but which they probably did not do because the curriculum which teachers followed was not enriched with such games and instructions on how teachers should have conducted the activities. Kasapo (2000) states that, at the age of about two to four years, children would have already started scribbling on paper their thoughts although what children scribble may not have immediate translation. Children are known to cause a mess at home in form of scribbling on walls or on anything that they feel can be written on (Kasapo, 2000).

Guiding children in play activities such as scribbling, tracing, painting and drawing, makes children's hand movements to develop and this also becomes the starting point to guide children on how to write letters of the alphabet. In most instances, children who receive scaffolding in tracing activities develop the desire to write and these children can misdirect this writing energy on anything they find as long as they have a pencil, crayon or pen in their hands.

Art activities like drawing, music and drama which pre-school teachers give to children, satisfy children's inner thoughts by allowing them room for self expression. Montessori in Essa (2000) states that, if a child's absorbent mind is exposed to appropriate play activities in the developmental stages, a child's minds can grow. Play activities which children do in pre-schools should be treated as a foundation on which children's ability to learn different skills is to be established. Observations made by teachers and parents over children's involvement in drawing and painting activities revealed that, children liked these activities because through drawing and painting activities, children were able to depict what they understood by the world around them.

The study further established that teachers were using drawing and painting activities to introduce children to letters and numbers. Play activities like cutting, scribbling and tracing, which are given to children, help to develop in children the idea of how to hold writing tools like a pencil and these activities also introduce learners to writing skills. Early childhood teachers who participated in the study further mentioned that, play activities done in music and citing of rhymes also helps children to develop logic and abstract thinking.

Nalwiimba (2008) established in her research findings on the appropriateness of the nursery and pre-school curriculum in Zambia that there was no central common curriculum which was being followed by preschools in Zambia. However, this research established that play activities done in painting, drawing and music all create a basis for children's learning and she suggested that it would be appropriate to have them included in the pre-school curriculum. It is stated in the education policy, Educating Our Future (1999) that pre-school teacher training and a common early childhood curriculum for all pre-schools was to be formulated and also given priority of implementation. The results of this research established that, the sampled early childhood teachers were not well equipped with early childhood teaching methods and that there was no

common curriculum to be followed by early childhood teachers on how to develop in children early literacy and numeracy skills.

# 5.5 Teachers' and parents' gender contributes to children's better involvement in play activities

The results of the research also established that, respondents thought the gender of pre-school teachers contributed to how freely children interacted with the teacher and how children performed in play activities. The results are in agreement with Dee (2005) who observes that, a teacher's gender may significantly affect a learner's active involvement in the learning process although studies by Holmlund and Sund (2005) and Tynms (2005) disagree with this view by stating that, a teacher's gender does not contribute to a learner's active involvement in the learning process. Bandura and Ross (1961) state that in the theory of social learning, female teachers could be said to be better nursery school teachers than male teachers because female teachers have a soft approach to children than male teachers. Children taught by female teachers are probably given more freedom to play and explore with materials and this probably strengthens children's interaction with the teacher and amongst children themselves. Banyard and Grayson (2000) observe that, socially women are less aggressive to children than men therefore; children could be freer to associate with female teachers than they probably do with male teachers.

The responses in interviews from female teachers indicates that they spent more time assisting children with activities such as; music, poems, colouring, scribbling, painting and tracing and occasionally they also involved children in moulding and cutting activities while male teachers only mentioned a few activities like, drawing, tracing and music which they frequently gave to children to do. It was established from the statements which respondents gave that, female pre-school teachers create for children an environment of freedom in which children are involved in different play activities. Another explanation for this phenomenon of women enjoying to teach children in pre-schools could be that traditionally the role of women in the pre-schools is taken as an "extension of motherhood" and therefore a "natural" job for women to interact well with children (Acker and Joan, 1990). Although female teachers mentioned that, they enjoyed teaching children different play activities, the research established that both male teachers and
female teachers were capable of teaching play activities to pre-school children as long as the teachers have been trained to teach pre-school children.

