

**DECLARATION**

I, Kasonde Estella, hereby solely declare that the work contained in this dissertation has been composed and written by me and that this work is as a result of my own individual effort. I further sincerely declare that this research has not been previously submitted for any academic award, and that all the work from other researchers has been acknowledged.

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## **APPROVAL**

This dissertation by Kasonde Estella is approved as a fulfilment of the requirements for the award of the degree of Master of Education in Literacy and Learning of the University of Zambia.

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## **ABSTRACT**

The study was carried out to find out what type of skills, knowledge and attitudes found in children's play or games can be characterised as foundations of reading, writing (literacy) and numeracy or those that aid their development.

The sample included 30 children (16 girls and 14 boys) and their parents. Purposive sampling was used in selecting the subjects and participants of the research. The snowballing technique whereby one mother led the researcher to the next was used to select mothers who had preschoolers. Parents of the children were identified first before commencing observations because permission had to be sought from them. The number of parents was 25 because out of the total sample of 30 children, there was a set of twins and four sets of siblings. The children were aged between one and six years old.

The study employed qualitative data collection and analysis procedures. These were used to identify the games played by preschoolers in the study area as well as establish what type of skills, knowledge and attitudes found in children's play and games could be characterised as foundations literacy and numeracy or those that aid their development.

The findings indicated that preschoolers in the targeted compounds engaged in both exploratory and rule-governed play depending on how the game was played or what behaviour the players engaged in while playing. Children's play in the targeted area was also consistent with Davidson (1996:283)'s classification; sensory, play with motion, rough and tumble, language play, dramatic and modelling, constructive, games and rituals and competitive play. The age and gender of the children as well as the culture and social economic status (SES) of their parents determined the kind of games that the children played.

The acquisition and use of language skills were found in almost all the games while the other components were scantily distributed in many of the games that were observed. Most games contained more of emergent numeracy than emergent literacy proper. In view of these findings, the researcher concluded that it was not all the games or forms of play found among preschoolers in the targeted compounds that could be adopted for use as aids in initial literacy instruction.

This study informs both policy and practice in literacy instruction. The researcher recommends that curriculum planners, teachers as well as parents and guardians of preschoolers be made aware of their role as stakeholders in the nurturing of emergent literacy and the literacy acquisition process in children. Similar studies need to be done in other parts of Zambia and with communities that have a different SES. These would establish whether the games played by children in other parts of the country are different and whether they are more rich in emergent literacy and numeracy.

## **DEDICATION**

To the almighty God without whom this part of the journey would not have been possible. To my mother and father who nurtured the humble beginnings (R.I.P.). To my siblings, especially Mwansa and Mpundu who have carried on the role of parenting.

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## **ACRONYMS AND ABBREVIATIONS**

**AIDS** - Acquired Immuno-Deficiency Syndrome

**ECD** - Early Childhood Development

**HIV** - Human Immune Virus

**NCS** - National Curriculum Statement

**SES** - Social Economic Status

**SIA** - Sport in Action

**UNESCO** - United Nations Educational Scientific and Cultural Organisation

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Overview**

This chapter introduces the study by bringing out background information. The background to the study is followed by the statement of the problem under investigation, the purpose of the study, the significance of the study, the research objectives and questions. The chapter also presents the theoretical frame work in which this study is situated and the definition of terms as they have been used in this study.

### **1.2 Background**

Emergent literacy is the term used to refer to the literacy traits that children display before they learn conventional literacy. Apart from the ability to read and write, literacy here should also be understood as the ability to identify, understand, interpret, create, communicate, compute and use printed and written materials associated with varying contexts (UNESCO, 2003). A key to the term literacy is the interrelatedness of all parts of language: speaking, listening, reading, writing, and viewing (Feldman, 1980).

In the past, literacy instructors believed in reading readiness. Reading readiness is a theory that dominated the teaching of literacy from the 1920s into the 1950s. It was believed that, as a result of biological maturation, children reached a stage when they were said to be ready to learn to read. From this perspective, it was believed that the mental processes necessary for reading would unfold automatically at a certain period in time during the child's development (Teale & Sulzby, 1986; Ferreiro & Teberosky, 1982; Whitehurst & Lonigan, 1998). Reading readiness focused on the question of what skills children needed to have mastered before they could profit from formal reading instruction. Therefore, reading readiness was seen as a deciding factor in learning to read (Whitehurst & Lonigan, 1998). However, with time it has been realised that long before they come to formal schooling, children already display some literacy abilities. A situation whereby a young child already knows the letters of the alphabet or is able to write his name can serve as an example in this regard. Thus, the term reading readiness could no longer adequately describe what happens in the literacy development of a child (Teale, 1986). This realisation prompted the replacement of reading readiness with a more fitting term to describe what goes on with the children before they come to formal literacy instructions. Thus, the concept of *emergent literacy* has gradually replaced the notion of reading readiness. Emergent literacy is a gradual process that takes place over time

from birth until a child can read and write in a conventional sense. In contrast to reading readiness, an emergent literacy outlook regards literacy related behaviours happening in the pre-school period as legitimate and significant aspects of literacy (Whitehurst & Lonigan, 1998). Reading readiness refers to a situation where all required skills and knowledge are in place for reading instructions to take place while emergent literacy implies that the development of literacy is taking place within the child as a gradual process.

The beginning of this gradual replacement of reading readiness by emergent literacy can be traced to 1966 and is attributed to the work of Marie Clay, a New Zealand researcher (Ferreiro, 2011). Clay analysed the behaviour of young children when they used books and writing material to imitate reading and writing activities of adults even when they were not able to read and write. Since Clay's study, much research has been carried out to try and expand the understanding of emergent literacy. Research in the fields of child development, psychology, education, linguistics, anthropology and sociology has led to the development of the theory of emergent literacy. Emergent literacy redefined the field of literacy and made educators, teachers and parents aware that much more was happening in the development of literacy than the term reading readiness described (Teale, 1986). Something that emerges has been there at the beginning and only shows itself under the right conditions. This is an indication of the child's own natural learning ability which facilitates any kind of learning. The social- cultural context is also a determining factor in the awakening of this innate ability. The kind of home and surrounding environment that a child grows up in will either help or hinder emergent literacy. The children's need to communicate, their curiosity and their skills for making sense of the world prompts this development (Morrow, 1989).

Studies worldwide have expanded understanding of emergent literacy (Hodgskiss, 2007) although not much research has been carried out on this topic in Zambia (Musonda, 2011). Among the few studies on emergent literacy in Zambia is that carried out by Musonda (2011) who studied pre-schoolers in Lusaka to examine literacy behaviours that they exhibited. Another study is that of Zimba (2011) whose inquiry aimed at ascertaining whether early childhood education supported emergent literacy in selected preschools of Kasempa and Solwezi. The novelty of the phenomenon of emergent literacy on the Zambian scene accounts for the paucity of information on emergent literacy skills, knowledge and attitudes obtaining in young children's play in Zambia.

### **1.3 Statement of the problem**

Although teachers of first graders want to treat their pupils as if they enter school devoid of any insight into the skills of reading and writing, researchers have found out that these children actually enter school already possessing skills, knowledge and attitudes that are the foundation for conventional literacy. These skills, knowledge and attitudes are exhibitions of emergent literacy or are related to it. The child's social and cultural context influences the development of this early literacy. Play forms part of a child's social cultural context. The problem that this study sought to address was that it was not known whether the games or play that children engaged in before they started school in Zambia had some skills, knowledge and attitudes that could lay the foundation of conventional literacy.

### **1.4 Purpose of the study**

The purpose of the study was to find out whether children's games contained skills, knowledge and attitudes that can be characterised as foundations of reading and writing (literacy) or those that aid their development.

### **1.5 Main Objective**

The main objective of this study was to identify aspects of emergent literacy in Zambian children's games.

### **1.6 Specific objectives**

The objectives of this study were to establish:

- i) The types of games that young children play in the targeted compounds.
- ii) The skills, knowledge or attitudes that can be said to be foundations of reading and writing (literacy) in the games.
- iii) The skills, knowledge or attitudes that can be said to be foundations of numeracy in the games

### **1.7 Main Research Question**

What aspects of emergent literacy are found in Zambian children's games?

### **1.8 Sub-Questions**

- i) What types of games do young children play in the targeted compounds?
- ii) What skills, knowledge or attitudes displayed in the games can be said to be foundations of reading and writing (literacy)?

- iii) What skills, knowledge or attitudes displayed in the games can be said to be foundations of numeracy?

## **1.9 Significance of the Study**

Findings from this study would reveal the emergent literacy skills, knowledge and attitudes (foundations of literacy acquisition) that children already possess as they first come to the classroom. It is also hoped that curriculum planners may be provided with data for consideration as they design the curriculum for teaching initial literacy. The games and forms of play may be adopted and fused into the syllabus to provide for developmentally appropriate practices designed to meet the needs of the learners. As a result, teachers of first graders may exploit these foundations of literacy and use them as building blocks to facilitate literacy advancement in initial literacy instruction. Thus the study may assist both planners and teachers to avoid imposing a curriculum that disturbs the literacy development continuum.

## **1.10 Delimitation of the Study**

This study was confined to two site and service compounds in Kitwe because time would not allow for it to be extended to other areas. The compounds have remained anonymous on ethical grounds.

## **1.11 Limitations of the study**

The researcher met resistance as some parents wanted to know what their children would gain from the research. In cases where the researcher needed to take photographs for use during data analysis, some parents refused to have their children photographed. They believed that such photographs are taken to Europe to solicit for funds that never reach the intended people. Worse still some claimed that the photographs could be used for rituals. This accounts for the failure to capture some of the games in pictures. The study was restricted to two compounds. Therefore, findings from this study could only be interpreted within the context of the study and conclusions may not be generalised beyond the area under study.

## **1.12 Theoretical Framework**

This study is situated within the theory of emergent literacy which posits that the steps which are part of the process of acquiring literacy in children begin long before they enter formal schooling (Teale & Sulzby, 1987). Children do not come to school devoid of any traits that point to the development of oral language, reading and writing skills. The social and cultural



context in which a child is found determines or influences this aspect of early childhood development. Games and other forms of play also form part of this social cultural context of the child.

The study's embedment into the social cultural contexts further situates it into the notions of constructivism which views social interaction as a primary mechanism for children to develop their individual understanding and knowledge about reading and writing. Constructivist notions embrace both the cognitive development theory of Piaget and the socio-cultural theory of Vygotsky (Kaufman, 2004). Piaget's cognitive constructivism states that learners construct knowledge and understanding through experiences. Experiences enable people to create schemas, mental models in the heads, which are changed, enlarged, and made more sophisticated through assimilation and accommodation. New information is assimilated into existing cognitive structures while the structures themselves accommodate the new information (Schunk, 2009). This is how learning develops in all children. Literacy acquisition is no exception in this regard. Emergent literacy which is a continuum of literacy practices obviously utilises the processes of assimilation and accommodation as children learn different aspects that can be classified as early literacy behaviour. Furthermore, something is said to emerge only if it has been there before. Schemas of literacy already exist in the children. These already existing structures assimilate or accommodate new information as children interact with the literate environment which includes other human beings.

Piaget's view joins with that of Lev Vygotsky as a framework for emergent literacy. Vygotsky (1978) expanded Piaget's theory by placing greater emphasis on the social context in which learning takes place. For Vygotsky, the environment is crucial in stimulating the child's cognitive development. Central to his theory is the Zone of Proximal Development (ZPD) which "is a distance between the actual developmental level determined by individual problem solving and the level of development as determined through problem solving under guidance or in collaboration with more capable peers" (Vygotsky, 1978:86). The experiences and contexts in which the child learns to read and write are critical to the child's literacy development. Emergent literacy is usually acquired informally through the different experiences and contexts that children find themselves in. This study was an investigation into the presence of elements of emergent literacy in children's play or the games that children engage in before they enter formal education.

### **1.13 Definition of terms**

**Conventional Literacy** - knowledge of reading and writing as taught in school. It also refers to the level of literacy when children's reading and writing approximates adults' reading and writing.

**Emergent Literacy** – Early literacy behaviour in children, which is an imitation of adults' literacy behaviour or an imitation of conventional literacy. It involves the skills, knowledge and attitudes that are developmental precursors to conventional forms of reading and writing (Whitehurst & Lonigan, 1998).

**Emergent Numeracy** – Early counting and simple arithmetic that is a precursor of quantitative literacy or emerging abilities that will enable a child to use mathematics in the activities of daily life requiring quantitative skills.

**Games** – Any activity that children engage in as they play. For instance, playing with toys or pretending to be someone else.

**Play** – Things that children, do alone, with other people or with toys for amusement rather than as work.

**Print Knowledge** – The ability to make associations of letters to sounds. It consists of print awareness, when a child learns that print carries meaning and of the concept of print where a child learns how print functions.

**Pretend Writing** – Children's literacy behaviour whereby they imitate conventional writing.

**Pretend Reading** – Children's literacy behaviour that imitate conventional reading either silently or loudly, such as flapping the pages of a book the way those who read do or reading signs, symbols and gestures.

**Reading Readiness** – the view that there is a point when a child is ready to begin to learn how to read and write.

**Scribbling** - Pretend writing in the form of random strings of letters or drawings that do not seem to be meaningful to adults.

## **1.14 Summary of Chapter One**

The first chapter has given the background of the study. It has also looked at the statement of the problem, the purpose of the study, research objectives and questions, significance of the study, the delimitation and limitation of the study, the theoretical frame work that underlie the study and the definition of terms as used in this dissertation. The next chapter reviews literature that is relevant to the study.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1. Introduction**

To situate this study in the context of related studies that have been carried out before, literature that deals with an overview of literacy has been reviewed first. An attempt has then been made to define emergent literacy (2.3) and its components (2.3.1). This has been followed by the relationship between social interactions and emergent literacy (2.4) and between language and emergent literacy (2.5). A section of this literature review has explored children's games (2.6) followed by play and emergent literacy (2.7) and a section on play and language (2.8). Since the study is situated in Zambia, this literature review has also tackled literature related to the topic in the Zambian context. Subsequent sections are on literacy in Zambia (2.9), Emergent literacy in Zambia (2.10), social interactions and emergent literacy in Zambia (2.11) and Language and emergent literacy in Zambia (2.12). What has been written on play and emergent literacy in Zambia (2.13) has also been reviewed followed by play and emergent literacy in Zambia (2.14). This literature review has also paid particular attention to the methodology and approach that other researchers of emergent literacy have employed in their studies (2.15).

### **2.2. Literacy**

This section presents an overview of literacy as defined by different people and organisations.

Basically, literacy is described as the ability to read and write. Longman Dictionary of Contemporary English (2009:1021) defines literacy as “the state of being able to read and write”. This traditional definition makes literacy appear to be an easy term to define. Contemporary scholars have come to agree that literacy involves competencies other than those immediately concerned with written texts. Therefore, the traditional definition has received criticism and has been expanded to embrace other areas such as change of attitude, individual growth, acquisition of new survival skills, liberation and grade equivalent (Mwansa, 2007:14). This shows that literacy is a plural notion which has different dimensions. Depending on their work and experience, different individuals and organisations view literacy differently.

Barton (2007:19) states that “literacy is a fairly recent word and its meaning is being extended”. He further points out that literacy goes beyond knowing how to read and write and its definition would depend on the people's use and experience in a specific context. For example, a lawyer is literate in legal matters while a medical doctor is literate in the medical

field. In the medical field, a lawyer is illiterate unless he also has attained some literacy in the form of medical training. This entails that whether one is literate or not depends on a particular situation or set up. It is not so much what literacy is but what it does. The function of literacy precedes its form Hodgskiss (2007:12), hence the term functional literacy. Scribner and Cole (1981:236) are in line with this view when they define literacy as

*...a set of socially organised practices which make use of a symbol system and a technology for producing and disseminating it. Literacy is not simply the ability to read and write a particular script but applying this knowledge for specific purposes in specific contexts of use.*

Barton (2007) also views literacy as a process in which its participants can acquire information which will help them use their abilities to the maximum and attain their aspirations and ambitions. Britto, Fuligni and Brooks-Gunn (2006) who point out that the word literacy, derived from Latin, means “marked with letters” are also quick to explain that the National Academy of Science Report on Preventing Reading Difficulties in Young Children views literacy as being “broader than reading and encompass writing and other creative or analytic skills” (Dickinson & Neuman, 2006:312). Britto et al (2006) further note that literacy development can be understood in terms of the acquisition of a set of complex multidimensional skills that take place on a developmental continuum, with its origins early in life. Common in the above statements by both Barton (2007) and Britto et al (2006) is the aspect that literacy acquisition is a process or continuum.

Luke (1993:4) has extended the definition of literacy when he states that literacy is not a fixed, static body of skills but a dynamic, evolving social and historical construction. Standards and practices of literacy are dependent on the agendas and power relations of institutions and communities, governments and cultures. Luke stresses that literacy is constructed by individuals and groups as part of everyday life.

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) has been at the centre of the fight against illiteracy. According to Barton (2007:190), “literacy education has been one of the main planks of UNESCO’s modernisation policies since the 1950s”. As a result, UNESCO has, over the years, built on the definition of literacy to embrace aspects other than reading and writing. In 1956, UNESCO published a book by Gray in which functional literacy is described. Gray quoted in Mwansa (2007:20) defines a person as functionally literate when he “has acquired the knowledge and skills in reading and writing

which enable that person to engage effectively in all those activities in which literacy is normally assumed” in their culture or group. Gray’s definition broadens to knowledge and skills. In 1965, UNESCO defined a literate person as one that can write a short simple statement on his everyday life (Mwansa, 2007:15). In 1971, UNESCO stated that” A person is literate when he has acquired the essential knowledge and skills which enable him to engage in all those activities in which literacy is required for effective functioning of his group or community”. Barton further explains that UNESCO evaluated literacy programmes that were based on functional literacy and found them wanting. Recently, UNESCO defined literacy as

*The ability to identify, understand, interpret, create, communicate and compute using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society (UNESCO, 2003:1).*

The views presented in this section converge at the point that literacy is much more than just being able to read and write. The definition of literacy has been expanded to cover much more than just reading and writing. This has been due to the influence of various perspectives in fields such as sociology, psychology and anthropology. It is agreeable that literacy is contextual or situational. The reviewed literature has revealed that literacy development is a process or continuum. The next section is going to discuss one dimension in the continuum of literacy development. This is the notion of emergent literacy.

### **2.3. Emergent Literacy**

This section explores the notion of emergent literacy. Literacy acquisition is viewed as a continuous process which starts at birth and continues till death. Teale (1987) quoted in Britto, Fuligni and Brooks-Gunn (2006) holds the view that literacy is better characterised as a gradually emerging competence. It is an acquisition of different skills whose development proceeds along a continuum and children acquire literacy skills in a variety of ways. Early acquisition of language and interactions in a literacy-rich environment facilitates early literacy development.

The idea of emergent literacy is attributed to Marie Clay, a New Zealander who first used it in 1966 when she described how young children interact with books and imitate reading and writing, even though they could not read or write in the conventional sense. Although Marie Clay was the first to talk about emergent literacy, a more formal introduction of the term and the field of inquiry was heralded by Teale and Sulzby's book, *Emergent Literacy: Writing and Reading* (Whitehurst & Lonigan, 1998). Ferreiro (2011) also explains that Teale and Sulzby coined the term *emergent literacy* in 1986 from Marie Clay's dissertation title, "Emergent Reading Behaviour" (1966). Their term designated new conceptions about the relationship between a growing child and literacy information from the environment and home literacy practices. They attest to the fact that the process of becoming literate starts before school intervention.