Results obtained in this study also suggests that there were more female teachers than male teachers in the pre-schools however, no obvious factors were established which associated the gender of a teacher to be the cause for interest in children's play activities. There were more female teachers than male teachers in these pre-schools probably because female teachers were more comfortable working with very young children and also because female teachers enjoyed spending more time with children, instructing them and guiding them in art and design activities

When parents were interviewed on their involvement in their children's play activities, male respondents stated that they seldom got involved in helping their children with play activities or in children's home work. The number of female parents who said they usually helped their children with play activities were more. Responses from respondents here show that, female parents like female teachers were more interested in helping children with play activities such as drawing, painting and tracing. To some extent, it can be said that the gender of teachers and parents influenced their involvement in children's play activities. Postlethwaite and Ross (1992) observed in the analyses of data from the IEA Reading Literacy study that female teachers were more efficient in teaching nursery school children than male teachers.

The research also established that, the general involvement of parents in children's play activities was low and probably this had a negative effect on children's learning of literacy and numeracy skills. Arnheim (2004) states that, artistic expressions are a form of reasoning, in which perceiving and thinking are indivisibly intertwined. A child, who paints, writes, thinks with his senses (Arnheim 2004). Play activities given to children prepare them for critical and imaginative thinking. Introducing a child to activities such as writing and reading becomes easy if a child has been exposed to some scribbling, doodling and tracing activities and many of these activities can be developed in the home by allowing children to get involved in guided play activities (play activities children do with the help of an adult).

# **5.6 Education level, teacher training and experience as factors contributing to better use of play activities**

The study established that training for early childhood teachers was necessary because it made teachers to learn how to teach play activities better than teachers who had not been trained. Teachers in this study said that play activities which they taught to learners in the pre- schools contribute to children's development of interest in literacy and numeracy and the same teachers were also found to have the experience of teaching at a pre-school. Further these teachers also knew how to use materials such as clay, paper and ink to help children express themselves.

Teachers who had enough experience of teaching pre-school children also managed to give children various play activities. The teaching experience for pre-school teachers was given consideration in the research because of the assumption that, experienced teachers knew how to teach and guide children with play activities. The period of years early childhood teachers had taught in pre-schools probably contributed to teacher's good attitude towards pre-school children. Jalongo (1999) observes that many practicing pre-school teachers are affected by their own in-experiences and feelings of inadequacy in the arts. This observation by Jalongo (1999) indicates that an early childhood teacher's level of awareness for play activities is necessary in helping children to progress at learning different skills. Although play activities assist in enhancing children's thinking abilities and interest for learning literacy and numeracy skills, trained teachers are needed to guide children well in play activities.

The level of education for parents was considered to be a factor which influenced how well parents got involved with children's play activities. Buchmann and Flocen (1990) observe that, children with better performance at early childhood learning usually come from homes where the parents' level of educational attainment is high and probably children from these homes are also exposed to a lot of play activities. An analysis of each parents' level of education revealed that 47 percent of the parents that participated in the study had attained secondary school education

and these parents said they encouraged their children in activities such as painting, colouring and scribbling. The educational level for parents was associated with the level of involvement parents had with their children's play time. A lack of extended personal educational experience as argued by Kohl et al. (2000) rendered some parents to lack relevant skills which were necessary in helping children with their play activities.

Desforges and Abouchaar (2000) observe that parents who guide children in doing play activities actually make children to develop a love for play activities .Activities such as painting and drawing are influential in shaping children's intellectual development and parents who were engaged in helping children with activities such as; drawing shapes, identifying colours, matching objects, moulding objects and even scribbling on paper, actually compliment on children's intellectual experiences (Sylva et al., 2004). Parents who are educated contribute greatly to their children's ability to learn literacy and numeracy skills through play activities. Children coming from homes where parents are educated have a higher chance of developing their literacy and numeracy abilities faster than children whose parents are not educated.

The effect of parental involvement (in terms of providing a home learning environment) on achievement was explored in recent studies of pre schoolers (Sylva et al., 1999; Melhuish et al. 2001). A wide range of methods were used to explore the effects of parental guidance on children's attainment and adjustment. Of particular interest here was the impact of parental involvement in children's work. The idea of a 'home learning environment' (HLE) was devised to describe a range of learning related provision in the home as reported by parents. HLE included play activities such as; playing with letters and numbers, painting and drawing, teaching, tracing numbers and shapes. Melhuish et al. (2001) concludes that, 'higher home learning environment was associated with increased levels of higher cognitive development.