Marie Clay's research was like an eye opener to would be researchers in different fields that are concerned with early childhood learning. This accounts for the expansion of studies on emergent literacy. Clay's work made it clear that young children take steps in the written world. These steps which are part of the process of acquiring literacy begin long before a child begins formal schooling and have been referred to as emergent literacy (Teale & Sulzby, 1987). Although they cannot yet read, many pre-readers already have discovered much about the processes of reading and writing. They know that literacy's purposes are to get and convey meaning; that the print context often provides cues for meaning, and that reading and writing have many functional uses (Bruning, Schraw & Ronning, 1999:248).

Children have contact with many forms of communication right from the start. Most children can identify common signs and logos by the age of 2-3. This is evidence of emergent reading. Children also begin to experiment with written forms of communicating by scribbling long before they can read (Clay, 1966). Aspects of emergent literacy include skills, knowledge and attitudes that lay the foundation for conventional literacy (Whitehurst and Lonigan, 1998). Emergent literacy skills and knowledge include language, conventions of print and beginning forms of printing, knowledge of graphemes, grapheme-phoneme correspondence and phonological awareness. Print motivation and other related behaviour fall under emergent literacy attitudes.

The acquisition of literacy, like other areas of child development, is largely influenced by the circumstances in which children find themselves.

Bruning et al (1999:248) further explain that emergent literacy is a process and its components develop and increase over time. A child who is not yet reading is neither “ready to read” nor “not ready to read.” This is contrary to those who believe in reading readiness. Instead, literacy development like general language development is seen as a process that has begun far in advance of formal instruction and continues far beyond the point when a child has “learned how to read”. This is their own way of corroborating with the view that literacy acquisition begins from birth and goes on until someone dies. Similarly, Hall (1987) states that emergent literacy is a process that takes place within the child and further argues that for something to emerge means that it was there at the beginning. This refers to the fundamental abilities children have and use to make sense of the world. Hall further explains that things usually only emerge under the right conditions. This means “in contexts which support, facilitate enquiry, respect performance and provide opportunities for engagement in real literacy acts” (Hall 1987:10).

This section has begun by reviewing literature which explains the introduction of the term ‘*emergent literacy*’ to the scholarly circles by the New Zealand researcher Marie Clay, to its adoption and formalisation by Teale and Sulzby. Emergent literacy has been explained as comprising skills, knowledge and attitudes that lay the foundation for conventional literacy. Emergent literacy has also been presented as a process whose components develop and increases over time. This process begins long before children enter formal schooling. Therefore, children do not enter formal schooling devoid of traits that are foundations of conventional literacy. The current study seeks to investigate the presence of these traits preschoolers’ play in the targeted compounds.

### **2.3.1 Components of emergent literacy**

The previous section has reviewed literature that defines emergent literacy. To facilitate the analysis of data in this study, it is inevitable that components which constitute emergent literacy be identified. Therefore, this section reviews literature that has identified and named emergent literacy components.

Whitehurst and Lonigan (1998) propose that emergent literacy and conventional literacy consists of at least two distinct yet interdependent domains of skills and processes. These domains are inside-out skills and outside- in skills. The outside-in skills represent children’s understanding of the context in which the text they are trying to read or write occurs. The inside-out skills on the other hand represent children’s knowledge of the rules for translating



the particular writing they are trying to read into sounds or sounds into print for writing. (Whitehurst & Lonigan, 1998). Under outside-in processes, Whitehurst and Lonigan included language which is semantic, syntactic and conceptual knowledge. Others involve the understanding and production of narratives, conventions of print which involve knowledge of standard print format (left-to-right, front -to-back orientation) and emergent reading which is children's pretend reading. Inside-out processes include Knowledge of graphemes or letter naming knowledge, phonological awareness, repair of grammatical errors, letter-sound knowledge and emergent writing.

The duo further state that the child's ability to decode the letters in a sentence into correct phonological representations (i.e., being able to say the sentence) depends on knowing letters, sounds, links between letters and sounds, punctuation, sentence grammar, and cognitive processes, such as being able to remember and organize these elements into a production sequence. These inside-out processes are based on and keyed to the elements of the sentence itself. However, a child could have the requisite inside-out skills to read the sentence aloud and still not read it successfully. Understanding of the text depends on knowledge that cannot be found in the word or sentence itself. This is the narrative, conceptual, and semantic context in which a sentence is found, and how the sentence makes sense within that context? The child has to depend on the outside-in processes which have to do with the knowledge of the world, semantic knowledge, and knowledge of the written context in which this particular sentence occurred. To understand a written sentence, a child has to translate a sequence of graphemes into sounds and also be able to understand the concepts and context in which the sentence occurs. Outside-in and inside-out processes are both essential to reading and work simultaneously in readers who are reading well. These two processes are mutually supporting and essential components of being literate. Whitehurst & Lonigan go further by adding skills that they attribute to other factors. These are phonological memory, rapid naming and print motivation (Childhood Development, 1998:848-872).

Wehner (1999) reasons like Whitehurst and Lonigan when she states that emergent literacy skills are divided into two categories: outside-in and inside-out. However Wehner (1999:23) prefers the names given to these domains by Storch and Whitehurst (2001). These are oral language and code-related skills respectively. However, Wehner (1999: 16) stresses emergent reading, emergent writing and print motivation as the major components of emergent literacy. Emergent reading is when children pretend to read. It consists of print

awareness, when children learn that print carries meaning and of concepts of print where they learn how print functions. Drawing, scribbling, non-phonetic letter strings, phonetic letter strings and conventional orthography are presented by Wehner as forms of emergent writing. Print motivation is the term she used to refer to the development of interest in and enjoying reading and writing by young children. According to Wehner (1999:30), due to experiences like playing with reading readiness toys, watching adults model the purposes of reading and writing, and having fun with their own exploration of reading and writing, children become motivated to read and write.

Strickland and Morrow (1989) define emergent literacy as a framework which includes conventions of print, literacy environments, phonological awareness, letter or sound identification and language abilities as components or skills that predict later success in reading and writing. Similarly, Halle, Calkins, Pitzer & Martinez-Beck (2004) also outline the following as components of emergent literacy;

- Phonemic awareness: Being aware that speech is composed of units and the ability to use speech units.
- Letter Recognition: Understanding that letters are different from each other, knowing their names and sounds and associating letters with their sounds.
- Awareness of print: Noticing print, knowing how to handle a book and knowing how to follow words on a page.
- Early writing development: Attempts to produce written text (e.g. scribbling, invented spelling).
- Oral language which includes vocabulary development and the understanding of the uses and conventions of spoken language.

Another classification of emergent literacy components is that of Foorman, Anthony, Seals and Mouzaki (2002) who state that the components of emergent literacy include oral language, phonological sensitivity, letter knowledge, print awareness, print motivation and emergent reading and writing.

Britto, Fuligni and Brooks-Gunn (2006) acknowledge that Whitehurst and Lonigan (1998) have crafted one of the most widely used typologies of skills for understanding the components of emergent literacy. Britto et al (2006) name the components of the outside-in processes as language, conventions of print and emergent reading while those of inside-out

processes are, linguistic awareness, phoneme-grapheme correspondence and emergent writing ( Dickinson and Neuman, 2006:312). The current study has used the classification by Whitehurst and Lonigan with the addition of emergent numeracy. Although Barton (2007:107) thinks that viewing symbol systems like numeracy as literacy means discussing something else, the evolutionary nature of the definition of literacy justifies the inclusion of numeracy as a literacy skill. Part of the UNESCO definition for literacy cited in section 2.2 of this literature review is “the ability to compute...” (UNESCO, 2003:1). Chali (1998) quoted in Mwansa(2007) whose definition of literacy appears under the Zambian definitions of literacy in this review also states that literacy is the “ability to read, write, calculate and interpret symbols for use and application for effective functioning of self, family, community and environment in which one is found” (Mwansa,2007:20). Calculations deal with numbers which is numeracy. Numeracy has been described as the capacity to use mathematics in the activities of daily life requiring quantitative skills and the capacity to reason mathematically when information is presented in quantitative form. This has been referred to as quantitative literacy (Anning & Edwards, 1999; Berch, 2005). Like letters of the alphabet and words, numbers also have to be read and written. The process of acquiring this knowledge also begins long before children enter formal schooling. This is emergent numeracy. Among the questions that the current study seeks to answer is whether emergent numeracy exists in the games that children play in the selected compounds.

This section has revealed variations in the labelling or naming of emergent literacy components by different scholars or researchers. Prominent among them is the classification by Whitehurst and Lonigan (1998) which the current study has also adopted and used to analyse emergent literacy in children’s play or games. To Whitehurst and Lonigan (1998), emergent literacy skills and knowledge include language, conventions of print, beginning forms of printing, knowledge of graphemes, grapheme-phoneme correspondence and phonological awareness. Print motivation and other related behaviour fall under emergent literacy attitudes. This typology has been preferred by the researcher because it is quite elaborate. Since this study wants to answer the question as to whether or not emergent literacy exists in preschoolers’ play in the targeted compounds, this classification will facilitate the identification of emergent literacy skills, knowledge and attitudes in the play and games. The section has also explained and justified the inclusion of emergent numeracy which is a precursor to quantitative literacy acquisition. Since emergent literacy development is facilitated by the children’s interactions with other members of the society and their

environment, the section that follows discusses the role of social interactions in emergent literacy.

## **2. 4. Social Interactions and Emergent Literacy**

The last section has explained that different scholars have used different typologies for components of emergent literacy and explained the current study's use of Whitehurst and Lonigan (1998)'s version in analysing emergent literacy skills in the games that children play in targeted compounds. This section discusses the relationship between social interactions and emergent literacy.

As alluded to in the foregoing section, literacy does not develop from abstract situations but from real life situations in which reading and writing are used to get things done. The vast majority of literacy development experienced by young children is embedded in some activity that goes beyond the goal of literacy itself (Hodgskiss 2007:12). Therefore, there is a link between emergent literacy and social interactions. Britto and Brooks-Gunn (2001) view social interaction as central to the development of literacy. This implies that the development of literacy in children is greatly dependent on their interactions with other members of their society and the environment. The kind of home and surrounding environment that a child grows up in will either help or hinder them from becoming literate before they enter formal schooling. The current study looks at children's games or play which involves interaction of the preschoolers with others and with the environment.

Tied to social interaction is the social economic status (SES) of the family, community or society to which a child belongs. The social economic status is a factor in emergent literacy development. The family or society forms the circle within which the child spends his or her day to day life. According to Britto, Fuligni and Brooks- Gunn (2006), income, education and occupation are among the most common indicators of SES. The income, education and occupation of parents will determine both the home literacy environment and the kind of neighbourhood and community that the child will be raised in. Families that have low income cannot afford books and toys to facilitate emergent literacy in their preschooler. In some cases, low SES families barely survive. Family that have low SES will be restricted in their choice of residential area. Often they live in poor neighbourhoods which have few resources and facilities let alone play grounds (Dickinson & Neuman, 2006: 318). In such neighbourhoods, even environmental literacy is limited.

Korat (2005) conducted a comparative study between children from a low SES and middle SES communities. Among his aims was to examine the relationship between two components of emergent literacy. These are contextual and non-contextual knowledge. According to Korat (2005:3), the contextual knowledge component of emergent literacy referred to children's behaviour as embedded in the supporting context. It is what Whitehurst and Lonigan (1998) refer to as emergent literacy environments experience. This includes emergent reading in context, print concept, knowledge about the function of print and the meaning of the acts of reading and writing. The non-contextual knowledge, on the other hand, refers to children's tasks without contextual support. It relates to letter-name knowledge, letter-sound relations, early word recognition and phonemic awareness.

The study explored the relationship between children's knowledge of each of the two components and their SES level in the community. Furthermore, an investigation was made to find out if and how these two components predicted children's word recognition and emergent literacy. Therefore, his sample was drawn from both the low and middle SES children. The results of this study showed the existence of the two distinct components of emergent literacy in both groups though they were poorer in low SES children than in their higher SES peers. Children from middle SES communities were better placed because their families could afford literacy supporting items like books and television sets. It was also observed that non-contextual components dominated the prediction of word recognition and emergent literacy than contextual knowledge, age or SES group.

This section has addressed the role of social interactions in emergent literacy development. Social interactions also include the SES of the child which is the SES of the child's family and the society to which the child belongs. The current study also endeavoured to establish the SES of the families of the observed children and identify ways in which this status influenced children's play and consequently, emergent literacy in the compounds under study. Since social interactions occur in the language medium, it is imperative that there is a relationship between language and emergent literacy. The following section reviews literature that deals with the relationship between language and emergent literacy.

## **2.5. Language and Emergent Literacy**

This section explains the relationship between language and emergent literacy.

Emergent literacy is dependent on oral language. Literacy and language are also related in many ways. As children move from learning simple to complex language, they also display

different literacy behaviours. Language learning occurs as children participate in social activities and so does literacy development. Morrow (1989) attributes this early development of vocabulary, and subsequently literacy, to the children's need to communicate, their curiosity and their skills for making sense of the world. As mentioned in the previous section, these developing abilities are embedded in the social- cultural context.

Children's language skills at school entry are important because they lay the foundation for later reading and writing, and children with poorer language skills are more likely to have difficulties in learning to read. Oral language is the root for literacy acquisition (Whitehurst & Lonigan, 1998; Barton, 2007; Bruning, Schraw and Ronning; 1999).

Whitehurst and Lonigan(1998:848) observe that reading, writing and oral language develop concurrently and interdependently from an early age from children's exposure to interactions in social context in which literacy is a component, and in the absence of formal instruction. The acquisition of spoken language here is linked to the emergence of literacy because a child who does not know how to speak will not learn how to read. The development of language capabilities is enhanced when children are in language-rich environments where parents and others talk with them (Schunk, 2009:391). A child who is exposed to an environment which is rich in vocabulary and a wide variety of structures is likely to advance in vocabulary and grammar acquisition of their language than one who is not so exposed (Hoff, 2006:163). Through exposure to oral language, preschool children develop listening comprehension, vocabulary and language facility (Gunn, Simmons & Kameenui, 1994).

According to Feldman (1980), young children throughout the world are surrounded by opportunities to develop and use emergent literacy skills which include listening, speaking, reading and writing. There are as many opportunities as the language, cultures and peoples that they represent. He also acknowledges the many linguistic, cognitive, and socio-emotional resources that are available to children daily. The current study also focused on children's use of oral language, during play, either alone, with other children or with parents or caregivers.

Montessori (1967) cited in Woods (2003) emphasises the value of early language experiences as the foundation for reading and writing. This foundation is laid during early childhood which is a sensitive period for oral language acquisition. Ages 3 to 6 are critical in a child's language, concept and literacy development (Dickinson, 2001). This is evident in a case study by Wehner (2010). She studied a middle class 3-year-old boy over a period of eight months to observe how he developed emergent literacy (Wehner, 2010). At the beginning, the child

was at the concepts of print stage of emergent reading. Over the eight months, there was significant growth in most areas. Due to pretend reading, the child improved on the print observation task. Writing forms advanced from scribbling to non-phonetic letter forms because of drawing and writing. Growth in vocabulary was most dramatic. Both receptive and expressive vocabulary increased. Oral language skills progressed from labelling of items (words or phrases) to sentence construction. Growth in oral language and vocabulary was due to storybook reading. The child also became phonologically aware of words and then syllables.

This section has reviewed literature that shows dependence of emergent literacy on oral language. It has been observed that a child's needs to learn how to speak before they can read. One who does not know how to speak cannot learn how to read.

## **2.6. Children's Play/ Games**

This section discusses children's play and games. Since games are found in children's play, the two terms are used interchangeably in this study. The section also discusses the forms of play that children engage in as well as their functions.

Gander and Gardiner (1981:497)), define play as "voluntary activities undertaken without any purpose beyond enjoyment or expectation of enjoyment". Longman (2010:719) refers to a game as "children's activity in which they play with toys, pretend to be someone else etc". Play is the work that children do. Bruner (1975) quoted in Gander and Gardiner (1981:83) states that "play is the principal business of childhood". Goodman and Goodman (1979) cited in Adams (1990:90) take the same stance when they state that "play is the child's equivalent of the work world of the adult". Play has been called the "work of childhood" because of its central role in the young child's development. It promotes the growth of sensory capacities and physical skills while providing endless opportunities to exercise and expand newfound intellectual skills. Boon (2010) has a similar view when he outlines that children play all the time.

However, Santrock (1988:314) states that play is an elusive concept because it can range from an infant's simple exercise of a newfound sensory motor talent to a preschool child's riding a tricycle to an older child's participation in organised games. Quoting Sutton-Smith, (1973), Santrock says that there is no universally accepted definition of play, probably because it can encompass so many different kinds of activities. Similarly, Gardner (1978:231)

states that the term play denotes many activities. He explains that those who have viewed almost all the toddler's activities as play have attributed all development during this period to the child's unique flair for playing. He argues that such a broad usage robs the word 'play' of any practical use in describing behaviour. He prefers to begin defining play by saying what it is not. He cites behaviour that satisfy pressing biological needs like eating, drinking, escaping from pain and those that are part of a ritual such as a religious ceremony as those that do not qualify to be termed play. To this list he adds behaviour which is designed to overcome an immediate obstacle like pushing away a child who is reaching out for a desired toy. Gardner (1971), quoted in Gardner (1978:231), states that the nature of play can be clarified by contrasting it with problem-solving and then examining the roles of play in problem-solving. He then divides play into two categories; exploratory play and rule-governed play. These two categories are exemplified in a situation where children are given a pair of scissors and paper to play with. A child who ignores the instructions and rules of geometry but just cuts out designs of his own liking or crumples the paper can be said to be engaging in exploratory play while one who follows a designed sequence and cuts the paper in a geometrical pattern to produce a line of distinct figures will have engaged in rule-governed play. In a similar vein, Berlyne (1960) quoted in Santrock (1988:314), sees play as exciting and pleasurable in itself because it satisfies the exploratory drive that each person has. Santrock further explains that play serves as a means whereby children can safely explore and seek out new information.

Whether exploring or using already set rules, children grow through play. Santrock, (1988: 314) points out that while play is a very important part of the child's social world, cognition and language serve important roles in understanding the nature of play. He mentions affiliation with peers, tension release, advances in cognitive development and exploration as functions of play. This is in line with Piaget who saw play as a medium that helps to advance the child's cognitive development. To Piaget, cognitive structures need to be used and exercised, and play provides a perfect medium for such use. He also believed that play is an important aspect of sensory motor development in infancy. Play allows children to practice their competencies and acquire skills in a relaxed, pleasurable way (Santrock, 1988:319). Their senses are stimulated. They learn how to use their muscles, coordinate what they see with what they do, and gain mastery over their bodies. The physical nature of many types of play or games aids in the development of motor skills and of coordination. Activities like rolling play dough and doing finger plays help children strengthen and improve the



coordination of the small muscles in their hands and fingers. Children also acquire new skills and become more proficient with language.

Different types of play also satisfy different needs and help promote different aspects of development. Despite having their own characteristics and functions, the types are not rigidly distinct and may overlap in any play situation (Davidson, 1996:281). Davidson identified some of the major forms of children's play as follows; sensory pleasure, play with motion, rough and tumble play, language play, dramatic play and modelling and constructive play or play with games, rituals and competitive play. Parten (1932) quoted in Santrock (1988:315) observed play activities of children between two and five years of age as they interacted in nursery school settings. This was in her study of social participation among preschool children in which she identified six types of behaviour. These types are:

**Unoccupied behaviour-** This is whereby a child may stand in one spot, look around the room or just perform movements that seem to have no goal.

**Onlooker behaviour-** This is whereby a child watches other children playing. The onlooker may talk to the other children without joining in the play behaviour. What differentiates the onlooker from the unoccupied child is the former's interest in the other children's play.

**Solitary play-** Under solitary play, a child plays alone and independently of others around. The player is absorbed in the play and does not care about anything else that may be happening around.

**Parallel play-** A child plays alone but with toys like those being used by other children or in the same manner as other playing children. Usually younger children engage in parallel play when they mimic older children.