This study established that if experienced teachers taught appropriate play activities to children and also if children received extra help from home, then the development of children's skills in literacy and numeracy was going to grow. It was further established in this study that educated parents knew that play activities helped to improve children's cognitive development. There was a notable consensus across education policy statements and practice guidelines in many countries that parents were children's first and most enduring educators (OECD, 2012).

In recent decades this 'truth' has frequently been accompanied with recommendations firstly, about the need to support parents in their parenting, including their role in supporting their children's learning and development.

#### 5.7 Summary

Presented in this chapter are discussions on teachers' and parents' perception of the use of play activities in teaching pre-school children literacy and numeracy skills. It was established in the study that although teachers were using play activities to stimulate children's interest in learning literacy and numeracy skills, there was need to have many early childhood teachers trained in order for them to be well equipped in teaching play activities to children. It was also noted in the study that although parents were helping their children with play activities, their level of involvement in children's play activities was generally low.

The study also found that teachers and parents used play activities such as; drawing, tracing, colouring, rhymes, Cutting activities, puzzles, moulding and computer games to increase children's interest in reading, writing, listening skills. Other activities which were given to children involved, matching activities, tracing numbers, counting, songs, cutting and measurements. All these play activities were used to teach children numeracy skills like, simple addition and subtraction concepts although many other play activities apart from the ones mention could have been used to help children in learning literacy and numeracy skills.

Other findings of the study suggest that some factors which enable teachers and parents to teach and assist children well in play activities and these factors include the gender of teachers and the gender of parents which to a greater extent determine how much interest teachers and parents have with children and their play activities. The educational attainment for both teachers and parents is another factor which plays a role in how teachers and parents contribute to children's learning of numeracy and literacy skills. Lastly, experience was mentioned to be a factor which enabled early childhood teachers to use different play methods in children's learning.

### CHAPTER SIX CONCLUSION AND RECOMENDATIONS

#### **6.0** Overview

This chapter has conclusions drawn from the findings of the study on teachers' and parents' perceptions of the use of play activities in early childhood institutions. Recommendations were suggested to the Ministry of Education on how to maximize the use of play activities in early childhood institutions. The chapter ends with recommendations for future research on challenges of using play activities in other subjects for lower grades at primary schools

#### 6.1 Conclusion

Findings of the study were that pre-school teachers in Choma were teaching children literacy and numeracy skills through different activities such as; painting, drawing and tracing. The effects of play activities on children's acquisition of literacy and numeracy skills were found to have a positive learning effect on children. Teachers and parents perceived that play activities expanded children's thinking ability because active participation in these activities required mental application. Play activities were further perceived by parents and teachers to improve learner's ability to think in abstract. Children, who were involved in play activities were said to have learnt how to read, write and they also acquired some concepts about counting, addition and subtraction.

Exposing children to appropriate play activities and adequate play materials help children to learn literacy and numeracy skills well. Additionally, factors like the gender of teachers and parents were contributing factors to children's active involvement in learning. There were more female teachers in the pre-schools than male teachers probably because female teachers enjoy being with children and also because children are free with female teachers. The level of educational attainment and teachers experience were both considered to be important factors which enable teachers to teach children play activities well.

#### 6.2 **Recommendations**

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

- 1. The Ministry of Education, Science, Vocational Training and Early Education should ensure that all children in early childhood classes should be taught more play activities and different learning materials are to be use for the purpose of allowing children free expression (learning that is not interfered).
- 2. Play activities should be systematically planned in relation to the stage of development of learners and it would be appropriate if children were also introduced to more play activities with modern tools like computers. The Ministry of Education, Science, Vocational Training and Early Education should introduce computer labs in early childhood classes in order to help children have access to electronic games which are tailored to teach children literacy and numeracy skills and that early childhood classes should be well equipped with learning materials to support play based learning.
- 3. The Ministry of Education Science, Vocational Training and Early Education should make sure that at each primary school, there should be classes set aside for early childhood learning. Although many early childhood teachers for the first time were deployed to primary schools to implement government's policy on compulsory early childhood education for every Zambian child, many primary schools in Zambia have no structures design to accommodate serious early childhood learning.
- 4. Zambian curriculum in pre-schools should include more play activities and teachers' guides should be printed to help teachers in their planning. Further, there is need to develop collaboration between teachers and parents so that children can benefit from organized play activities both at school and at home.