**Associative play-** Children get involved in play activities similar to those being done by other children but appear to be more interested in being associated with each other than in the play. Associative play involves social interaction with little or no organisation. The playing child does not place the group first. Instead the child plays as he or she wishes. An example is when children lend or borrow toys from each other without necessarily playing together in an organised manner.

**Cooperative play-** This play involves social interaction with a sense of group identity and organised activity. Games in which there is competition aimed at winning and games that

involve teams are examples of cooperative play. Cooperative play is not common among very young preschoolers but five and six year old ones usually engage in it with older siblings at home or with other children in the neighbourhood.

Parten discovered that with age and added opportunities for peer interaction, the non social types of play gave way to the social types (Santrock, 1988:318). She viewed age as a factor in the types of play that the children engaged in. However, Barnes (1970) conducted a study that showed less social play by three and four-year-olds of that time. Explanations for the shift included a decrease in peer interaction due to an increase in television viewing, availability of complex toys and games that foster solitary play. Another factor had to do with fewer opportunities for sibling interaction because of smaller families.

Revisiting Parten (1932) and Piaget (1962), Rubin, Maioni and Hornung (1976) studied free play behaviours in middle and lower class preschoolers. The trio provided information on social class and sex differences in play. They found that parallel play was more frequent among girls and lower class children. Boys and middle class children often engaged in associative and cooperative play. Another factor in types of play that children engage in is culture. The type of play exhibited by children differs with every different culture (Rubin, Maioni, and Hornung, 1976). The frequency of specific forms of play differs across cultures. Play environments that adults set up for children usually reflect cultural values.

In this section literature has attested to the fact that play is the core business of children. It has also presented the categories into which children's play can be divided (Gardner (1978, Davidson, 1996). The functions of play have also been discussed. The section has presented gender, social class and culture as factors in children's play. The current study also sought to establish whether these factors influenced play in the targeted compounds.

## **2.7. Play and Emergent Literacy**

The last section discussed play and games. It also explored the forms of play that children engage in. This section discusses the relationship between play and emergent literacy.

Boon (2010) points out that although it has always been proclaimed that incidental learning does not occur during play, it can be further enhanced, systematised and formally instituted if teachers realised the potential of learning through play. Many play experiences support children's emerging literacy skills. Sorting, matching, classifying, and sequencing materials such as beads, pebbles, a box of buttons, or a set of coloured cubes, contribute to children's

emerging literacy skills. They use these muscles to control writing tools such as crayons, markers, and brushes. Bergen (2001) has also explored the relationship between play and cognitive development. He noted that apart from free play, pretend play also had a key role in children's development. This is because pretending involves language use and takes place in social contexts.

Morrow and Schickedanz (2006) in Dickinson and Neuman (2006:269) have looked at the relationship between Socio-dramatic play and literacy development. The duo began by outlining the changing perspectives on play, indicating how these points of view shape research and then turning to studies that have explicitly examined the relationship of play with literacy. Among other aspects of children's play, they have examined literacy behaviour exhibited by preschoolers in their spontaneous dramatic play. They point out that early research dealing with children's behaviour in spontaneous play was motivated by a concern that adult-centred, decontextualised probes underestimate preschoolers' actual literacy knowledge and skills. They cite studies by Neuman and Roskos, (1991) and Roskos (1991). In the former, free play data were collected from 50 children over a period of 2 months in two preschool settings. The literacy demonstrations isolated in play protocols were analysed for functions served by the child's literacy behaviour and for evidence of children's knowledge of features of print such as letter knowledge and orientation of print. Preschoolers displayed knowledge of literacy functions. Roskos' study (1991) provided a similar inventory of preschoolers' literacy demonstrations as they occurred naturally in the context of children's pretend play. Literacy related episodes were captured on video. These were analysed and inventoried as instances of activities, skills and knowledge. The data showed that preschoolers knew much about literacy and revealed knowledge in the dramatic play context. Morrow and Schickedanz (2006) explain that these two descriptive studies attested to the fact that preschoolers had literacy knowledge and skills. They further elaborate that this realisation prompted researchers to move a step further in their research by enriching the children's playing environments and shifting their focus from using play to study what preschoolers already understand about literacy to viewing it as a potential context for promoting literacy learning (Dickinson and Neuman, 2006:271). Likewise, the current study is intended to provide data that would aid Zambian planners and teachers of initial literacy to use play as a context for initial literacy teaching.

Play that involves singing is also instrumental in the development of literacy. Traditional rhyming, skipping and word games are the roots of phonemic awareness which is a powerful

predictor of later success in reading. Moss, (2006), quotes a study by Maclean, Bryant and Bradley, (1987), showing that three-year-old children's knowledge of nursery rhymes and rhythms allows them to associate the phonemic symbols with the sounds they hear in these words.

This section has revealed that many play experiences support children's emerging literacy skills. Both free and pretend play has been presented as having a key role in children's cognitive development. The literature has also shown that preschoolers displayed knowledge of literacy in dramatic play and presents singing as being helpful in literacy development. This study was intended to establish whether these forms of play were among those played by the targeted children so as to ascertain their support of emergent literacy skills.

## **2.8. Play and language**

This section discusses the relationship between play and language.

Children use language as private speech or self talk or as a means of socialisation with other members of their family and society (Vygotsky, 1978). Self talk or with others during play is a manifestation of the importance of language at this early stage of human development. A child engages in private speech to regulate oneself or just to play with the language (Dickinson and Neuman, 2006). Children love to play with language. Meaningful communication which is the primary function of language is lost in language play. Alone or with others, a child experiments with speech rhythm or the rise and fall of the voice. Children concentrate on the language itself, playfully manipulating its sounds, patterns and meanings. Playing with language also gives young children a chance to practice and master the grammar and words they are learning (Garvey, 1990).

Santrock (1988:320) observes that theorists (Piaget, 1962; Vygotsky, 1978; Werner & Kaplan, 1963) have for some time stressed that pretend play and early language development have some common dimensions or have some influence on each other. He is also quick to explain that researchers have not been able to provide convincing data that pretend play is a prerequisite for language development or cognitive abilities.

One important oral practice in the support of emergent literacy is storytelling. Frequent participation in storytelling and other oral activities with a storyline is related to children's narrative production (Serpell, Baker & Sonnenschein, 2005).

This section has reviewed literature on the relationship between play and language in preschoolers. Literature has revealed that children use language as self-talk or to communicate with others during play. Children also play with sounds, patterns and meanings of language. As whether this is the case with the children in the targeted compounds in what this study intended to establish. This section has completed the sections on the general literature review of the subject. The sections that follow cover literature on the subject and the topic under study from the Zambian perspective.

## **2.9. Literacy in Zambia**

The foregoing (Sections 2.2 - 2.8) have been a general review of literature on literacy, emergent literacy and how the latter relates to language, social interactions and children's play. Sections 2.9 - 2.15, cover literature dealing with these aspects in Zambia. This section explores literacy as it is understood in Zambia.

Mwansa (2007:18) observes that Zambia has adopted UNESCO definitions of literacy. These definitions have been stated in Section 2.2 above. In addition to the UNESCO definitions, the grade equivalent has also been used to define literacy in Zambia. Mwansa (2007) explains that in 1969, a person was considered to be literate if he or she attained the equivalent of grade 3. However, grade 3 equivalent is low because those who pass through grade 3 in Zambia fail to function in the fast growing urban areas (Mwansa, 2007:18).

Recent among documented Zambian definitions of literacy is that made by government officials and experts. They defined literacy as the "ability to read, write, calculate and interpret symbols for use and application for effective functioning of self, family, community and environment in which one is found" (Chali, 1998:10). Central to this definition is the use of the three Rs, namely; reading, writing and arithmetic. It is clear that this definition subscribes to the category of definitions that view literacy in relation to its function.

Literature in this section has shown that the definition of literacy in Zambia is based on the UNESCO definitions and is related to the three Rs. These definitions do not cover emergent literacy due to a dearth of information on this discipline. On the Zambian scene, literacy is almost always synonymous with adult literacy. The following section reviews studies carried out in Zambia on emergent literacy.

## **2.10. Emergent Literacy in Zambia**

This section reveals what has been written on emergent literacy in Zambia.

There have been very few studies carried out on emergent literacy in Zambia. Among them are studies by Matafwali (2010), Musonda (2011) and Matafwali and Munsaka (2011). These have been cited in other parts of this literature review. Zimba (2011) carried out an inquiry into whether early childhood Education supported emergent literacy in selected pre-schools of Kasempa and Solwezi. He observed that there was very limited support of emergent literacy in the preschools under study. He cites three reasons for this lack. Firstly, it was observed that teachers lacked knowledge concerning the presence of emergent literacy in the pre-schoolers. In cases where they were able to notice the children's literacy behaviour, teachers lacked the skill to scaffold this behaviour properly to enhance the acquisition of conventional literacy. Zimba proposes that there was need for capacity building of the teachers in the appreciation and use of emergent literacy. The second reason is that of lack of resources to construct appropriate buildings and furnish schools with materials that would facilitate the support of emergent literacy. It was discovered that all the preschools visited were owned and run by the private sector or individuals. The Zambian government has had no stake in preschools. Zimba cited this lack of involvement by the government in the running of preschools as the third reason for the failure by the latter to support emergent literacy. Among his recommendations is that the government needs to get involved in providing preschool education. Studies by Matafwali (2010), Musonda (2011) and Matafwali and Munsaka (2011) have been discussed in detail under the sections on the role of language in emergent literacy (2.12) and play in emergent literacy (2.14).

This section dealt with literature on emergent literacy in Zambia. The paucity of information on emergent literacy in Zambia attests to the novelty of this topic on the Zambian academic scene. This study makes an attempt to explore the subject of emergent literacy in Zambia and add to the list of the few studies on the subject. The following section examines literature on social interactions and emergent literacy in Zambia.

## **2.11. Social interactions and Emergent Literacy in Zambia**

Zambians still maintain a communal kind of existence, typical of African society, whereby the raising of children is everyone's responsibility. The extended family and neighbours take part in the socialisation of children in Zambia. According to Musonda (2011), the Zambian socialisation style explains why the level of education of parents is insignificant in

determining how well literate their children become. This is because the members of the extended family and neighbours also play a part in raising children. In line with this idea, Musonda further elaborates that in the social-cultural setting of the African community, a literate home environment may extend further than just the nuclear family. This implies that even the whole society has influence on the preschooler's emergent literacy development. A child benefits from the literacy of the members of the extended family as well as that of the neighbours.

This section explains that the socialisation style in Zambia is dominated by a communal life in which the raising of the young members of the community is everyone's responsibility. Thereby implying that emergent literacy is influenced by more than just the nuclear family of a preschooler. Whether this happens among preschoolers in the targeted compounds is what this study intended to investigate. The following section reviews literature that addresses the relationship between language and emergent literacy in Zambia.

## **2.12. Language and Emergent Literacy in Zambia**

The following is a review of literature that deals with the relationship between language and emergent literacy in Zambia.

Matafwali (2010) examines the role of oral language in the acquisition of early literacy skills. Her study has shown that children whose oral language is well developed at an early age excel in literacy, language learning and academic achievement in general. These early language learners use the technique of repetition to increase their vocabulary. They learn the sounds of the spoken words and later as they learn to read, make associations of the sounds which they have heard and spoken repeatedly with the written words. They become familiar with words and when they come across them again, the words are not strange. This enhances literacy acquisition and development. This may or may not be the case with the children under this study. One of Matafwali's recommendations point to the need for collaboration between home and school environment so that parents or caregivers get actively involved in literacy activities for their children (Matafwali, 2010:172).

## **2.13. Children's Play/Games in Zambia**

The previous section dealt with literature on language and emergent literacy in Zambia. This section reviews what has been written on children's play in Zambia.

Lancy (2007) quoted in Serpell (2011) states that children play in all societies as do the young of many other biological species but the social organisation of play varies across cultures. Serpell (2011) explains that in Zambian society, age-mates and older children are generally more legitimate participants in preschool age children's play than parents. This implies that it is more common for preschoolers to play with their peers and older children than with their parents.

Considering games as very important developmental aspects of human development, 'Sport in Action' (SIA) (2004) has documented games that have been integrated with HIV/AIDS, drugs and alcohol abuse and children's rights education. These games range from those that involve very active body movements like "akalambe" to those involving minimal body movements like "nsolo". 'Akalambe' is a game that involves two teams, one chasing and the other dodging. The participants that are tagged will be out of the game, only to watch and cheer for the remaining teammates. The dodgers run from one end of a line to the other, making decoy movements to avoid being touched out. Upon the dodgers being touched out, the chasing team becomes the dodgers and the dodgers become chasers. *Nsolo* is played with small stones or seeds on a flat surface with shallow holes of equal size dug close to each other in rows. At least 24 stones or seeds are used. The game is begun by both players at the same time picking stones from any hole on their playing side and distributing them one by one into every other hole in the sequence without skipping a hole in that sequence.

The document describes each game and further explains how the latter can be used to teach children about HIV/AIDS, drug and alcohol abuse or children's rights. In a similar way, the current study analyses the games for the presence of emergent literacy after describing them in detail from the observations during data collection. The 'Sport in Action' document covers children from 6 to 13 years of age which only touches the later years of early childhood. The current study covers the period of early childhood, from 1 to 6 years. However, quite useful to the present study is the differentiation between sport and play that 'Sport in Action' offers. As opposed to sport, play is presented as a social activity that is dependent on the environment and based on a natural setting. Play is based on the child's decision. Children also make their own rules pertaining to the kind of playing activity. The cognitive learning goals of games centre on helping children become more effective multi-sensory learners and active learners. This is because movement is seen as a viable medium for perceptual- motor and cognitive learning. This has an implication on emergent literacy and thus relevant to the topic under study.



Matafwali and Munsaka (2011) conducted an evaluation of community based early childhood education programmes in four selected districts in Zambia. Although it is an evaluation of early childhood education programmes, the study by Matafwali and Munsaka is linked to the current study because findings from the current study are supposed to inform and benefit early childhood educators in the area of literacy. Matafwali and Munsaka (2011) posit that local games and stories which children are familiar with should be used as modes of transmitting knowledge and skills (which include literacy skills). They quote Kakuwa (2005) as having documented a number of traditional games played in the nine provinces in Zambia. These games are categorized into developmental domains as follows; psychomotor, cognitive, language, socio-emotional, and self- help skills. Games such as *ciyato* and *chibale* belong to the psychomotor domain because they enhance children's psychomotor development. *Ciyato* is played mainly by girls who try to make eye-hand coordination as they throw and catch a stone while scooping and pushing back several stones into a shallow hole in the ground. *Chibale* is played using beads and a small bowl. Games that enhance cognitive skills include *nsolo* a game that enhances computation abilities, improves attention, and organisation, planning, reasoning and manipulation abilities. It also enhances fine motor skills. Under the language domain are found games that involve singing and rhyming while fables and riddles fall under the socio-emotional domain. The self-help domain includes games that impart life skills to enable the children to take care of themselves and their environment (Matafwali & Munsaka, 2011:122). The study advocates the integration of traditional cultural elements like children's games into early childhood curricula and collaboration between early childhood educators and the local communities.

In this section, literature reveals that play varies across cultures and that in the Zambian culture children play with age mates and older children than with their parents. Games have been integrated in teaching about HIV/AIDS, drugs and alcohol abuse and children's rights. Literature has also categorised games as psychomotor, cognitive, language, socio-emotional, and self- help skills. The integration of children's games into early childhood curricula has been advocated by those who have evaluated early childhood programmes. The current study makes an attempt to identify these games in the two selected compounds in Kitwe. The following section will explore literature on play and emergent literacy in Zambia.

## 2.14. Play and Emergent Literacy in Zambia

This section reviews what has been written on the relationship between play and emergent literacy in Zambia.

In Zambia there is a dearth of information or research on emergent literacy let alone on play and emergent literacy. Nevertheless, the few studies conducted in Zambia have shed light on the contribution of children's play to their gradual acquisition of literacy. Musonda (2011) looked at literacy behaviours which pre-schoolers exhibited in selected households of Lusaka. She studied children who had not yet started formal schooling. Musonda's study revealed evidence of emergent literacy in the children under study. Apart from correct handling of books to pretend reading, children were able to engage in other literacy-related games and play. She also found that they had well developed oral skills and were able to count and write numbers. She lists *ciyato*, *wider*, *touch*, and *eagle* for girls and *draft*, a game of bottle tops for boys as games in which the children exhibited emergent literacy behaviour. Musonda's report also attests to the presence of literacy behaviours in the children's play (Musonda, 2011:42). Nevertheless, parents and children under study seemed not to be aware that those games were relevant to literacy development. *Ciyato* and *nsolo* were identified as very useful in the development of emergent numeracy. While children played *Ciyato*, they were mere observers in *nsolo* as it required higher skills. However, the researcher argued that children were able to enhance their emergent literacy even by just observing the game being played because they heard names of objects which were in words that stood for numbers.

Despite her mention of literacy behaviours in games and the importance of language games and other activities that children know and play before they start formal schooling, Musonda (2011) did not provide an elaborate analysis of these games for aspects of emergent literacy. Instead, she only dwelt on the contribution of songs to early childhood development. Comparison is made between the acquisition of emergent reading and writing through drawing and pretending to write, and musical learning through song and movement. Musonda further elaborates that the use of music for reading instruction allows children to easily recall vocabulary, facts, numbers and conventions of print. She also explains the positive effect that repetition in songs has on vocabulary enrichment.

This section has shown that among the scarce emergent literacy studies is that of Musonda (2011). Although Musonda's study includes children's games, it does not specifically analyse these games for elements of emergent literacy. This is the gap that the current study

endeavours to fill. The following section will review selected studies in emergent literacy and examine the methodology and approaches that were used.

### **2.15. Methodology Used in Emergent Literacy Research**

To justify the choice of methodology for the current study, this section discusses methodology employed in selected studies in emergent literacy.

Whitehurst and Lonigan (1998) present two perspectives of research that provide information about the components of emergent literacy. A perspective that has examined the relation between emergent literacy and the acquisition of conventional literacy has consisted of mainly quantitative studies. A second perspective examining the development of behaviours of preschool-aged children in response to literacy materials and tasks is inclined towards qualitative studies.

Literature on emergent literacy shows that researchers have employed more of descriptive and correlational studies than experimental inquiries (Teale & Sulzby, 1987). Baker, et al (1994) quoted in Musonda (2011:32) state that, more recently, the trend is towards direct observation of literate activities within the home. Instead of only relying on quantifications of material resources or on parental reports of literacy related behaviours, researchers have begun to document a variety of literacy events within the home through descriptions and analysis of children's interactions with other people.

Korat (2005) carried out a quantitative study which was a comparison of contextual and non-contextual knowledge in emergent literacy between children from low SES and middle SES communities in Israel. For this study, Korat drew 34 children from a low SES community and 36 from a middle SES community. The total was 70 Kindergarteners. Korat's research had three aims. The first aim was to examine the relationship between contextual and non-contextual knowledge of emergent literacy. Secondly, the study wanted to explore the relationship between children's knowledge of each of the two components and their socio-economic status level in the community. The third aim was to study if and how these two components predicted children's word recognition and emergent writing. .

Among studies carried out on emergent literacy in Africa is that of Hodgskiss, (2007). She utilises an interpretive approach to trace and document children's emergent literacy development in a Grade R class over a period of two months. The intention of Hodgskiss' school-based case study was to investigate whether it was possible for trained, motivated

teachers who have access to everyday resource in ordinary South African schools, to achieve the Assessment Standards set out in the National Curriculum Statement (NCS) for Home Language in Grade R. Her sample consisted of 4 children from 1 preschool in Queenstown, South Africa. Gender and language were also considered in the selection of the sample because these appear to be significant factors in literacy development. Data were gathered from three main sources; a research journal, semi-structured interviews with the parents of the 4 participants and samples of the participants' spontaneous writing. These were then triangulated to give credibility, objectivity and validity to the interpretation of the data. Her findings revealed that social class, language and to a lesser extent gender impacted significantly on children's literacy development (Hodgskiss, 2007: ii). Hodgskiss' study is interpretive or qualitative in the collection and analysing of data. The sample is chosen using purposive sampling (Hodgskiss, 2007). Similarly, this study used the naturalistic observations of children playing to find out the kind of play or games that the children engage in and what emergent literacy skills, knowledge or attitudes they contain.