#### **6.3 Recommendations for future studies**

The following recommendations are suggested for future studies.

- 1. Similar study to be conducted on teachers' and parents perceptions of the use of play activities in the primary schools to enhance children learning of literacy and numeracy skills.
- 2. Conduct studies on the use of play activities in other subjects for grades one to four
- 3. Investigate challenges faced by teachers in implementing play activities in other subjects other than literacy and numeracy

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#### **QUESTIONNAIRE FOR TEACHERS**

#### **INSTRUCTIONS:** Read the instructions to help you answer the questionnaire

- A. The questionnaire has questions to which you are require to tick in a given box or to briefly explain in the spaces provided.
- B. You are asked to tick only in one box against your response e.g. Yes No
- C. Do not write your name on the questionnaire

#### **SECTION A**

	RESPONDENT'S			Official
	BACKGROUND INFORMATION			Use
			to	only
	Sex of the respondent			
Q1		1.Male		
		2.Female		
	How old were you at			
Q 2	your last birth day?			
	What is your current			
Q 3	Marital status?			
	What is your highest	1.grade 10		
Q 4	level of education	2.grade 12		
	attainment?	3.form 5		
		4.college certificate		

		5.college diploma	
		6.degree	
		7.masters	
Q 5	How do you categorize	1.skilled	
	the type of job you do?	2.unskilled	
Q 6	How long have you been	1.less than 1 year	
	a nursery school teacher?	2.1-5years	
		3.over 5years	
Q 7	SECTION B		
Q 8	Do you have any	1. Yes	
	knowledge on literacy	2 .No	
	and numeracy skills?		
Q 9	List at least six skills	1	
	children learn in literacy	2	
	and numeracy	3	
		4	
		5	
		6	
0.10	De ver sive graile glav		
Q IU	Do you give pupils play		
	activities?	2. NO	
Q 11	Can play activities		
	stimulate children's	2. No	
	interest for literacy and		
	numeracy skills?		
Q 12	Which literacy and	1.Puzzles/	
	numeracy skills do you	2.Drawing//	
	think children learn from	3.Tracing/	
	the following play	4.Colouring//	
	activities	5.Rhymes//	

		6.Singing/	
		7.Matching of objects//	
		8.Computer games//	
		9.Role plays//	
		10.Cutting scissors//	
		11.Moulding//	
		12 Building blocks /	
		13 Story telling /	
0.12	List at lasst fine fortun	1	
Q 13	List at least five factors	1	
	which assist teachers to	2	
	teach children play	3	
	activities well	4	
		5	
-			
0 14	Who do you think	1. Male Teachers	
Q 14	Who do you think teaches children play	1. Male Teachers     2. Female teachers	
Q 14	Who do you think teaches children play activities well?	<ol> <li>Male Teachers</li> <li>Female teachers</li> <li>Both Male and Female teachers</li> </ol>	
Q 14	Who do you think teaches children play activities well?	<ol> <li>Male Teachers</li> <li>Female teachers</li> <li>Both Male and Female teachers</li> </ol>	
Q 14	Who do you think teaches children play activities well?	<ol> <li>Male Teachers</li> <li>Female teachers</li> <li>Both Male and Female teachers</li> </ol>	
Q 14	Who do you think teaches children play activities well?	1. Male Teachers       Image: Constraint of the sector of th	
Q 14 Q 15	Who do you think teaches children play activities well? Give at least six reasons	1. Male Teachers       Image: Constraint of the sector of th	
Q 14 Q 15	Who do you think teaches children play activities well? Give at least six reasons why the gender you have	1. Male Teachers   2. Female teachers   3. Both Male and Female teachers     1.   2.	
Q 14 Q 15	Who do you think teaches children play activities well? Give at least six reasons why the gender you have chosen has more interest	1. Male Teachers	
Q 14 Q 15	Who do you think teaches children play activities well? Give at least six reasons why the gender you have chosen has more interest in children's play	1. Male Teachers	
Q 14 Q 15	Who do you think teaches children play activities well? Give at least six reasons why the gender you have chosen has more interest in children's play activities	1. Male Teachers	
Q 14 Q 15	Who do you think teaches children play activities well? Give at least six reasons why the gender you have chosen has more interest in children's play activities	1. Male Teachers	
Q 14 Q 15	Who do you think teaches children play activities well? Give at least six reasons why the gender you have chosen has more interest in children's play activities	1. Male Teachers	
Q 14 Q 15	Who do you think teaches children play activities well? Give at least six reasons why the gender you have chosen has more interest in children's play activities Does a teacher's	1. Male Teachers	
Q 14 Q 15 Q 16	Who do you think teaches children play activities well? Give at least six reasons why the gender you have chosen has more interest in children's play activities Does a teacher's educational level and	1. Male Teachers	
Q 14 Q 15 Q 16	Who do you think teaches children play activities well? Give at least six reasons why the gender you have chosen has more interest in children's play activities Does a teacher's educational level and training help in teaching	1. Male Teachers	

	children play activities		
	well?		
Q 17	Give reasons for your	Briefly explain	
	response in question 9		
	above		

# End of questionnaire

Thank you for your co-operation

#### **QUESTIONAIRE FOR PARENTS**

#### INSTRUCTIONS: Read the instructions to help you answer the questionnaire

- **A.** The questionnaire has questions to which you are required to tick your option in the given box or to briefly explain in the spaces provided.
- **B.** You are asked to tick only in one box against your response eg. Ye
- Yes No

C. Do not write your name on the questionnaire

				Go	OFFICIAL
QST	<b>RESPONDENT'S</b>			to	USE ONLY
	BACKGROUND INFORMATION				
Q 1	Sex of the respondent	1.Male			
		2.Female			
Q2	How old were you at				
	your last birth day?				
Q3	What is your current	1.single			
	Marital status?	2.Married			
		3.Divorced			
		4.Widowed			
		5.Separated			
Q4	What is your highest	1.grade 10			
	level of education	2.grade 12			
	attainment?	3.form 5			
		4.college certificate			

		5.college diploma		
		6.degree		
		7.masters	]	
Q 5	Do you appreciate	1.Yes		
	nursery education?	2.NO		
		3.Not sure		
Q 6	Do you check your	1.Yes		
	children's books	2.No		
Q7	How often do you	1.Yes		
	check your	2.No		
	child/children's			
	books?			
08	Have you any	1. Yes		
	knowledge on what	2. No		
	literacy and			
	numeracy skills are?			
Q9	List at least four	1		
	activities you see in	4		
	your child/children's	5		
	books	6		
010	Do you give your	1		
QIU	child/children play			
	activities?	2.		
011	Which of the	List of play activities		
<b>x</b>	following literacy	1.Puzzles///		
	and numeracy skills	2.Drawing/////		
	1.Reading	3.Tracing//		
	2.Writing	4.Colouring//		
	<b>3</b> .Basic arithmetic	5.Moulding///		
	4.Vocabulary	6.Cutting/		

	<b>5</b> .Communication	7.Rhymes//	
	skills	8.Computer games	
	Do you think	9.Matching of objects	
	children learn from		
	the list of play		
	activities?		
Q12	Who do you think	1.Mothers	
	has more interest in	2. Fathers	
	children's play	3.Both	
	activities?	4.Non	
Q 13	Give reasons for	If you chose Mothers, briefly	
	your	expain	
	answers in Q8 above		
		If Fathers, explain	
		If Both, explain	
		•••••	
		If Non, expain	

## End of questionnaire

Thank you for your co-operation

#### INTERVIEW GUIDE FOR EARLY CHILDHOOD TEACHERS

- 1. Which play activities do you frequently give your class to do?
- 2. Would you explain with one example how you use a play activity in any expressive art?
- **3.** How do you introduce the aspect of literacy and numeracy in the play activity you have just mentioned?
- **4.** Do you think play activities should be encouraged for teaching nursery and pre-school? children?
- 5. Would you encourage the use of play activities for preparing children for grade one entry?

#### **END OF INTERVIEW**

Thank you for sparing me time to have this interview with you

#### **INTERVIEW GUIDE FOR PARENTS**

- **1.** Do you help your child with her home work?
- 2. Do you show interest in helping your child /children with play activities?
- **3.** How do you use play activities to stimulate your child/children's interest for literacy and numeracy skills?
- **4.** Would you encourage teachers to use these play activities for helping children to learn literacy and numeracy skills?
- **5.** Do you think children who have done play activities at a nursery or pre-school can find it easy to write and read in grade one?

#### **END OF INTERVIEW**

Thank you for taking part in this interview