## **2.16 Summary of Chapter Two**

In this chapter, a review of the literature related to the research area in general and the research topic in particular has been presented. The review has looked at literature on the overview of literacy and emergent literacy abroad, children's games, the role of social interactions in emergent literacy, the role of language in emergent literacy, the relationship between language and play. The review has become more specific by dealing with literature covering the topic from the Zambian perspective. Hence the sections on literacy in Zambia, emergent literacy in Zambia, games played by children in Zambia, play and emergent literacy in Zambia. The researcher has ended the review by discussing the methodology and approaches that have dominated studies in this research area. The next chapter discusses the methodology employed in the current study.

## **CHAPTER THREE: METHODOLOGY**

### **3.0 Introduction**

Chapter three presents and justifies the methodology that was deemed appropriate in view of the purpose of this study. It comprises the research design, data collection procedures, instruments used and data analysis. The methodology employed was designed in such a way as to provide answers to the research questions.

### **3.1 Research Design**

Bryman (2008:80) defines a research design as “the procedures through which one can gather information that addresses the research purpose in a simple, elegant and systematic way. It is a plan or an outline of how the research will be conducted. Kombo and Tromp (2006:70) call it “the glue that holds all of the elements in a research project together”. This study was a qualitative case study. According to Merriam (2001) quoted in Hodgskiss (2007:30), Qualitative research is the term used to describe studies or investigations that assist the inquirer "to understand and interpret the meaning of social phenomena with as little disruption to the natural setting as possible". It is based on the assumption that reality is ever changing and constructed by individuals interacting with their social worlds. The current study focused on children's play or games in the children's natural setting. It paid particular attention to emergent literacy experiences, behaviours, actions and knowledge. The study was naturalistic since it did not involve manipulation of any process but involved a period of intensive non-participation observation of children in their natural setting. The research used an ethnographic strategy in which the researcher studied an intact cultural group in a natural setting over a period of time by collecting primary observational and interview data. Observation of children at play and interviews conducted with parents of the observed children are qualitative data collection techniques (Creswell, 2009:175).

Kombo (2006), explains that a case study seeks to describe a unit in detail, in context and holistically. This study provides detailed information on the aspects of emergent literacy in the games that children play in the selected compounds in Kitwe.

### **3.2 Research Site**

This study was conducted in two compounds in Kitwe. Due to ethical issues unreal names of Machipisha and Lambalala are used for the two compounds. These are high density compounds which began as illegal settlements for retired miners. Therefore, there is a dearth

of social amenities in the compounds. However, the local government has tried to upgrade them to the level of site and service compounds by providing communal piped water and electricity for those that can afford it. None of the two compounds has a government school. Most of the people are not in formal employment but work as domestic servants in the nearby townships or as vegetable growers who sell their vegetables on the streets of Kitwe. The houses which look like temporal homes vary from a single room to four or five small rooms depending on the ability of the family. Most of these houses are made of mud bricks with simple iron sheets for the roof. Those who cannot afford iron sheets use old metal drums that are cut open and stretched to make sheets for roofing. Otherwise they use any tough material that they think is strong enough to protect them from the cold and rain. Most of the homes that the researcher went to had very limited furniture. Very few had a television which they watched using used car batteries.

### **3.3 Population**

Best and Kahn (2006:13) define population as “any group of individuals with at least one common characteristic which distinguishes that group from other individuals. The population consisted of all the children between the ages of one to six years in the selected compounds. since this is the age group of children before entering formal education. The parents or guardians of these children also formed part of the population.

### **3.4 Sample Size**

According to Best and Khan (2006:13), a sample is a small proportion of the population that is selected for observation. It represents the population because certain inferences about the population can be made by observing the sample. In this study, the sample included 30 children (16 girls and 14 boys) and their parents. The children were aged between one and six years old and were observed while playing in small groups or as individuals. These groups were drawn from different locations within the two compounds. Parents or guardians of the observed children were interviewed. In all, 25 parents were interviewed because 2 of the observed children were twins, while 8 were 4 sets of siblings. Table 1 below shows the distribution of the children observed by gender.

**Table 1: Total Sample of Children**

Gender	Number	Total
Female	16	16
Male	14	14
Total	30	30

### **3.5 Sampling Procedure**

Creswell (2009:178) states that “the idea behind qualitative research is to purposefully select participants or sites that will best help the researcher understand the problem and the research question. To begin with, the snowballing technique was employed. In snowballing, a small number of people or individuals who have characteristics that interest the researcher are identified. Then using these selected people as informants, the researcher is able to identify others who qualify for inclusion. Those who are identified, in turn identify others (Cohen, Manion and Morrison (2007:116). The researcher had a contact person in each of these compounds who assisted her in finding one mother who had a preschooler. The first mother to be approached led the researcher to the next mother and the chain continued. Parents of children were identified first before commencing observations. This was because permission had to be sought from the parents to ensure that the same groups of children were observed over a period of four weeks. Apart from snowballing, purposive sampling was used in the selection of the subjects and participants of the research. Cohen et al (2007:114) defines purposive sampling as “a feature of qualitative research where researchers handpick the cases to be included in the sample on the basis of their judgement of the typicality or possession of the particular characteristics being sought.” The researcher chose to observe pre-schoolers at play because they had the information that was required to fulfil the research objectives. Similarly, parents and guardians of the observed preschoolers were interviewed because they were the primary caregivers of those children.

### **3.6 Research Instruments**

The following instruments were used to collect data.

#### **3.6.1 An observation scheme**

The observation scheme was used as the researcher observed children playing (Refer to Appendix i). The scheme was used to record the description of the game and acted as a guide

or checklist for emergent literacy skills, knowledge and attitudes. Guiding questions were placed under language, conventions of print, emergent reading, grapheme knowledge, phonological awareness, phoneme-grapheme correspondence emergent writing and print motivation. The information was later used to analyse the game for aspects of emergent literacy.

### **3.6.2 An interview schedule**

Interviews were conducted with parents or guardians who were the first caregivers of the children (Refer to Appendix ii for the interview schedule). These were to help fill in the gaps that may have been left from the observations and clarify details from what was observed during children's play. Both structured and unstructured questions related to literacy were used to collect information from parents. Like the observation scheme, the questions on the interview schedule fell under the eight emergent literacy components of language, conventions of print, emergent reading, grapheme knowledge, phonological awareness, phoneme-grapheme correspondence, emergent writing and print motivation.

### **3.7 Data Collection Procedure**

The data collection exercise was undertaken over a period of four (4) weeks. Firstly, parents with young children who do not go to school were identified and approached for permission to observe their children. This was followed by a non-participation observation of the children at play on a daily basis. Observations form a primary source of qualitative research. Describing a setting and events that take place within that particular setting is what observations are all about. In the current study, observations took place in a natural setting and represented first hand encounter with the phenomena under review. There are two types of observation: participant and non-participant observation. The latter is also referred to as structured observation (Cohen, Manion and Morrison 2000: 186).

The children were able to accept the researcher because they were familiar with sisters who worked in their compounds. Some of the children already knew the researcher because she had earlier done community service in those compounds.

Creswell (2009:181) explains that Qualitative observations are those in which the researcher takes field notes on the behaviour and activities of individuals at the research site. The researcher wrote down descriptions of what was observed. Games were singled out and described in detail in writing. Relevant observations and comments were made on the



observation schedule where applicable. Where necessary and for groups where parents were agreeable, the games were captured on camera to help in analysing them later.

Using an interview guide, the researcher interviewed parents of the observed children to get more information on the games. Parents were interviewed in their homes using a semi-structured interview guide. The number of parents that were interviewed reduced to 25 because out of the total sample of 30 children, there was a set of twins and four sets of siblings. Semi-structured interviews are used in qualitative investigations because they are more open-ended and flexible, allowing one to probe in order to obtain in-depth data (Hodgskiss, 2007:38). The answers of parents were recorded in the spaces provided for that purpose on the interview schedule. Interviews also aided in ascertaining the parents' knowledge of emergent literacy as well as their involvement in the facilitation of emergent literacy through the games they played with their children.

The interviews used together with the observation of children at play provided for triangulation in the data collection methods. Triangulation adds credibility, objectivity and validity to the interpretation of data. According to Saunders, Lewis and Thornhill (1997), triangulation refers to a situation where various types of data or procedures are used within one study to verify the validity of data or to ensure that it is telling the researcher what the researcher thinks it is telling them. Borg and Gall (1989:393) state that, "triangulation can also be achieved by collecting essentially the same data from different samples, at different times and in different places. Hodgskiss (2007:37) explains that observation, when combined with interviewing and document analysis, allows for a holistic integration of the phenomenon being investigated. Documents, such as photographs, are prepared by the researcher or for the researcher by participants in the course of the research. Such documents are meant to assist the researcher to learn more about the situation, person or event being investigated. Merriam (2001:119) observes that photographs provide a "means of remembering and studying material that might be overlooked if a photographic image was not available for reflection". In addition to observing children at play and interviewing their parents, where parents were agreeable, the researcher took photographs of children at play in the current study. The photographs were used to re-examine the games in cases where the researcher needed to be reminded of the game during analysis. These three techniques used together give credibility, objectivity and validity to the data collected.

### **3.8 Data Analysis**

This section describes the process of data analysis. Data analysis is defined as “a process of inspecting, cleaning, transforming, and modelling data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making (Ader, 2008:333). According to Best and Kahn (2006:270) data analysis involves organising, analysing and interpreting data. Like other qualitative studies, data analysis for this study began during data collection. This involved the analytical observations and comments that were recorded as data was being collected. Each game that was documented was described in detail as it was being observed. All the information was recorded on the observation schedule which had been designed with spaces for filling it in. In this study, all the data from observations, field notes, interviews and photographs were closely examined to come up with the types of games that the children played in the study site. The games were further analysed for themes and patterns of emergent literacy according to the typology by Whitehurst and Lonigan (1998) as outlined in the literature review. Data was then classified into themes according to the objectives of the research. The same themes have been employed in the presentation and discussion of findings.

### **3.9 Ethical Considerations**

An introductory letter from the University of Zambia (UNZA) was presented to the parents of the children to be observed. Permission to observe the children was sought from the parents or guardians who were made to sign an informed consent form. Where photographs were necessary, permission was sought from parents with the assurance that the photographs were just to aid the researcher in the analysis of the games later.

### **3.10 Summary of Chapter Three**

In this chapter an overview of the research methodology selected for this study and the rationale for the choices made has been presented. It is evident that the research design used for this study was qualitative. The instruments which were used to collect data and the procedures applied have also been discussed. It has also been indicated that data analysis and presentation of findings has been thematically done in line with the research objectives. The next chapter presents the data and its interpretation.

## **CHAPTER FOUR: PRESENTATION OF FINDINGS**

### **4.0 Overview**

This chapter presents findings from the study of children at play to find out what types of skills, knowledge and attitudes found in preschoolers' play and games can be characterised as foundations of reading and writing (literacy) or those that aid their development. The findings, otherwise referred to as results of the study constitute the conclusions which the researcher came up with after considering the data sourced through observations and interviews. The researcher observed 30 children at play over a period of four weeks and interviewed parents of the observed children. The findings are presented under themes following the research questions as follows: (i) What types of games do young children play in the targeted compounds? (ii) What skills, knowledge or attitudes displayed in the games can be said to be foundations of reading and writing (literacy)? (iii) What skills, knowledge or attitudes displayed in the games can be said to be foundations of numeracy?

### **4.1 The Types of Games Children Play in the Targeted Compounds**

The first objective of this research was to find out the types of games played by children in the targeted compounds. The games were compiled from observation notes as well as information from interviews carried out with the parents of the children that were observed. Photographs were taken to assist the researcher in remembering the games during data analysis and discussion. Findings are presented below:

#### **4.1.1 Findings from Observations**

From observing 30 preschoolers at play over a period of four weeks, the researcher came up with a compilation of 20 games and forms of play that the children in the targeted compounds played. These are presented below.

#### **4.1.2 Iciyenga**

*Iciyenga* was played by at least two players although there were a couple of times when the researcher found a lone child playing the game. When playing *iciyenga*, players sat around a shallow hole made in the ground or where they used a cemented floor, drew a circle of about 10 centimetres in diameter. In this hole or circle, the players put small stones or seeds which were referred to as '*abana*' (children). The number of stones or seeds was agreed upon by the players. The players then got another pebble which was bigger and heavier than *abana*. This was either one that each player used when his or her turn to play came or each player found a

suitable stone depending on what was preferred. This bigger stone was referred to as '*ichanto*'. Players took turns to play the game. The *ichanto* was tossed into the air and caught without allowing it to fall. Between the throwing and the catching, the player scooped some stones from the hole or circle and pushed them back at the next throw. All the scoped stones would be pushed back into the hole leaving only one stone which was taken by the player as a point. Dropping the *ichanto* on the ground during play made the player lose his or her chance of playing. The next person was then given the chance to play. Chances were given in a clockwise or anticlockwise sequence depending on the players' agreement. One player continued to play until either the *ichanto* dropped or the player left more than one stone outside the hole or circle as they tried to push the stones back in. If a player finished all the stones in the hole, the next player on the wrong side of the sequence had to put the stones from her reserve into the hole for the player to continue. A player who managed to acquire all the stones from the hole and from all the other players was declared winner of that round of the game and was automatically supposed to be the first player in the next round of the game.

#### **4.1.3 Akabwambe**

*Akabwambe* is a running and dodging game that was played by both boys and girls. Players usually chose an open space such as a football ground for this game. This was because they needed a lot of space where they could run and dodge each other without bumping into obstacles. The researcher observed *akabwambe* played by at least two children. One ran and dodged while the other chased with the view of touching the dodger. Where there were more than two children, one chased while the rest were dodgers. The players set rules before the beginning of the game. Sometimes whoever was touched switched roles with the chaser and started chasing the rest. Otherwise the one who was touched came out of the game and cheered as the chaser went for the others. This went on until everyone had been touched. The first to be touched in the previous game then became the chaser in the new game. If on the other hand the chaser fails to touch one player and surrenders, the dodger was declared a winner and made points. Sometimes children played *akabwambe* as a parting game. As a way of saying goodbye, one child touched the other and immediately started running home. The touched child was expected to chase the other and make sure he or she touched the other before running back to his or her own home. If the running child reached his or her home before the pursuer, the latter was said to have been the loser for that day.

#### **4.1.4 Inkwampa/ Inkampa**

*Inkwampa* was played by at least 3 children using a rope. Two of the players stood at opposite ends each holding one end of the rope. The two players swung the rope up and down in the same direction while the third skipped as the swingers swung the rope. The skipping was accompanied by a song, counting from 1 to 10 or the letters of the alphabet. The skipping song gave instructions to the skipper on the actions to take as he or she skipped. The skipper was not supposed to touch the rope while skipping. When the skipper came into contact with the rope or failed to follow any of the instructions in the skipping song, they lost the chance of playing and were expected to either take the position of a swinger or go to cheer the others while waiting for another turn. This depended on the number of players involved in the game and the rules set at the beginning of the game.

#### **4.1.5 Wider**

Wider was played by both girls and boys. The name Wider is an English word which is the comparative for the word 'wide'. The game was played using a string or rope that was joined together. At least 3 children were needed to play this game. Two children positioned themselves opposite each other with both legs inside the joined rope. They stood as far apart as the rope could stretch. The third child was expected to jump in and out of the rope. Wider was a version of high jump because it tested the player's ability to jump at different heights beginning with the rope being placed around the ankles of the children inside and then moving it up their legs as the game progressed. At every successful jump, the rope was moved up and the jumper was expected to jump in and out of the space made by the rope. There were different styles that the player then followed as he or she jumped. One such style was to jump out with legs apart so that when they landed, the two sides of the rope were caught between the jumper's legs. The name wider could be attributed to this style.

#### **4.1.6 Pada / Eagle**

*Pada* or Eagle was played by both boys and girls. The game was played using a structure made of connected squares, rectangles and triangles drawn on level ground. Each player had a flat stone or a small piece of floor tiles for playing. A player started playing by throwing the playing object into the first box whilst standing at the starting point outside the structure. He or she then hopped on one leg through the squares, rectangles and triangles to the end and back to the starting point, with the exception of the one with the playing piece. A player was not expected to change the leg as he or she hopped through the structure. Neither were they allowed to step on the lines that demarcated the compartments. On the way back, the playing object was picked up using one hand while standing on one leg. When this was done

successfully, the player played again this time throwing the playing piece in the second compartment. And so the game continued until a player had had a chance of playing in all the compartments. When a player had completed taking turns at different compartments, he or she faced the opposite direction and threw the playing piece into any free space without looking at the playing surface. The compartment in which the piece fell was decorated with special designs of the player's choice and claimed as the player's house (*ing'anda*). The other players were not allowed to go into such a compartment when their turn to play came. Players lost a playing chance if they touched the ground with their hands except when picking the playing piece. Even then, they were expected to pick the piece using only one hand. A player also lost a chance to play if he or she left the playing piece behind when going back to the starting point. The player had to remember where he or she failed the last time as he or she was expected to start from there when the next chance to play came. And so the game continued.

#### **4.1.7 Bonga / Rounders**

*Bonga* is also referred to as Rounders due to the movements that the players make as they play. This game was played by both girls and boys. A minimum of 3 children were required to play Bonga. Preschoolers needed the help of older children to draw the structure for the game. A square or rectangular design of at least 5 metres wide was drawn on levelled ground. The square or rectangle was drawn with an inner square in such a way that the two shapes created a 'corridor' next to the outer line. Players used this corridor to go round during the game. Each corner of the structure was marked with a circle. Two players acted as shooters who stood at opposite outer lines and threw the ball into the playing area with a view to hitting any of the other players who were by then going round the structure while counting how many circles they went through. Players agreed before hand as to how many circles a player needed to go through before being declared a winner. The circles bore names of towns or countries and served as resting places for the runners as well as places of refuge as they dodged the ball. A player could only be hit away from a circle. Once hit, a player went out of the game and the game continued for as long as the members of a team had not been hit. If, on the other hand, a member of a team managed to reach the number of counts that were agreed upon, the whole team won. They were given a score and another chance to play. If all the members of the team were hit before any of them reached the required count, the team lost the chance to play and two of their members then took up the positions of the shooters while their opponents took their turn of playing the game.

#### **4.1.8 Start**

Start was played using a ball, an empty vessel and sand. The ball was usually a home-made one that bigger children made from plastics or other materials tied together using rubber bands or plastic thread from maize meal bags. Only on three occasions did the researcher come across children who were using a children's ball from shops. Start was played by a minimum of 3 players in an open space big enough for the players to run around. In cases where there were four or more players, two teams were formed. The first team started as dodgers while the second team played as shooters. Two of the shooters stood at opposite ends of the playing area. The distance between them was at least 4 metres and increased when there were more dodgers. Older children (5 and 6 year olds) preferred a longer distance. Shooters threw the ball at each other while aiming at hitting any of the dodgers between them. The aim of the dodgers was to fill the vessel with sand and empty it again while dodging being hit by the ball that was being targeted at them by the shooters. The dodgers made points by counting the number of times that they were able to fill the vessel with soil and empty it. Any dodger that was hit came out of the playing area and became a spectator until either all the members of his team had been hit or the team managed to reach the targeted number of filled and emptied vessels. Another version of Start that the researcher observed involved the use of a big basin and a lot of empty tins and plastic bottles. The players were required to pick the tins and bottles and put them into the basin and empty it in the same way as those that used sand.

#### **4.1.9 Icidunu**

*Icidunu* is a version of hide and seek played using a ball. The ball can be an ordinary one bought from shops or a home-made ball known as *icimpombwa*. *Icimpombwa* is made out of used plastics or other suitable materials that are firmly tied together using strings. Any object, like an empty plastic bottle, was used if the children did not have a ball. This was as long as that object could be easily picked up and thrown away by the players just as they did with the ball. *Icidunu* was played by both boys and girls. A minimum of 3 participants were needed to play the game. It was played in an area which had an open space and places where the participants could run to hide. The ball was placed at the centre of the open space and kicked or thrown away by any of the players. All the participants then ran to go and hide. The first player then ran after the ball, picked it up and took it to the centre. At the centre, the player counted 1 to 10 and announced that the search for the hiding participants had started. The player thus embarked on a search for the other players. Upon locating any one of the hiding players, the first player shouted to alert the others. The searcher and the one found then

compete in running to try and pick the ball first. If the searcher picks up the ball first, the player that was located was stopped from participating as the game continued until all the hiding participants were found. While searching for the hiding players the searcher would sometimes be out of sight and away from the ball. In this case any of the hiding participants left their hiding places, picked up the ball and kicked it very far away. This was referred to as *ukucidunun* (to kick it), hence the name *icidunu*. If this happened, then all those that had been found would go back into hiding and the game started again with the same searcher. A hiding participant was declared a winner when the searcher gave up the search before locating him or her. When two teams were involved, the winning participant gained points for his or her team and gave them another chance to be the hiding team. Otherwise, the ones who were searching become the ones to hide.

#### **4.1.10 Football**

Football was the most common game that children engaged in. There was no day that the researcher visited the compounds and did not come across a child or children playing football. Most of the balls used were home-made plastic balls like the ones described under *icidunu*. The period of data collection was just a few weeks after the Zambia National Team's victory in the Africa Cup of Nations. Soccer was the talk of the day and many children wanted to identify with some of the national soccer players. Some wanted to be called "Katongo", "Mayuka" or "Mweene" as they played with the ball imitating the Zambian football heroes. The researcher came across children who played football alone, in twos as well as in groups. The football that children played did not necessarily follow the rules of adult football. The researcher noticed that the children enjoyed kicking the ball and passing it to their friends without any rules to govern how it was done. In most cases they did not even have goal posts into which they could score. In games where the players wanted to be scoring, they positioned stones or sticks to mark the goal posts. This was in cases where older children played with the preschoolers. The children played football for pleasure and not competition. Football was played by boys although a couple of times girls were found playing football in the company of boys or on their own.

#### **4.1.11 Pamutwe na Panshi (On the head and down)**

This game got its name from the actions that the children performed when playing it. *Pamutwe* means on or over the head, while *panshi* is down. This game involved passing the ball over the head or between their legs as will be described below. The game which was played by both boys and girls needed a number of children big enough to form a single file to play it. Pre-schoolers (5 and 6 years old) played this game together with older children. Apart



from the children who formed a single file, one child acted as a facilitator or referee. The child at the beginning of the single file was given a ball. At the signal of the referee, the child at the beginning of the queue passed the ball over his or her head to the second child. The second child received the ball and bending passed the ball between her legs to the child behind her. The third child received the ball and passed it over her head to the fourth child and so the game continued to the last child. Upon getting hold of the ball, the last child runs to the front of the file to go and restart the game. This game was also used for competition whereby children formed two teams. The two teams formed two separate queues and two balls were used. A referee gave the beginning signal as usual but this time also watched to see which line of children passed the ball to the end first. These were the winners of that game.

#### **4.1.12 Kankuluwale**

*Kankuluwale* was played by a minimum of two children. The game involved a song that the children sang with their hands joined to form a circle. In the song, the children would mention a particular child and give instructions as to what activity the child should perform. In this way, the players took turns as they performed those actions as follows;

*Kankuluwale, Kankuluwale ee ya ee.* (Kankuluwale, Kankuluwale. Yes! Yes!)

*Nabo ba Anne bekale panshi ee ya ee.* (Let Anne sit down. Yes! Yes!)

*Nabo ba Anne beeminine ee ya ee.* (Let Anne stand Up. yes! Yes!)

Sometimes the players swapped names. When the game song was sung players were expected to answer to the name of another player which they had taken on. This was meant to test the children's memory.

#### **4.1.13 Maceni-maceni**

Maceni-maceni is derived from the English word 'chains'. Like *Kankuluwale*, *Maceni-maceni* involved the holding of hands and forming a circle. The children treated their hands as chains that were tied together and sang the game song while they ran in a circular manner. The idea was that every player held onto the others tightly and made sure the circle did not break. If the circle was broken, those that broke it would leave the circle and the game would continue without them until only two players remained. The two remaining players were declared winners. The game song went as follows;

Maceni maceni waya waya (Chains, chains, you go, you go)

Uwaputula ewafumako (The one who cuts, goes away)

Uwawa ewafumako (The one who falls, goes away)

Kumufunako injenjele injenjele (You have to cut him/her off)

#### **4.1.14 Ranger**

Ranger was the name of the toy used to play this game. The toy is made using a bottle top and a strong string. Two holes are made in the middle of a bottle top. A strong string is then passed through the holes in such a way that they are joined at the end. A player hooked the string with the two index fingers on both hands and swung the bottle top in the same direction at a very high speed. After swinging it for some time, the player started pulling the string. When the ranger was being swung, the string got coiled and when it was pulled, the string vibrated as it uncoiled. The string was pulled in such a way that the vibrations produced a musical sound. The harder the initial swinging of the ranger, the better the sound it produced when it was pulled. It was common to find 5 to 6 year old children competing at producing good sounds with their rangers made using assorted colours of bottle tops. The children also used the different brands of bottle tops to identify their ranger. Sometimes the swinging of the ranger was accompanied by a game song as follows.

*Ranger Ranger shinguluka x2* (Ranger, Ranger rotate)

*Vu Vu Vu* (Vu Vu Vu)

#### **4.1.15 Pretend /Role Play**

Pretend play was one of the most common forms of play that was observed among the children. Children assumed different roles and acted the way they had seen those people act. The most common roles were those of parents and children. Home scenes were very common with imaginary houses being used. At times these houses were made by drawing boundaries on the ground with charcoal on a dry ground. If the ground was wet, the drawings were made using a stick. Otherwise children just heaped up stretches of sand and imagined they were walls of a house. In this way they were able to imagine a house with several rooms. In home scenes those who acted as mothers took care of house chores while fathers went to work. Children went to school or went to play with friends. Sometimes, in the pretend play, a child was sick and needed medical attention. Then someone acted as a doctor or a nurse. In this case a hospital or clinic scene was played. At times church scenes were acted out and someone played pastor or priest. Other scenes acted out were shops or the market or people shopping.

#### **4.1.16 Ukubuta/ 'Mock Cooking'**

Sometimes mock cooking was part of pretend play as referred to under section 4.2.15. However, the researcher noticed that children, especially girls, engaged in *ukubuta* or mock cooking for its own sake. Empty tins and jars were used for this purpose. Children got these

tins and jars and pretended that they were pots. They filled these vessels with soil and water then using sticks, they stirred the mixture the way they saw their mothers cooking. Sometimes younger pre-schoolers (1 to 3 years old) even ate this soil if adults were not there to stop them. They also took this 'food' to their mothers and tried to make them taste it. Some children got small amounts of actual foodstuffs from their homes and used them in their cooking. Once the researcher observed older pre-schoolers (5 and 6 years old) who had managed to start a fire and put their tins over it. A mother of one of the children put out the fire and explained that children usually got fire from their mother's braziers but ended up being burnt or burning the younger ones.

#### **4.1.17 Singing and Dancing**

One activity performed by children at play was singing. It was also common to find a lone child singing. Among the songs that children liked singing were church hymns, nursery rhymes that they had learnt from older children who went to school and sometimes songs from folktales. Church songs were mainly in Bemba while nursery rhymes were in English. One day, the researcher observed children who had formed a small choir, imitating the choir from their local church. One child stood in front of the others to imitate a choir conductor. Older preschoolers were able to sing the words of the songs clearly while younger ones would just sing anything and sometimes out of tune. Many at times the songs were accompanied by clapping and dancing. Tins and plastic containers were seen being used as drums. Sometimes children danced to music from the radio or television. Some of the children lived near bars and they danced to music from the bars and taverns.

#### **4.1.18 Story-Telling**

The researcher also observed that children told stories. The story-telling sessions were not exclusive. Usually stories were told in the midst of other types of play and they were mainly narrations of something that had happened. For instance, during a mock cooking session a 4 year old girl narrated how her father took her shopping the previous day, the beautiful shops she saw and all the goodies that they bought. She had a small packet of biscuits from the shopping to share with her friends. The researcher also listened to a 5 year old boy who was narrating to his friends how his mother took him to see the Africa Cup of Nations trophy at the show grounds. This was the trophy that the Zambia National Team had brought home after becoming African football champions. The trophy was on tour of the nation and had been taken to Kitwe Show Grounds for Kitwe residents to see. The child's mother had taken him to see this trophy. The other children did not seem tired of listening to the same story.

Once a child was heard repeating a story told to her at home. It was the Kalulu (the hare) and hyena story. As the others listened to the story, one of the listeners was busy arguing over the incorrect details because she had heard this story from her grandmother.

#### **4.1.19 Running/ Jumping**

Children often engaged in physical exercises of running and jumping. Sometimes running just involved chasing other children for fun but at times they competed against one another to see who ran faster than the other. Occasionally, boys ran with objects like old tyres that represented cars. The researcher also observed children who organised themselves and had athletics under the supervision of older children. Older children took the roles of referees who counted to signal the beginning of a race. The older children also acted as judges who decided on the winner of a particular race.

#### **4.1.20 Moulding with clay**

The researcher observed children moulding objects from clay. Younger preschoolers (3 years and below) often just played with the mud and tried to form objects that the researcher could not make out. Older preschoolers (4-6years old) were able to make objects that could be recognised. Girls often made babies while boys made cars. The girls sang as they moulded their babies.

*“chimumbwa pala noko. Pala wiso kuwama”* (Moulded object take after your mother

Take after your father’s beauty)

Some boys in the company of older ones were trying to mould images of their favourite cartoon characters like *Ben Ten* or *Scooby Doo*. Some preschoolers crushed charcoal and mixed with the soil to enhance the colour. Charcoal was also used to decorate their objects.

#### **4.1.21 Draft**

Another game that was common among older preschoolers (5 to 6 years old) was daft. This was usually played in the company of older children. However, younger preschoolers were observed using the cardboard and bottle tops and moving them trying to imitate older players of the game. This was despite lacking the knowledge of the rules of the game. The researcher observed preschoolers who were trying to imitate adults in playing the game of draft. The game which needed at least two players involved the use of bottle tops on a cardboard marked with squares. Each player used a different colour of bottle tops. To facilitate this difference, they used bottle tops from different brands of soft drinks. If one used coca cola bottle tops, the other used fanta ones. The squares on the card board were also marked in such a way that there were two different designs which corresponded diagonally. A player was

only allowed to move his bottle tops diagonally following the pattern in which his or her bottle tops were placed at the beginning of the game. A player could only move the bottle top forward or backwards across the other design if there was a bottle top on his way that he wanted to gain as a point in his favour.

#### **4.1.22 Findings from interviewing parents**

The foregoing is a list of children's games compiled based on the researcher's observation of children at play in the targeted compounds. These games were further confirmed by parents who were interviewed. Parents also added unclassified ball games and jigsaw puzzles to the list. Table 2 below presents a list of games and the number of parents who mentioned them as games played by their preschoolers. The list has been arranged in descending order beginning with the game that was mentioned by most of the parents.

**Table 2. Games & number of parents who mentioned them**

<b>Name of the game</b>	<b>Number of parents</b>
Unclassified Ball games	18
Pretend play	17
Ukubuta(Cooking)	15
Singing & Dancing	12
Ichiyenga	11
Football	11
Akabwambe	10
Inkwampa	08
Kankuluwale	08
Running & jumping	08
Moulding	08
Pada/Eagle	07
Start	06
Wider	05
Bonga	05
Cidunu	03
Draft	03
Pamutwe na Panshi	02
Maceni-Maceni	02
Story-Telling	02
Ranger	01
Jigsaw Puzzle	01

Out of 25 parents, 18 mentioned that their children played ball games. They were not able to classify them either as football, Start or any of those games involving the use of a ball. Parents said, *Balangashako na bola* which means, "they also play with the ball". These

unclassified ball games were mentioned despite parents having mentioned other ball games such as football, Start or Bonga by name. Scribbling and drawing were mentioned by 7 parents. Although scribbling does not appear on the list of the observed games and forms of play, it was observed under role play because when children played the classroom scene, they also scribbled. Jigsaw puzzles have been added to the list because despite having been mentioned by only one parent, this form of play did not appear on the list of observed games. Pretend play and pretend cooking were mentioned by 17 and 15 parents respectively. Parents explained that preschoolers copied anything that they saw an adult doing and brought it to their play in the form of role play. Similarly, children copied and sang songs from church, rhymes from school going children and Zambian popular music from public places such as markets and taverns. That is why 12 parents were able to mention that their children engaged in singing and dancing. *Inkwampa*, *Kankuluwale*, running and jumping and moulding were mentioned by 8 parents each. Eagle was mentioned by 7 parents, Start by 6 parents, Wider and Bonga by 5 parents each. *Icidunu* and draft were mentioned 3 times each while *Pamutwe na panshi*, *Maceni maceni* and storytelling were mentioned 2 times each. Ranger and Jigsaw puzzles were only mentioned once.

This section has attempted to respond to the research question that sought to establish what types of games were played by preschoolers in the targeted compounds. The conclusion from observing preschoolers at play and interviewing parents of the observed preschoolers was that the children played the games that are listed in Table 2 above.

## **4.2 Foundations of reading and writing in the games**

The second specific research question of the current research was to find out the skills, knowledge or attitudes displayed in the games played by preschoolers in the targeted compounds that could be said to be foundations of reading and writing. Following a detailed description of each observed game or form of play, guiding questions under each of the components of emergent literacy were used to aid in ascertaining the presence of emergent literacy skills in a particular game (Appendix ii). The information obtained through observations was triangulated by interviewing parents of the observed preschoolers using open-ended questions (Appendix iii). Data from observing children at play and interviewing their parents revealed that there were several skills, knowledge and attitudes that can be said to be foundations of reading and writing in the play and games that young children engaged in. This section presents results from both the observations of children at play and interviews

with parents of the observed children. As mentioned in the literature review, this study has adopted the typology by Whitehurst and Lonigan (1989) to facilitate the analysis of the games or children's play in Lambalala and Machipisha (not real names) compounds for skills, knowledge and attitudes that are precursors of literacy. The emergent literacy components based on this typology are: language, conventions of print (print awareness), emergent reading, grapheme knowledge, phonological awareness, phoneme-grapheme correspondence, emergent reading and print motivation. These emergent literacy components are used as subheadings for the findings.

#### **4.2.1 Language (Oral language and Narrative skills)**

To find out whether the games contained language skills, eight questions needed to be answered on the observation checklist (Refer to the checklist in appendix ii). The questions examined the games for:

- (a) oral communication,
- (b) use and acquisition of vocabulary,
- (c) any pretend play,
- (d) the presence of things or concepts to be named or known,
- (e) whether the language used during the game was game specific or ordinary,
- (f) aspects of storytelling,
- (g) description of things or events and
- (h) opportunity for asking and answering questions.

The researcher came up with these categories because according to the literature review they represented a child's exposure to oral language and early language experiences which are foundations for reading and writing (Gunn, Simmons & Kameenui, 1994; Montessori, 1967 cited in Woods, 2003). The findings on language skills were as presented in Table 3 below. To facilitate easy tabulation, the questions have been tagged (a) to (h) according to the letters used in the observation schedule. A tick indicates the presence of the emergent literacy skill or a positive answer to the question being posed. A cross on the other hand is an indication of the absence of that particular skill from the game being examined. Mention needs to be made here that one of the children that were observed was hearing impaired; therefore, not able to use oral language. The four years old preschooler used invented sign language to communicate with others.

**Table 3. Language Skills in the Games**

	a	b	c	d	e	f	g	h
Ichiyenga	√	√	x	√	√	x	√	√
Akabwambe	√	√	x	x	√	x	x	x
Inkwampa	√	√	x	√	√	√	√	√
Wider	√	√	x	√	√	x	x	√
Pada/Eagle	√	√	x	√	√	x	x	√
Bonga	√	√	√	√	√	x	x	√
Start	√	√	x	√	√	x	x	√
Cidunu	√	√	x	√	√	x	x	x
Football	√	√	√	√	√	x	x	x
Pamutwe na panshi	√	√	x	√	x	x	x	x
Kankuluwale	√	√	√	x	x	x	x	x
Maceni-Maceni	√	√	x	x	x	x	x	x
Ranger	√	√	x	√	x	x	x	x
Pretend Play	√	√	√	√	x	√	√	√
Ukubuta	√	√	√	√	x	x	√	√
Singing& Dancing	√	√	√	√	x	x	x	x
Storytelling	√	√	x	√	x	√	√	√
Running& Jumping	√	x	x	√	x	x	x	x
Moulding	√	√	√	√	x	x	√	√
Draft	√	√	x	√	√	x	√	√

The results as depicted in Table 3 show that as long as the preschooler was not impaired of speech, oral communication was present in almost all the games. In group play, children were always talking to each other. For example there was no way the children could play *iciyenga* without talking to one another. They first started by a discussion to decide on which game they wanted to play and the place where they were going to play. Upon agreeing on *iciyenga*, the children talked to each other as they gathered the stones for the game. During the game, the players spoke all the time as they monitored each player, as they gave each other chances to play, as they made their points as well as when they declared the winner. During the observation period, the researcher came across children who even in solitary play engaged in self talk. The second guide question required the researcher to look out for the use and acquisition of vocabulary in the games. As children spoke to each other, it gave them an opportunity to pick up vocabulary from the knowledgeable others. That is why all the games that were listed allowed for the use and acquisition of vocabulary. Findings also showed that some games involved role play within them. Pretend play and cooking was all about role play while games like football and moulding involved role play in subtle ways. Preschoolers took up roles of prominent footballers and wanted to be addressed as such. When a six year old girl was moulding a doll from mud, she called it her baby. In this way she was playing the



role of mother. Column (f) in the table illustrates that all the games with the exception of *akabwambe*, *kankuluwale* and *Maceni maceni* involved things, toys or concepts that needed naming and being known by the players. This further facilitated vocabulary acquisition. Some games involved the use of language specific to that game. For example, *nacidununa*, which meant “I have thrown it away” during *icidunu* is not the normal word for throwing it away. Similarly, what was referred to as “my house” during the game of Eagle is not a house but one of the spaces in the structure drawn for the game. The use of language that was specific to certain games also exposed preschoolers to the fact that words could have multiple meaning depending on the context. This realisation falls under semantic knowledge of language which aids comprehension in reading. Findings also revealed that some games involved storytelling or just aspects of it. Apart from narratives proper, pretend play involved a story or a description. Even by playing a particular role, the preschoolers were telling a story of someone’s life. Story telling was also found in the game songs such as those sung during *inkwampa*. More than half of the number of games that were recorded were opportunities for children to ask and answer questions.

To corroborate what was observed, parents were asked questions concerning the kind of knowledge, skills or attitudes that existed in the children’s play. Other questions inquired on the children’s use of oral language, the use and acquisition of vocabulary, storytelling, singing, descriptions. The researcher also wanted to find out from parents whether children were able to ask and answer questions as they played. The parents’ responses revealed that oral language was prominent in the children’s play. All the interviewed parents (except the one with the hearing impaired child) mentioned that their children used oral language either as self-talk or as a way of communicating with the other children during play. Parents explained that almost all games played with other children involved talking. Five parents noted that their children talked more in the company of other children during play than with adults or at any other time. Parents mentioned that younger preschoolers learnt new concepts from parents, guardians or other members of the family by listening to them speaking and trying to imitate and repeat what they heard. The mother to the twins (1year and 8 months) who were just learning to speak explained that the preschoolers copied and tried to say whatever they heard. The duo made repetition of those words as part of their play. She said that lately her sons had been imitating the Chipolopolo (the Zambia Soccer Team) praise songs which were popular since the team’s victory in the Africa Cup of Nations. Although they could not sing the songs, the children were able to repeat some of the words very clearly.

The mother also explained that her children also repeated words from nursery rhymes sang by a neighbour's school going children who usually played with the twins.

According to the parents, children learnt and used language in almost all the games and play as they had to communicate with their playmates. They explained that all the games which involved talking to the other players were opportunities for using and acquiring oral language. However, pretend play was cited by parents as a form of play which allowed for a lot of vocabulary acquisition and use. Twenty parents mentioned that their children learnt a lot of new vocabulary from their friends during pretend play. This was because they played different roles such as mother, father, teacher, doctor or pastor. Even very young preschoolers were co-opted in to play the role of children or babies. The role players needed to learn the vocabulary fit for the roles they played. As they played, other children with them also learnt the vocabulary. Parents also mentioned that during pretend play children acted out different situations. Some situations were imitations of real life situations that the children had witnessed while others were created using the children's imagination. Some parents observed that often times they were faced with situations where they had to stop their children from using bad language that they had picked up from different situations. One mother explained how her 3 year old preschooler sat on the arm of a chair and pretended it was a minibus. He then started playing the role of the bus conductor and started acting out a scene he had witnessed on the bus where the conductor was insulting one of the female passengers. Similarly, another parent mentioned that her 6 year old son picked up a lot of vocabulary from the music played at a nearby tavern and sometimes she did not approve of the songs that were played there.

Among the situations that the children acted out in pretend play was the classroom scene. Usually, an older child gathered the preschoolers together and acting as a teacher, taught the young ones what the former had learnt at school. Among these lessons was singing or saying the letters of the alphabet and counting. Preschoolers also learnt nursery rhymes from such play.

Parents also observed that their children were always reporting what they were doing or what had happened in the absence of their parents. This was a form of storytelling. Parents of older preschoolers explained that their children were able to narrate and describe their experiences as they played with their friends.

The major findings in this section were that children used oral language at play either as self-talk or as a means of communication with colleagues during play with others. Younger children used imitation to acquire more vocabulary. At times children who were knowledgeable taught others language during pretend play. In this way preschoolers learnt a lot of vocabulary from other children during play. During pretend play, preschoolers also learnt the language used by the people whose roles they played. They were able to move from the level of just using isolated words to producing extended talk. They learnt how to construct sentences and explained procedures. The older preschoolers were able to hold conversations.

#### **4.2.2 Conventions of Print (Print awareness)**

To establish whether a game contained any conventions of print, six guiding questions were used. (Refer to item 8 on the observation schedule in appendix ii) These questions were arrived at considering that conventions of print entailed knowledge of standard print concepts like writing or reading from left to right and front to back orientation (Whitehurst and Lonigan, 1998). The questions inquired upon:

- (a) whether any environmental print was used or referred to during the game,
- (b) the use of any form of print during the game,
- (c) whether the game fostered the learning of any standard print format,
- (d) whether the game required any logical thinking,
- (e) any pattern recognition
- (f) any colour matching.

These skills have also been coded using the letters (a) to (f) as they appeared in the observation schedule and also above. The findings are as in Table 4 below.

**Table 4. Conventions of Print in the Games**

	a	b	c	d	e	f
Ichiyenga	x	x	√	√	√	x
Akabwambe	x	x	x	x	x	x
Inkwampa	x	x	x	x	x	x
Wider	x	x	x	√	√	x
Pada/Eagle	x	x	√	√	√	x
Bonga	x	x	√	√	√	x
Start	√	x	x	√	√	x
Cidunu	x	x	x	x	x	x
Football	x	x	x	√	x	√
Pamutwe na panshi	x	x	x	√	√	x
Kankuluwale	x	x	√	√	√	x
Maceni-Maceni	x	x	√	√	√	x
Ranger	√	x	x	x	√	x
Pretend Play	√	√	√	√	√	√
Ukubuta	x	x	x	√	x	x
Singing& Dancing	x	x	x	x	√	x
Storytelling	x	x	x	x	√	x
Running& Jumping	√	x	x	x	√	x
Moulding	√	x	x	√	√	√
Draft	x	√	√	√	√	√

The table shows more crosses than ticks. This is an indication that the games the children play in the targeted compounds do not have much in terms of conventions of print. However, pretend play is depicted as being rich in conventions of print or the promotion of print awareness among the observed preschoolers. The researcher observed at least one aspect of conventions of print in all the games except in *akabwambe* and *inkwampa*. Games like Eagle (Pada) and Bonga which involved drawing structures on the ground and following a certain direction or sequence exposed children to the notion of directionality in print. Without necessarily using print, those games that involved the mastery of patterns also prepared the children for pattern recognition which is related to reading.

To add to what was observed, the parents' answers to the questions related to this theme on the interview schedule also revealed the presence of conventions of print in the children's play. Asked to name the kinds of print found in their homes, the calendar was the most common. Of the 25 parents, 22 had a calendar in their house. Other forms were the labels on packets, tins and bottles of food and groceries in the home, the bible, books, magazines and newspapers for older members of the family. When parents were asked to name the environmental print that children used or referred to during games, they mentioned labels on these packets, tins and bottles as the most common because children used the empty

containers as toys. Four parents also mentioned money as a form of print that their children played with. These parents explained that their children asked for small denominations of money which they used during pretend play. A few mentioned billboards that the children used as targets when they were doing athletics.

Findings also revealed that 11 parents bought books for their preschoolers. The rest did not. When asked whether their children engaged in games that involved books or literature, parents mentioned pretend reading, the use of picture stories, scribbling, drawing and colouring. To this question, one parent said that her sons enjoyed tearing pages from books.

One question required parents to explain how any of the games that children played fostered the learning of any standard print format. Correct turning of pages of a book during pretend reading and imitating adult readers were given as answers to this question. Parents explained that these practices helped children to develop a sense of directionality of reading. Games like *Eagle*, *Bonga* and *Iciyenga* that required drawing a structure on the ground also fostered standard print format. The use of different brands of bottle tops in games of Draft and Ranger involved pattern recognition and colour matching.

The last question in this part of the interview schedule sought to find out the games that older children played with preschoolers to aid the development of reading and writing skills. Pretend play that involved the classroom scene was the most common answer. Most parents said *Nga baleebafunda ifya kusukulu*. This literally means, “When they teach them things of school”. Asked to give examples of 'things of school', parents named reciting the alphabet: A for Apple, B for ball and so on, drawing, tracing from dotted letters, simple counting and writing. Children who went to school brought their old books to the pretend play class. One parent explained that her daughter was taught how to write her name by a neighbour's child during such pretend play. Similarly a grandparent said that her grandson had learnt to write his name from pretend play classes.

In summary, the main findings in this section were that there was evidence of conventions of print in some of the games that children played in the targeted compounds. Labels on packages of food and groceries were the most common because children used empty packets and containers during play. They also came into contact with books during pretend play that involved classroom scenes. Games that involved drawings or writings on the floor also promoted a kind of print format that prepared preschoolers for standard print formats and

directionality of print. Nevertheless, most of the games that the children played did not involve conventions of print.

#### 4.2.3 Emergent Reading

The researcher also looked out for aspects of emergent reading in the games that were observed. One guiding question was used to aid the observation of this phenomenon. The question inquired on the presence of emergent reading in the games. Children display emergent reading by pretending to read silently or loudly and reading environmental print (Whitehurst & Lonigan, 1998). Table 5 below shows the games and whether or not each game involves any emergent reading.

**Table 5. Emergent Reading in the Games**

	a
Ichiyenga	x
Akabwambe	x
Inkwampa	x
Wider	x
Pada/Eagle	√
Bonga	√
Start	x
Cidunu	x
Football	x
Pamutwe na panshi	x
Kankuluwale	x
Maceni-Maceni	x
Ranger	x
Pretend Play	√
Ukubuta	√
Singing& Dancing	x
Storytelling	x
Running& Jumping	x
Moulding	x
Draft	√

Seen from the few ticks in Table 5, findings revealed that very few of the games that were observed showed the presence of emergent reading. To play Eagle (Pada), Bonga and Draft one needed to understand the structures that were drawn for the purpose. This entailed a kind of decoding of the symbols and structures used. This was a kind of reading which qualified to be called emergent reading. To play Bonga, preschoolers often used structures drawn by older children. In this case the circles used as resting places or places of refuge during the

game bore names of cities or countries. Young children were exposed to these writings and pretended to read these names because they had heard older children mentioning them. Most of the emergent reading was displayed in pretend reading during pretend play and pretend cooking. Sometimes these young children brought out old newspapers, magazines and books and imitated adults whom they had seen reading. The pretend reading was sometimes done quietly while turning the pages of a book while at other times a child pretended to read loudly. At times an older child played teacher and taught other children the basics of reading like how to hold a book and turn the pages correctly.

Parents were asked to identify foundations of reading in the games that children played. They were also asked whether they read in the presence of the child and to the child. To answer the question on the foundations of reading, 11 parents mentioned pretend reading. They said that their children were able to handle a book, magazine or newspaper and pretend to be reading. This would happen during pretend play or at home when they saw older people reading. One parent was quick to mention that her 4 years and 6 months old child had already started recognising the first letter of her name. Whenever she saw the letter 'c' she would exclaim, *icayambila kwi shina lyandi!* Which means, "That which begins my name". The correct turning of pages was mentioned by 10 parents, 3 parents mentioned the children's ability to sing or say the alphabet while 2 parents saw the liking for books as a foundation for reading. One parent expressed that her child's ability to speak English was also a foundation for reading.

From the above presented information, the researcher concluded that pretend reading was present in some games that preschoolers played. Children were able to handle a book, magazine or news paper, turn the pages correctly and imitate adults when they saw them reading at home. During games like Bonga which involved names of countries or cities written on the drawings, children depended on their memory and pretended to read by repeating what they heard older children read. Children could also recognise the shapes and refer to them in other contexts when they came across them. Moreover those structures needed to be understood for the player to be able to play the game. This was a kind of reading.

#### **4.2.4 Knowledge of Graphemes**

A grapheme is a written symbol or a letter. Examples of graphemes are letters of the alphabet. Grapheme knowledge entails knowing the names of letters. A guiding question was posed to

find out whether children are exposed to the alphabet or any individual letters (Grapheme Knowledge). Table 6 below shows the games that enhance knowledge of graphemes.

**Table 6. Knowledge of Graphemes in the games**

	a
Ichiyenga	x
Akabwambe	x
Inkwampa	√
Wider	x
Pada/Eagle	x
Bonga	√
Start	x
Cidunu	x
Football	x
Pamutwe na panshi	x
Kankuluwale	x
Maceni-Maceni	x
Ranger	x
Pretend Play	√
Ukubuta	x
Singing& Dancing	√
Storytelling	x
Running& Jumping	x
Moulding	x
Draft	√

As can be seen from Table 6, most games did not expose the preschoolers to the alphabet. In the company of children who were able to write, the circles in the game of Bonga were labelled with names of cities or countries. These exposed children to the letters of the alphabet. Otherwise the observed preschoolers met the letters of the alphabet in the alphabet song that was sung on its own or as an accompaniment for games like *inkwampa*. They also learnt the during the pretend play classroom scene.

Responses from parents revealed that at least half of the observed children were exposed to the letters of the alphabet during play. They also confirmed that their children sang the alphabet song. One parent explained that her child would eventually learn to read the letters of the alphabet that she sang.

The main findings in this section were that although most games did not expose preschoolers to the letters of the alphabet, more than half the preschoolers under observation were already



exposed to it through the alphabet song. Games like Bonga also exposed writings that had the letters of the alphabet.

#### 4.2.5 Phonological Awareness/ Sensitivity

Phonological awareness involves understanding that words are made up of smaller sounds like syllables and phonemes (Whitehurst and Lonigan, 1998). To find out whether the games involved any phonological awareness, two questions were asked. The questions were intended to find out (a) whether children sang or used songs as part of the game and (b) whether the game involved the use of sounds in rhymes, alliteration or tongue twisters. The findings are presented in Table 7 as follows:

**Table 7. Phonological Awareness in the games**

	a	b
Ichiyenga	x	x
Akabwambe	x	x
Inkwampa	√	√
Wider	x	x
Pada/Eagle	√	x
Bonga	x	x
Start	x	x
Cidunu	x	x
Football	x	x
Pamutwe na panshi	x	x
Kankuluwale	√	√
Maceni-Maceni	√	√
Ranger	√	√
Pretend Play	√	√
Ukubuta	x	x
Singing& Dancing	√	√
Storytelling	√	√
Running& Jumping	x	x
Moulding	√	x
Draft	x	x

All the games that involved singing brought the preschoolers into contact with sounds in rhymes, alliteration and rarely with tongue twisters. Nursery rhymes fostered the development of phonological awareness because they are specifically composed to stress certain sounds for children to learn words.

The responses from parents who were interviewed confirmed what was observed. The first question was on what songs preschoolers sang and whether those songs had a bearing on the

children's eventual learning of reading. All the parents mentioned one form of music that their child engaged in. Three parents explained that although their young children were not able to sing complete songs, they were able to mention some words and sing part of the tune. Gospel music and the alphabet song topped the list with each of these two types being mentioned by 15 parents. Secular or Zambian Music was mentioned by 12 parents, football music by 7 parents and rhymes by 4 parents. Game songs and the national anthem were mentioned by 1 parent each. The second question was an inquiry into whether children played games that involved the use of sound in rhymes, alliteration or tongue twisters. About 10 parents were positive about their children's use of sound in rhymes, alliteration or tongue twisters

Findings in this section are that the different kinds of songs that the children sang exposed them to phonological awareness. Rhymes were predominant in this regard due to the way they are composed.

#### **4.2.6 Phoneme-Grapheme Correspondence**

Phoneme- Grapheme correspondence involves the association between sounds and letters. To find out the presence of these skills in the games that children played, two questions were posed. The first (a) was meant to ascertain whether the game exposed the children to the correspondence between sounds and letters while the second (b) was to check whether the games involved the decoding of game specific words. The questions are coded (a) and (b) in the Table 8 (below) which has been used to present the findings. The findings under this section showed that most games that preschoolers played in the targeted compounds did not expose them to the phoneme- grapheme correspondence. This emergent literacy skill was only found present when children sang the alphabet song or recited the 'A for Apple' , 'B for Ball' and so on sequence. From what has been recorded in Table 8 below, only three games involved the decoding of pseudo words. These are *iciyenga*, *Kankuluwale* and pretend play.

To corroborate the above data, the researcher asked parents what games exposed their children to the correspondence between sounds and letters. Although many parents found it difficult to answer this question, 12 parents cited the recitation of the alphabet and children's attempts to write them down as the presence of phoneme-grapheme correspondence. Two parents mentioned that their children were able to spell and write down their names. The second question which asked the parents to identify the decoding of game specific words in some games was only answered by one parent. Game specific words were words that children

may have used in their play which were not necessarily real words or words used in a very different way from the way they are used by other people in society. Only one parent pointed out that her child, like any other children, had her own language and names of things that she used at play.

**Table 8. Phoneme-Grapheme Correspondence in the Games**

	a	b
Ichiyenga	x	√
Akabwambe	x	x
Inkwampa	x	x
Wider	x	x
Pada/Eagle	x	x
Bonga	x	x
Start	x	x
Cidunu	x	x
Football	x	x
Pamutwe na panshi	x	x
Kankuluwale	x	√
Maceni-Maceni	x	x
Ranger	x	x
Pretend Play	√	√
Ukubuta	x	x
Singing& Dancing	√	x
Storytelling	x	x
Running& Jumping	x	x
Moulding	x	x
Draft	x	x

The major findings from the above data were that phoneme-grapheme correspondence was not very common in the games that these children played. Only pretend play and singing that involved the letters of the alphabet exposed preschoolers to the phoneme-grapheme correspondence. The use of game specific words was only found in three games.

#### **4.2.7 Emergent Writing**

Emergent writing involves behaviour and practices that a preschooler engages in which are precursors to writing. To investigate such practices in the games that children play, four questions were asked. The questions inquired whether:

- (a) the games involved any manipulation of objects with fingers.
- (b) the game involved assembling, or dismantling objects.
- (c) the children were exposed to writing objects like pencils, crayons and paper.

(d) the players engaged in any form of writing, scribbling or drawing.

These questions are coded using the same letters and the responses are presented in Table 9 below.

**Table 9. Emergent Writing in the Games**

	a	b	c	d
Ichiyenga	√	x	√	x
Akabwambe	x	x	x	x
Inkwampa	√	x	x	x
Wider	√	x	x	x
Pada/Eagle	√	x	√	√
Bonga	x	x	√	x
Start	√	√	x	x
Cidunu	x	x	x	x
Football	x	x	x	x
Pamutwe na panshi	√	x	x	x
Kankuluwale	x	x	x	x
Maceni-Maceni	x	x	x	x
Ranger	√	x	x	x
Pretend Play	√	√	√	√
Ukubuta	√	x	x	x
Singing& Dancing	x	x	x	x
Storytelling	x	x	x	x
Running& Jumping	x	x	x	x
Moulding	√	√	x	x
Draft	√	x	x	x

Findings on emergent writing revealed that about half of the games that were recorded involved the manipulation of things with fingers. Although the manipulation of such objects may not necessarily mean writing, the practices aid in preparing preschoolers to handle writing materials when they start learning how to write. The same is true for making, assembling and dismantling objects although only three games had that aspect in them. Findings also showed that only four games exposed preschoolers to writing objects like pencils, crayons, paper or slates. Apart from pretend writing which is part of pretend play, only *Pada* actually engaged children in any form of writing, scribbling or drawing.

During interviews, the first question asked parents to identify skills that were foundations of writing in the games played by children. Scribbling was mentioned by 23 parents while 7 mentioned drawing. Correct handling of pencils was mentioned by 3 parents, writing of one's

name was mentioned by 3 parents and wanting to own a book and a pencil was mentioned by 2 parents.

Parents were also asked to name the games that involved the manipulation of objects with fingers. Scribbling was mentioned by 19 parents while 15 mentioned pretend cooking. *Iciyenga* and playing with toy cars were mentioned by 4 parents each. Two parents mentioned Draft and colouring. Role play and Eagle were only mentioned by 1 parent each.

Another question that was asked required parents to name the games that involved making, assembling or dismantling objects. Ten parents mentioned moulding, 4 named hammering at objects. Three parents mentioned that their children always opened up their toys to see what was inside. Making toy cars was mentioned by 3 parents while making a playing house and making a ball were mentioned once each.

Parents were also asked whether their children were exposed to any writing objects like pencils, crayons and paper and whether they engaged in any form of writing, scribbling or drawing. The findings were that 24 preschoolers were exposed to pencils, crayons and paper and the same number of children also engaged in some form of writing, scribbling or drawing.

The major findings derived from the above data indicate that scribbling forms the greater part of emergent writing in the preschoolers play in the selected compounds. However, only few games exposed children to writing materials like pencils. Other findings are that although some games do not directly involve writing, they involve the manipulation of objects with fingers which aid in preparing preschoolers to handle writing materials when they start learning how to write.

#### **4.2.8 Print motivation**

Print motivation refers to children's interest in reading and writing activities. This interest is relative. As a result of this motivation, children make attempts to develop an understanding of print (Whitehurst and Lonigan (1998). This section wanted to establish whether children displayed print motivation in their play.

Most of the games that children played did not involve reading or writing. As a result, they were not opportunities for the researcher to check for the presence of the children's interest in reading and writing. However, the researcher observed that very young children were always curious about any object they saw and wanted to get it and explore it. In the same way, these

young preschoolers grabbed and played with any literacy item that they came across. This was more so they saw other people around them reading or writing. It was very common for the younger children being observed to leave their play as soon as they saw the researcher writing so that they could grab the pen and write like her. Many of those aged three and below wanted to get the pen from the researcher so that they could also write. The researcher also came across children who occupied themselves by scribbling or drawing things on the ground with their finger or with an object. The children's interest in singing nursery rhymes and the alphabet song also showed their interest in print.

These facts about print motivation were confirmed by parents when they pointed out that children became interested in reading or writing when they saw their parents or older siblings writing or reading. A few parents explained that they did not read in the presence of their preschoolers because the children always wanted to grab the books from them and read as well. Other parents mentioned that their preschoolers always wanted their own books and pencils whenever they saw their siblings doing homework. One studying mother pointed out that she was forced to buy exercise books and pencils for her two preschoolers and always gave them tasks like dotted lines to do in order to keep them from disturbing her studies. Some parents also mentioned that their children enjoyed scribbling on the ground and say that they are writing.

Findings in this section are that print motivation is seen in children's play when they want to imitate other people's reading or writing and to use books and pencils as they play. The children's desire to own and use books in pretend play is also an example of print motivation. Scribbling and drawing also show children's interest in writing.

### **4.3 Foundations of numeracy in the games**

Research question number three in this study sought to establish the skills, knowledge and attitudes displayed in the games that children played which could be said to be foundations of numeracy. In answering this question, the researcher looked out for any use of counting, estimation process, number pattern facility and logical thinking in the games.

These skills have been coded as follows:

- (a) of counting
- (b) estimation process
- (c) number pattern facility

(d) logical thinking

The findings from the observations are presented in Table 10 below.

**Table 10. Emergent Numeracy in the Games**

	a	b	c	d
Ichiyenga	√	√	√	√
Akabwambe	√	x	x	x
Inkwampa	√	√	√	√
Wider	√	√	x	√
Pada/Eagle	√	√	√	√
Bonga	√	√	√	√
Start	√	√	√	√
Cidunu	√	√	x	√
Football	√	√	x	√
Pamutwe na panshi	√	√	x	√
Kankuluwale	x	x	x	√
Maceni-Maceni	x	x	x	√
Ranger	√	√	x	x
Pretend Play	√	√	√	√
Ukubuta	x	√	x	√
Singing& Dancing	√	√	x	x
Storytelling	x	x	x	x
Running& Jumping	√	x	x	x
Moulding	x	√	x	x
Draft	√	√	x	√

Out of the 25 games that were recorded, 15 involved counting either for its own sake during the game or as a way of keeping a record of the points that the players made as they played games that involved competition. Children counted the stones during *iciyenga*, they counted each other to form teams during games that required teams or money during pretend play and so on. Another finding was that also 15 of the games that were observed involved an estimation process. Children needed to estimate to play games like *inkwampa* where they had to estimate the height of the rope as they jumped over it, or estimating the distance between different compartments on the Eagle or *Pada* structure and the height that the *ichanto* should go for a player to be able to scoop the *abana* in and out during *iciyenga*. Those that involved a number pattern facility were 6 out of the 20 games that were recorded. The researcher also found out that 14 of the recorded games required the players to think ahead, logically or critically. For example, to play draft one needed to think ahead and calculate a move. Logical and critical thinking was also necessary for a player of *Pamutwe na panshi* to know whether the ball is to be thrown over the head or down in between the legs.

Similarly, the interview of parents included questions that required them to identify games that involved counting, an estimation process, or a number pattern facility. They were also asked questions that helped to identify play or games that required the players to think ahead, logically or critically. Table 11 below shows the games that involved counting and how many parents mentioned them.

**Table 11. Games involving counting & how many parents mentioned them.**

Play involving counting	Number of parents
Iciyenga	11
Unclassified ball games	11
Counting for its own sake	8
Start	8
Skipping	5
Bonga	3
Counting songs	2
Eagle	1

The interviewed parents found it difficult to answer the last part of the interview. The last three questions were only answered by about 14, 7 and 6 parents respectively.

**Table 12. Games involving estimation process & how many parents mentioned them**

Play involving estimation process	Number of parents
Eagle	5
skipping	3
Bonga	2
puzzles	1
wide	1
iciyenga	1
draft	1

Asked to name games that made use of a number pattern, 3 parents mentioned counting; *iciyenga* was mentioned by 2 parents, counting songs by 1 parent. One parent said that all the games that involved counting used a number pattern facility. Two parents said that those that required thinking ahead, logically or critically were many without mentioning them. Other parents mentioned *iciyenga* 2, Bonga 1, and Draft 1.



Based on the data collected in this section, the researcher concluded that children's games in the targeted compounds were rich in emergent numeracy. Most games involved counting either as part of the game or as a way of recording the points that the players made during the game. A few required the estimation process; a few others had a number pattern facility or involved thinking ahead, logically or critically.

#### **4.4 Summary of Chapter four**

This chapter has presented findings from the study of emergent literacy skills in preschoolers' games or play in two selected compounds in Kitwe. For each section, the researcher has presented information obtained through observing children at play and from interviewing the parents of the observed children. Based on the data from these two sources, the researcher has then drawn conclusions that have been presented as findings for this research. These findings include a list of the games (described in detail) that are played in the targeted compounds and an analysis of these games for skills, knowledge and attitudes that can be said to be precursors of literacy and numeracy. The presence of emergent literacy skills, knowledge and attitudes in the games that children play is consistent with the assertion by Hodgskiss (2007) which states that literacy development experienced by young children is embedded in some activity that goes beyond the goal of literacy itself Hodgskiss (2007:12). The chapter that follows will discuss these findings and relate them to the literature review.

## **CHAPTER FIVE: DISCUSSION OF FINDINGS**

### **5.0 Introduction**

This chapter discusses findings that have been presented in chapter four above. The findings are related to emergent literacy in children's play in two compounds in Kitwe. This chapter will relate the findings of the study to the existing literature, emergent literacy theories and practice. The discussion is presented thematically in line with research objectives. Therefore, the objectives will be the titles under which the major findings of the study will be discussed. The objectives of the study were to establish:

- (i) the types of games that young children play in the targeted compounds.
- (ii) the skills, knowledge or attitudes that can be said to be foundations of reading and writing (literacy) in the games.
- (iii) the skills, knowledge or attitudes that can be said to be foundations of numeracy in the games.

### **5.1. Findings on the types of games that young children play in the targeted compounds**

The findings presented in chapter four above indicate that preschoolers in the two selected compounds of Kitwe engaged in a lot of games or forms of play. The researcher observed that the targeted children played all the time except when they were sick or asleep. This observation corroborates Bruner (1975)'s assertion that play is the principal business of the children (Gander and Gardiner, 1981:83). The following is the list of games that were identified and have been described in detail in chapter four above.

- |             |                          |                           |
|-------------|--------------------------|---------------------------|
| • Ichiyenga | • Pamutwe na panshi      | • Singing and Dancing     |
| • Akabwambe | • Kankuluwale            | • Story-Telling           |
| • Inkwampa, | • Maceni-maceni          | • Running and Jumping     |
| • Wider     | • Ranger                 | • Moulding                |
| • Eagle     | • Pretend or Role - play | • Draft                   |
| • Bonga     | • Ukubuta                | • Unclassified ball games |
| • Start     | • Jigsaw puzzles         |                           |
| • Cidunu    |                          |                           |
| • Football  |                          |                           |

### 5.1.1 Exploratory Vs Rule-governed play

The study has further established that the games played by children in the targeted area were both exploratory as well as rule governed ones (Gardner, 1978:231). Exploratory play did not involve the use of rules but children played freely while seeking out new information. For instance, when children were pretending to cook, there were no specific rules to follow. There were no rules that governed the kind of vessel a child used or what he or she cooked. Preschoolers just picked up little tins, sticks, any kind of food or what resembled food and pretended to cook.

Another example of exploratory play was when younger children played with toys or other objects. The young preschoolers were often curious to see what was inside the object or would put it into their mouth and try to eat it. Rule governed play, on the other hand, involved following the rules of the games or whatever activity they engaged in. When children played games like *icidunu*, *iciyenga*, *Bonga* and *inkwampa*, they had rules to follow. Players often agreed on the rules of the game or set their own rules before playing such games. Adherence to the rules was necessary for a player to continue playing or to gain points. All preschoolers played games to explore or satisfy their curiosity in many cases but older ones also played using the rules of the games. Often rule governed play also involved a kind of competition that gave rise to a winner and a loser at the end. In many cases team work was also characteristic of play that involved competition. For example, when playing with the home made ball, a boy who was 1 year and 10 months old kicked the ball, picked it up in his hands and started pulling it apart to find out what was inside. When the same ball was later taken by two six year old boys, they picked up four stones and positioned them to make goal posts. Then they started playing football. Eventually, a couple of other boys came and joined the two players. Two teams (A and B) of two each were formed and an interesting game of football was played. At the end, there was a 3-0 victory in favour of team A. This example also shows that play varied according to the age of the players.

A further elaboration of the relationship between age and play is that younger preschoolers imitated any song that they heard others singing without even knowing what they were singing. They did not even mind how they sang it. A good illustration of this aspect is that of the twins aged 1 year and 8 months who repeated words and phrases from the Chipolopolo (Zambian National Soccer Team) praise songs and sang along without a clear sequence or tune. These young children used songs to learn new words. Older preschoolers learnt the

words and the tunes of songs. They were also able to distinguish one type of song to another and sang accordingly. For example, children showed reverence when they sang church songs than when they recited nursery rhymes or when they sang and danced to music from the nearby tavern.

### **5.1.2 Davidson's Types of Play**

The games that children played in the targeted area were consistent with the types of play suggested by Davidson (1996). These are: sensory pleasure, play with motion, rough and tumble play, language play, dramatic play and modelling, constructive play, play with games and rituals competitive play (Davidson, 1996:283).

As the children played, they saw different things in their environment which included themselves, their playmates, toys and other things that they used. The children were also able to smell what they played with. As young children put different play objects in their mouths, they used their sense of taste and were able to learn that toys were not edible. Children also tasted what they cooked. To learn the songs that they sang with their friends children used their sense of hearing. Sometimes preschoolers just derived pleasure from listening to themselves repeating the sounds of words, phrases or mere sounds in a song. This was sensory experience which exposed preschoolers to facts about their bodies, senses and qualities of things in the environment. Many games involved movement of some kind. *Ichiyenga* involved moving *ichanto* and *abana*; *akabwambe* involved running to dodge being touched; *inkwampa* involved jumping up and down. This was playing with motion which is the second type in Davidson's classification of children's games. Sometimes the motions that children made in their play involved pushing and pulling each other or imitating games like wrestling, boxing, judo or karate. This kind of play was an example of the rough and tumble play.

Language was found in all games that involved speaking. Nursery rhymes and other songs can be classified under language play because they afforded children an opportunity to play with words. The same can be said of instances when very young preschoolers played with new words by repeating them and seemed to enjoy listening to the sounds of the parts of those words. Pretend play and *ukubuta* that have been described among the games played belong to dramatic play and modelling. And so do all the imitations that children engaged in as they played. When children made play houses, toy cars or moulded babies, they were

engaged in constructive play. At five or six, preschoolers showed competence in following the rules and rituals of games like *icidunu*, Start, Eagle and *Bonga*. They were even able to handle competition in the games.

However, the above types of games were not rigidly distinct in the children's play because they overlapped in different situations. One game or form of play could combine two or several of Davidson's types of play. For instance, children who were playing Start with soil derived sensory pleasure from feeling the soil with their fingers but their play was also play with motion as they packed the soil into the game vessel and emptied it. They also ran up and down to dodge the ball. During pretend play, the children were engaged in dramatic play and modelling but the games could be rough and tumble play if they were imitating their favourite boxers or wrestlers or play with motion if they were moving a toy. Pretend play also involved a lot of sensory pleasure as children used their senses to see, smell, hear, touch and taste. The researcher agrees that the games that preschoolers played were able to promote the growth of sensory capacities and physical skills while at the same time provided endless opportunities to exercise and expand the newly acquired skills (Davidson, 1996:281).

### **5.1.3 Age in Play**

As earlier mentioned under exploratory and rule-governed play, play varied according to the age of the players. In the same vein, preschoolers displayed a variety of behaviour during play depending on their age. These behaviours during play were in line with Parten's categories of play (Santrock, 1988: 315). The amount of social interaction during play increased with age. As children advanced in age, non-social play gave way to social play. Younger preschoolers (3 years and below) were seen playing alone without playmates while others played alongside each other without necessarily playing the same game. These two ways of play corresponded with Parten (1932)'s solitary and parallel play respectively. Younger preschoolers usually engaged in solitary play where they played alone or onlooker play as they watched their older siblings at play. Older children (5 and 6 years old) often played with other children of the same age and even those who were older than them. Rarely did these preschoolers play with their parents. Question 9 on the interview guide asked parents whether there were games that they played with their preschooler. In response, 6 parents clearly stated that they could not engage in games for children. Besides, their children had friends and other siblings to play with. Sometimes older preschoolers showed responsibility towards their younger counterparts and acted as mentors or initiators in many

games. Younger ones learnt the games or forms of play through imitation but sometimes they were taught by the older preschoolers. The researcher's findings are consistent with Serpell (2011) who explains that age-mates and older children are generally more legitimate participants in preschool age children's play than parents.

Older preschoolers also played games that involved teams and competition. Sometimes these were in the company of school going children, especially siblings.

#### **5.1.4 Gender and Culture in Children's play**

Although gender was not an issue with younger preschoolers, older ones displayed a sense of gender differences and played in clusters of the same gender. Five and six year old girls did not like the idea of playing with boys. One girl (5year old girl) was quoted sending her 3 year old brother away saying '*Ifwe tatwangala na baume*' which means, 'We do not play with boys'. In the same line of gender, the researcher noticed that the community instilled a sense of gender differences into the young very early in life. Girls mainly played *ichiyenga*, *Wider*, *Start* and other games that were thought to be forms of play for girls. On one occasion the researcher found a five year old girl playing football with her 7 year old brother and his friends. The girl's mother scolded and stopped her daughter. When the researcher wanted to know the reason for stopping the child from playing the game, she was told that football was for boys. This also shows the influence of culture on children's play. Apart from determining what kinds of games were played by what gender, culture also determined what toys were suitable for girls and not boys and vice versa. Girls were given dolls while boys got toy cars and animals. Even when they moulded toys from clay, girls made babies while boys made cars, motor cycles, cows and dogs. While five and six year old boys were allowed to play a few houses away from their homes, girls were always watched by their mothers to ensure that the latter knew where their girl preschooler was playing at all times. One mother was heard complaining how her five year old daughter liked playing away from home like a boy. Girls were also discouraged from playing the rough and tumble play.

#### **5.1.5 Socio-Economic Status (SES) and Play**

Out of the 25 parents that were interviewed, only two had gone beyond the Grade 12 level of education. While 5 went up to Grade 12 and 10 ended in Grade 9, the rest of the parents did not go beyond Grade 7. Apart from their level of education, the social economic status (SES) of these parents could be judged from the kind of jobs they did, the kind of structures they lived in, as well as what they had in terms of furniture and other items in and around the

house (Dickinson & Neuman 2006). Since the interviews took place in the homes of the preschoolers, the researcher also noted an absence of literacy related items such as books, radios and television sets in most homes. The presence of such items would have contributed a lot to the creation of a literacy rich environment which is necessary for emergent literacy development. As explained in the description of the study site in chapter three, the two compounds were not planned for by the town planners. They have poor infrastructure and limited social services. All the above mentioned factors are indications of a low SES.

This study established that the low SES of the parents determined the type and number of toys that could be made available to the children. Preschoolers in the targeted compounds had very few toys. Most of them did not even have any toy specifically bought for them. They either used those of playmates or had improvised ones. For example one child carried an empty plastic bottle on her back like a baby because she had no doll to use. Out of all the children that were observed, only 3 had real balls. The rest used home-made balls made of used plastic bags tied together by a string. Only one child had a jigsaw puzzle. Asked how the toys availed to their preschooler assisted in the child's learning of language, most parents answered that their children were not given any toys because they did not have money to buy them. Failure to get toys for the children is attributed to the parents' SES. Had the parents of the observed children been economically better off, they would have provided a variety of toys and children's games for their children. Lack of toys and children's games limited the literacy environment at the disposal of these children.

The low SES also partly explained the parents' failure to play with their preschoolers. This was because they were too busy trying to make ends meet. Many of them came home late and very tired after their work as domestic servants. Others spent part of their day in their vegetable gardens or looking for vegetables that they later sold on the streets of Kitwe town. They had very little time with their children.

In summary, this section has discussed the kind of games played by preschoolers in the targeted compounds. It has also presented age and gender of the children, culture and the SES of parents as factors that determine the kind of games played by preschoolers in the targeted compounds.

## **5.2 Findings on the skills, knowledge or attitudes that can be said to be foundations of reading and writing (literacy) in the games.**

In this section, the researcher discusses the findings of the study pertaining to skills, knowledge or attitudes that can be said to be foundations of reading and writing in the games played by preschoolers in the targeted compounds. As mentioned in the literature review, this study has adopted the typology of Whitehurst and Lonigan (1998) to analyse the skills, knowledge and attitudes that can be said to be foundations of reading and writing. The emergent literacy components that have been named according to this typology are: language, conventions of print (print awareness), emergent reading, grapheme knowledge, phonological awareness, phoneme-grapheme correspondence, emergent writing and print motivation. These components will form the subheadings for the discussion.

### **5.2.1 Language**

The observations and the answers that parents and guardians gave during interviews revealed the presence of language as an emergent literacy skill in children's play in the two selected compounds in Kitwe. Oral language and narrative skills were considered under this component. Findings were that all the games with the exception of Ranger needed oral communication. This was regardless of whether the game was a language game or not. Oral language is an important prerequisite to reading. This is consistent with the assertion that one who does not speak cannot learn how to read (Bruning, Schraw & Ronning, 1999, Barton, 2007, Schunk, 2009). This shows that generally, play lays a foundation for literacy because it facilitates oral communication. However, having come across a hearing impaired child, the researcher is quick to mention that children who are not able to speak do not benefit from this emergent literacy skill. For children who are naturally deprived of the use of oral language, sign language is a substitute and a solution to the problem of being left out in emergent literacy development.

The researcher also found out that apart from Ranger, running and jumping, all the games allowed for the use and acquisition of vocabulary. This means that as children play they are able to use the words they already know as well as learn new ones which enrich their speech as they prepare for learning how to read. Singing as a form of play as well as game songs, chants or poems also provided for real language experience opportunities (Gardner, 1985) and the acquisition of phonological awareness.



The researcher found out that apart from pretend play, there were other games that children engaged in which had aspects of role play in them. For instance, when a child who was playing football took up the name of a renowned footballer and wanted to be addressed by that name, the preschooler was engaging in role play within the game of soccer. Role play happened in other games such as *Kankuluwale*, *ukubuta*, singing, moulding and draft. It was also found that some games had specific language that players needed to learn in order to play the game successfully. Such games promoted the acquisition of more vocabulary. In some cases the vocabulary used consisted of familiar vocabulary which took up a different meaning in these games. For example, if a player broke any rule when playing *iciyenga*, the others would say *wapya!* This literally means “You are burnt”. This was to signal that he or she had committed a foul and it was time to give chance to the next player. The acquisition of vocabulary is consistent with Hodgskiss (2007:67) who states that the larger a child’s vocabulary, the better they are likely to be able to read and write.

### **5.2.2 Conventions of print**

The findings in chapter four showed that children displayed knowledge of conventions of print in some of the games that they played in the targeted compounds. The knowledge of conventions of print does not necessarily mean the ability to decode print. It is the ability to know that print exists and is constructed in a certain set fashion. This is knowledge that one acquires even before they are able to read. Whitehurst and Lonigan (1998)’s definition of conventions of print includes the left -to-right and top-to-bottom direction of print on a given page. It also includes the sequence and direction of print from the front to the back of a book. Preschoolers used objects that contained print during play. The empty tins, bottles and packets that they used in different games bore print on their labels. The children’s daily handling and use of these empty containers afforded them a chance to become aware of print and see how it appears. The preschoolers’ correct handling of books during pretend reading or pretend play showed their appreciation of conventions of print. The pretend teachers during a pretend play class charged themselves with the duty of teaching their pupils the conventions of print, thereby correcting wrong handling of books and other printed materials. Games that involved drawings or writings on the floor also promoted a kind of print format that prepared preschoolers for standard print formats and directionality of print.

Nevertheless, most of the games that the children played did not involve conventions of print. This lack can be attributed to the low SES which rendered the compounds wanting in terms of environmental print and also did not allow parents and guardians to source toys and games

that were rich in conventions of print for their children and wards. Families could not afford items like televisions and other gadgets that would bring print close to the children. Many of the parents neither read nor kept books or other forms of literature in their homes to provide opportunities for their children to develop an appreciation of print.

Knowledge of conventions of print is an important aspect of emergent literacy because it is helpful in the process of learning to read.

### **5.2.3 Emergent Reading**

According to the findings of this research, emergent reading was present in some of the games or play by preschoolers in the areas under this study. Emergent reading refers to behaviour in preschoolers that is a precursor to reading. This is consistent with Wehner (1999) who states that emergent reading is when children pretended to read. It consists of print awareness, when children learn that print carries meaning and of concepts of print where they learn how print functions.

The preschoolers in the compounds under study were able to engage in pretend reading alone or with other children. They were able to read environmental print. The environmental print consisted of logos (MTN/ Airtel), labels on commodities like sugar, soap or bottle tops of different brands of drinks and bill boards. For instance, the preschoolers could tell Coca cola from Fanta using the labels on the bottles and the bottle tops . The children were also able to handle books and turn pages correctly as they pretended to read. When the preschoolers recognised books, logos, labels or bill boards, they were showing print awareness. When they understood how this print functioned, the preschoolers acquired concepts of print.

Although the results of this study revealed the presence of emergent reading in the preschoolers' play, the reading culture of the society in which the children found themselves had a bearing on how much emergent reading was displayed. Preschoolers saw very little of reading among their parents and guardians. Therefore, reading was not very prominent among the activities that were imitated during pretend play. As already mentioned under conventions of print, because of the low SES the families of the children under study could not afford toys, books and other items that would promote emergent reading.

### **5.2.4 Grapheme knowledge**

According to the findings of this study, most games did not expose preschoolers to letters of the alphabet, thereby depriving the children a chance of acquiring letter knowledge. Only

Bonga and *inkwampa* allowed for the use of the alphabet. Bonga made use of the letters of the alphabet to write names of countries or cities in the circles that were part of the structure that the preschoolers used for the game. As they took refuge in those circles, the players could not help but look at the writings and get familiar with the letters that formed the words. During *inkwampa*, a player had a choice between counting the skipping using numbers or calling out the letters of the alphabet. Calling out the letters of the alphabet every time one was skipping meant practising how to recite them.

Despite limited contact with the letters of the alphabet, more than half the children under this study displayed exposure to the alphabet song. This exposure can be attributed to the Zambian nature of socialisation mentioned by Musonda (2011). The Zambian cultural set up, like anywhere else in Africa, is such that a child's socialisation is everyone's responsibility. Therefore, children had learnt the alphabet song from other children in the family or the neighbourhood.

Letter knowledge is important as a prerequisite to reading because it significantly influences the acquisition of some phonological sensitivity skills (Whitehurst & Lonigan, 1998:5). This is because in some cases the sound of these letters gives the upcoming reader a clue on the pronunciation of the word. Letter knowledge brings about understanding that letters are different from each other. The preschoolers then come to learn the names and sounds of the letters and start associating the letters with their sounds. In other words, letter knowledge sets a foundation for phonemic awareness (Halle et al, 2004) which is part of phonological sensitivity.

#### **5.2.5 Phonological Awareness/ Sensitivity**

The findings in chapter four revealed that phonological awareness was present in the games that preschoolers played in the targeted compounds. This was through the different songs that the children sang at play. Singing was one of the popular forms of play among all the children under the study. Songs involve the use of sounds and rhythms. The basic units of sound are phonemes. Therefore, songs and nursery rhymes indicate the preschoolers' exposure to sounds that could aid in phonemic awareness. Phonemic awareness sets the foundation for phonological awareness which involves understanding that words are made up of smaller sounds like syllables and phonemes (Whitehurst and Lonigan, 1998).

### **5.2.6 Phoneme-Grapheme Correspondence**

Findings from the study indicated that phoneme-grapheme correspondence was not very common in the games that these children played. Only pretend play and singing that involved the letters of the alphabet exposed preschoolers to the phoneme-grapheme correspondence. The use of pseudo words was only found in three games. This can be attributed to the fact that phoneme-grapheme correspondence is one of the advanced emergent literacy skills. Therefore they could only be prominent among older preschoolers and those who have had exposure to rich literacy environments. Whitehurst and Lonigan (1998:6) consider phoneme-grapheme correspondence to be “the most advanced of the emergent literacy skills or the least advanced of the conventional literacy skills a child must acquire, depending on where one draws the boundary between conventional literacy and emergent literacy”. This skill could just be the last emergent skill that a child can acquire before reaching the level where they will be considered able to read and write. Suffice to mention again that the community under study had a deprivation where environmental literacy was concerned and children had limited literacy promoting gadgets to play with due to the low SES of their families.

### **5.2.7 Emergent Writing**

Findings revealed that scribbling formed the greater part of emergent writing in the preschoolers’ play in the selected compounds. This was despite the absence of writing materials like pencils in many of the games that children engaged in. Although the games that were observed did not directly involve writing, they involved the manipulation of objects with fingers. These manipulations can aid preschoolers to prepare to handle writing materials when they start learning to write. Physical play aided in the development of motor skills and coordination. Rolling play dough and doing finger plays help children strengthen and improve the coordination of the small muscles in their hands and fingers. Children also acquire new skills and become more proficient with language.

### **5.2.8 Print Motivation**

Print motivation refers to the children’s interest in and enjoyment of reading and writing activities. Findings from this case study indicated that print motivation was seen in children’s play when they wanted to imitate other people’s reading or writing and used books and pencils as they played. When children expressed the desire to own and use books in pretend reading and writing, they were displaying print motivation. The literacy environment of a child determines how much interest he or she will develop for literacy related activities. This idea is consistent with Whitehurst and Lonigan (1998)’s view which states that children

become implicitly motivated to engage in literacy when their parents demonstrate the real purposes of reading and writing. These purposes could be to obtain information, for pleasure or for work. The duo further explain that parents engage their children directly in becoming motivated to read and write when they read and sing to them, take them to the library and praise their early attempts at reading and writing. All this is true in a situation where facilities like the library are available; parents are literate and have the means to provide literacy materials for their children. Parents also need to have time to spare so that they are able to give their children the attention required to give feedback for the early attempts. This motivation is not easy to come by in Machipisha and Lambalala compounds where social amenities like libraries are not available and parents have to be away from home most of the time to ensure the survival of the family. When they get home they are too tired to even notice the attempts that their preschooler is making in the direction of literacy.

### **5.3 Findings on the skills, knowledge or attitudes that can be said to be foundations of numeracy in the games.**

As recorded in chapter four above, findings indicated that children's games in the targeted compounds were rich in emergent numeracy. Children engaged in counting as part of some games but also as a way of recording the points that players made during a particular game. The latter was more in games involving competition to come up with winners and losers. Some games required the process of estimation while others had a number facility or involved thinking ahead, logically or critically.

During pretend play, children engaged in a lot of buying and selling. This could be attributed to the many trading situations found in the compounds. The SES of the people made it difficult for them to afford standard packaged food. Almost all the commodities had to be repackaged into smaller, affordable quantities for resell. What has been said about children watching adults model the purposes of reading and writing can also be said here about emergent numeracy. The children's replaying of these shopping scenes shows that this is what is obtaining in their society. If the children are able to engage in these numeracy practices, then the findings of the study are consistent with Anning and Edwards (1999)'s statement that many children have well developed numeracy skills before they begin formal education.

## **5.4 Summary of Chapter Five**

The discussion of findings which has been done by referring to the literature review and bringing in the voice of the researcher has revealed that preschoolers in the targeted compounds engaged in both exploratory and rule-governed play depending on how the game was played or what behaviour the players engaged in while playing. The games also fitted into Davidson (1996:283)'s classification; sensory, play with motion, rough and tumble, language play, dramatic and modelling, constructive, games and rituals and competitive play. The age and gender of the children as well as the culture and social economic status (SES) of their parents determined the kind of games that the children played. Findings also revealed that most games contained more of emergent numeracy than emergent literacy.

## **CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS**

### **6.0 Introduction**

The purpose of this study was to find out what types of skills, knowledge and attitudes found in children's play and games can be characterised as foundations of reading, writing (literacy) and numeracy or those that aid their development. This chapter presents the conclusions of the study in form of short summaries in line with research questions and objectives.

The chapter ends with a presentation of the necessary recommendations for the study which are meant to give feedback to initial literacy planners, teachers of initial literacy as well as other stake holders.

### **6.1 Conclusion**

The conclusion of this study is done in line with research questions and objectives.

The study has shown that preschoolers in the targeted compounds engage in a lot of games and forms of play that can be categorised differently depending on whether one is looking at how the game is played or what behaviour the player engages in while playing.

Although it can be said generally that the games that children play in the targeted compounds are rich in emergent literacy, not all of them contain skills, knowledge and attitudes that are precursors to reading writing and numeracy. Apart from the acquisition and use of language skills that can be found in almost all the games, the other components are scantily distributed in many of the games that were observed. Most of the games contained more of emergent numeracy than emergent literacy proper. Therefore, the researcher concludes that it is not all the games or forms of play found among preschoolers in the targeted compounds that can be adopted for use as aids in initial literacy and numeracy instruction.

### **6.2 Recommendations**

The recommendations that have come out of this study are as follows:

- a) The Directorate for Research and Graduate Studies needs to create a channel for bringing findings of researches like this one to the awareness of curriculum planners so that they may include forms like pretend play in the curriculum for initial literacy and numeracy.

- b) Teachers need to be made aware of theories that support emergent literacy and numeracy during training so that they may be able to connect with what children already know as they teach initial literacy and numeracy.
- c) Parents and guardians need to be made aware of their role in nurturing emergent literacy acquisition through the provision of literacy-rich environments for their children and wards. The awareness will also make them realise literacy rich toys, like books to a school going child, are an investment into the child's education.
- d) Further study needs to be carried out in other parts of the country to collect more games or forms of play that may be rich in emergent literacy and numeracy skills.
- e) One of the participants of this study was a hearing impaired child who could not use oral language. A study needs to be carried out with hearing impaired preschoolers on emergent literacy to establish emergent literacy skills with sign language in mind.

### **6.3 Summary of Chapter Six**

This chapter has brought this research report to a close by the presentation of a conclusion in line with the objectives of the study. The conclusion has been followed by recommendations based on the findings of the study. The recommendations consist of what needs to be done for the research to be beneficial to the society for which it is intended. The last two recommendations are suggestions for further research.



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## **APPENDICES**

### **Appendix i: Informed Consent Form**

**Dear Respondent,**

This serves to give you an understanding of the purpose of this research and procedures that will be followed. Further implications for your participation are explained. Finally you are being asked to sign this form to indicate that you have agreed to participate in this exercise.

Thank you in advance.

**1. Description**

This exercise is an education research. The researcher is a student at the University of Zambia pursuing a Master of Education degree in Literacy and Learning. This research is a major requirement for the researcher to complete her programme. Thus this exercise is purely academic.

**2. Purpose**

The researcher wishes to find out what games young children play and analyse them for skills knowledge and attitudes that are foundations of literacy.

**3. Consent**

Your child's participation in this exercise is dependent on your consent. You are free to stop your child/ ward from participating in this exercise.

**4. Confidentiality**

All data collected from this research is treated with ultimate confidentiality. Participants are assured that they will remain anonymous and untraceable in this research.

**5. Rights of Respondents**

All efforts will be taken to ensure that the rights of the participants are protected and respected. You are assured that your child will suffer no harm as a result of participating in this exercise. You are free to ask for clarification at any point of the exercise and to inform the researcher if you feel uncomfortable about any procedure in the research.

**6. Declaration of Consent**

I have read and fully understand this document/ the contents of this document have been explained to me. I therefore agree that my child/ward should participate in this exercise.

.....

Signature

.....

Date

## Appendix ii: Observation Checklist

1. Study site.....
2. Group/ Names of children.....  
.....
3. Age range of children involved.....
4. Name of the game.....
5. Number of children involved.....
6. Description of the game (i.e. how it is played) **Use back of page**  
.....

### 7. Language (oral language & Narrative skills)

- a. Does this game require oral communication among the children/players? YES/NO
- b. Does the game allow for the use and acquisition of vocabulary? YES/NO
- c. Do the children engage in any role play? (pretend play) YES/NO
- d. Are there things, toys or concepts used in the game that require naming or being known  
YES/NO
- e. What kind or form of language do the children use as they play the game?  
Ordinary language/ language specific for that game
- f. Are there any aspects of storytelling in the game? YES/NO
- g. Are descriptions of things or events part of the game? YES/NO
- h. Is the game an opportunity for children to ask and answer questions? YES/NO

### 8. Conventions of Print (Print Awareness)

- a. What environmental print is used or referred to during this game? like signs, labels, billboards, writings on shops, restaurants etc  
.....  
.....
- b. Are books or any form of print used in this game? YES/NO
- c. Does the game foster the learning of any standard print format  
(directionality of reading: left-to-right/ front-to-back)? YES/NO
- d. Are the players required to think ahead/ logically/ critically? YES/NO
- e. Is there any pattern recognition involved? YES/NO
- f. Does the game use any colour matching? YES/NO

### 9. Emergent Reading

- a. Is there any form of reading or pretend reading involved? YES/NO



**10. Grapheme Knowledge**

- a. Are the children exposed to the alphabet or any individual letters? YES/NO

**11. Phonological Awareness/Sensitivity**

- b. Do the children sing or use songs as part of the game? YES/NO  
c. Does the game involve the use of sound in rhymes, alliteration or tongue twisters?

YES/NO

**12. Phoneme-Grapheme Correspondence**

- a. Does the game expose the children to the correspondence between sounds and letters? YES/NO  
b. Does the game involve the decoding of pseudo words? YES/NO

**13. Emergent Writing**

- a. Does the game involve any manipulation of objects with fingers? YES/NO  
b. Does the game involve making, assembling or dismantling objects? YES/NO  
c. Are the children exposed to any writing objects like pencils, crayons and paper?

YES/NO

- d. Do the players engage in any form of writing, scribbling or drawing? YES/NO

**14. Print Motivation**

- a. Do you identify any print motivation traits in the children as they play? YES/NO

**15. Emergent Numeracy**

- a. Does the game involve counting? YES/NO  
b. Does the game involve an estimation process? YES/NO  
c. Does the game involve any number pattern facility? YES/NO  
d. Does the game require the players to think ahead/ logically/ critically? YES/NO

**16. Any other observations on evidence of emergent literacy behaviour in the game.....**

.....

### **Appendix iii: Interview Guide for parents**

#### **The University of Zambia**

#### **School of Education**

#### **Department of Language and Social Sciences Education**

This interview schedule is for parents, guardians or caregivers of the children that will be observed. It is meant to assist in finding out from them what games their children or wards play, their knowledge of emergent literacy and their role in the facilitation of the same. The information will be used for academic purposes only and the respondents' personal details will be kept confidential.

1. Name of Site.....House No.....
2. Name of Child.....
3. Age.....Sex (M/F).....
4. Name of Parent.....
5. Age.....Sex (M/F).....
6. Level of education of the parent.....
7. Date of interview.....
8. Describe games that your child or ward is fond of playing.  
.....  
.....  
.....  
.....
9. Are there any games that you play with the child (if answer is yes, describe them)?  
.....  
.....  
.....
10. What are the reasons for engaging your children in such games? (any awareness of emergent literacy)

.....  
.....  
.....

**Language**

11. Describe the children's use of oral language as they play. Are there any particular games that your children play that enhance the development of oral language?

.....  
.....

12. When and how do you teach your child new vocabulary?

.....  
.....

13. Which of the games played by your child involves the use and acquisition of vocabulary?

.....  
.....

14. Do the children engage in any role play? (pretend play) ? How?

.....  
.....

15. What games do you play with your child to help in language development?

.....  
.....

16. Which of your child's games have aspects of storytelling?

.....  
.....

17. Do any of your child's games involve descriptions of things or events? Which ones?

.....  
.....

18. Does the child's play involve storytelling? YES/NO

19. Do you tell stories to the child? YES/NO
20. Name and describe games that are meant to assist the child to learn how to ask and answer questions?

.....

.....

.....

### **Conventions of Print**

21. What kind of print is found in your home?

.....

.....

22. What environmental print do the children use or refer to during games? like signs, labels, billboards, writings on shops, restaurants etc.

.....

.....

23. Do you buy any books for your preschooler? YES/NO

24. Name games that your preschooler plays involving books or any other kind of literature?

.....

.....

25. Do any of the games your child plays foster the learning of any standard print format (directionality of reading: left-to-right/ front-to-back)? Explain.

.....

.....

26. What kind of print is found on toys and games availed to the child?

.....

.....

27. Which games involve pattern recognition or colour matching? Explain.

.....

.....

28. Do older children show the preschooler story books or pictures? YES/NO

29. What games do the older children play with the preschooler to develop reading and writing?

.....

.....

**Emergent Reading**

30. What environmental print is used or referred to during the games that the child plays? E.g. signs, labels, billboards, writings on shops, restaurants etc

.....

.....

31. Identify any skills that are foundations of reading in the games that your child plays?

.....

32. Do you read in the presence of you small child? YES/NO

33. Do you read to your child? YES/NO

.....

.....

**Knowledge of Graphemes**

34. Is the child exposed to the letters of the alphabet in his /her play? YES/NO

**Phonological Awareness/Sensitivity**

35. What songs does the child sing? Do these songs have a bearing on the child's eventual learning of reading?

.....

.....

36. Do the children play games that involve the use of sound in rhymes, alliteration or tongue twisters? YES/NO

**Phoneme-Grapheme Correspondence**

37. What games expose the children to the correspondence between sounds and letters? YES/NO

38. Can you identify the decoding of pseudo words in some games? YES/NO

**Emergent Writing**

39. Can you identify any skills that are foundations of reading or writing in the games that your child plays?

.....

40. Which games involve the manipulation of objects with fingers?

.....

41. Which games involve making, assembling or dismantling objects?

.....

42. Are the children exposed to any writing objects like pencils, crayons and paper?

YES/NO

43. Do the players engage in any form of writing, scribbling or drawing? YES/NO

**Print Motivation**

44. Explain how your child display interest in reading or writing.

**Emergent Numeracy**

45. Identify games that involve counting?

.....  
.....

46. Which games involve an estimation process?

.....  
.....

47. Which games involve a number pattern facility?

.....  
.....

48. Which games require the players to think ahead/ logically/ critically?