DETERMINANTS OF PRE-PRIMARY CHILDREN’S READING READINESS
IN MATHIRA, NYERI COUNTY, KENYA

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E55/CE/22523/2010

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EDUCATION (EARLY CHILDHOOD STUDIES) OF THE SCHOOL OF
EDUCATION, KENYATTA UNIVERSITY

DECEMBER, 2017
DECLARATION

I declare that this project is my original work and has not been presented in any other university/institution for consideration. This project has been complemented by referenced sources duly acknowledged. Where text, data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including the internet, these are specifically accredited and references cited in accordance with anti-plagiarism regulations.

Signature:………………………………… Date……………………………

Dinah W. Machira E/55/CE/22523/2010

Supervisors

We confirm that the work reported in this project was carried out by the candidate and has been submitted with our approval as university supervisor.

Signature………………………………… Date……………………………

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Signature: ……………………… Date: ………………………

Dr. Gladwel Wambiri

Department of Early Childhood Studies
DEDICATION

To my family and close friends who have been there to encourage and challenge me over the years.
ACKNOWLEDGEMENT

I thank the almighty God for the success and completion of this project. I also express my warm appreciation to all the people that have contributed to the success of my academic career. To all my lecturers I am thankful for the knowledge they have imparted in me. To my supervisors Dr. Esther Waithaka and Dr. Gladwell Wambiri I am deeply indebted for academic guidance, devotion, inspiration, encouragement, mentorship and moral support. I am also grateful to the pre-primary teachers who participated in the study.

I sincerely thank my husband, James Machira who stood by me through the challenges encountered. Lastly, I appreciate my children, Oscar Karaba; Bernard Ngetha; Elizabeth Wanjiru and Nancy Huini for their understanding and being there for me throughout my study. I wish all those who participated in this project God’s blessings.
ABSTRACT

The purpose of this study was to assess the determinants of pre-primary school children’s reading readiness, in Mathira sub-county, Nyeri county Kenya. The study was guided by the following objectives: to determine the levels of reading readiness of pre-primary children, to assess the availability of teaching and learning materials, to find out the relationship between availability of teaching/learning materials and children’s reading readiness, to establish the relationship between teachers use of teaching/learning materials and reading readiness and to establish the relationship between teachers’ level of experience and children’s reading readiness. The study adopted the Social Interactionist Theory of Language development by Bruner 1972. The research employed a correlational design which involved collection of quantitative data to determine the degree of relationship between the variables. The target population comprised of 120 pre-primary teachers from public pre-schools were sampled in Mathira East Sub-county. The study adopted simple random sampling technique to select the participants. This meant that all the pre-primary school teachers had equal chance of being selected. The SPSS software was used in analyzing data. The data analysis techniques adopted included the Chi-square descriptives which measures the levels of correlation between variables. The relationship between availability of teaching/learning materials and children’s reading readiness was significant at .05 level of significance (p value =.001). The hypothesis was accepted. This suggests that children’s reading readiness increased with the availability of teaching/learning materials. The relationship between teachers’ use of teaching/learning materials and children’s reading readiness was significant at .05 level of significance (p value =.001). The hypothesis was accepted. This suggests that children’s reading readiness increased with the teachers’ use of teaching/learning materials. The relationship between teachers’ level of teaching Experience and children’s reading readiness was significant at .05 level of significance (p value = .006). The hypothesis was accepted. This suggests that children’s reading readiness increased with the teachers’ level of experience. The study concludes that there was low availability of teaching materials. The study also concludes that children’s reading readiness increased with the teachers’ use of teaching/learning materials. Finally the study concludes that children’s reading readiness increased with the teachers’ level of experience.
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<td>CAI:</td>
<td>Computer Assisted Instruction</td>
</tr>
<tr>
<td>CRC:</td>
<td>Convention on the Rights of the Child</td>
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<tr>
<td>ECD:</td>
<td>Early Childhood Development</td>
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<td>K.I.E:</td>
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CHAPTER ONE

INTRODUCTION AND CONTEXTUALIZATION OF THE STUDY

1.0 Introduction

In this section, the researcher discusses the background of the study, followed by statement of the problem, purpose of the study, research objectives, hypothesis and significance of the study, limitations and delimitations, assumptions of the study, theoretical and conceptual frameworks and operational definition of terms.

1.1 Background of the Study

Reading competence significantly affects children’s academic achievement in educational institutions positively as it is related to societal socio-economic growth (Shoebottom, 2007; Zablocki 2006). As Klein (2008) observed, reading readiness is the most important foundation for learning other subjects. Being able to read enables one to access information easily and enhances one’s literacy skills, creativity and comprehension abilities (Ramsburg, 1998). Reading involves comprehension of written messages, improving ones spoken vocabulary and repeating learnt words. It is a process which encourages the formation of new thought and developing imaginative ideas. It enables the reader to make sense of pictures, inquire and respond to relevant queries (Schwartz and McGuiness, 2014).

The U.S Department of Education (2007) opined that, the involvement of family in a child’s life develops intellectual growth and early reading readiness skills. In their study, Wolfe and Nevills (2004) as well as Machado (2007) mentioned that infants start learning about the world as toddlers when their parents speak and smile at them showering them their love. The two studies further showed that children do as their
parents in that they imitate holding a book or pretend to read using similar words like what their parents do.

Ontario Government (2003) observed that acquiring language is a natural process among children; however, they need to be taught to read. According to the Ontario Government, the success of individuals depend on their ability to read and children who are unable to read fluently in grades 1-3 are disadvantaged academically as opposed to their fluent reading counterparts. Literacy acquisition among learners begins before their introduction to formal education and is influenced by interactions with grownups, exposure to literacy resources as well as engaging in early learning activities (Clay, 1966).

Nord, Lennon, Liu and Chandler (2000) revealed that the development of literacy foundation starts during a child's early years. Children raised in a home environment with literate adults have higher levels of reading abilities when they start schooling. Inability to read well exhibits itself clearly at the pre-primary level. This leads to increased dropouts, delinquency and class repetition among learners in later stages of education. Some children with reading challenges when they mature become unable to be absorbed into formal employment and become socially dependent (Carregie Corporation, 1994; Lyon, 1998).

Determinants of reading readiness varies from one school and locality to another. In some schools, learners with reading disabilities are removed from classes and ridiculed leading to the development of low self-esteem among them due to their inability to read well (Watson & Gemin, 2008). Teaching methods are also essential in improving reading readiness. Instructional procedures commonly employed by educators to teach learners how to read include lexical reading instruction (Chan,
Tang, Tang, Lee, Lo & Kwong, 2009) and phonemic awareness instruction (Byrne, 2005) among others.

Reading readiness challenges by learners are widespread in many academic institutions and educators and community leaders are worried about the long-term effects of this problem among learners (UNESCO, 2014). Therefore, educators must prepare to face reading readiness challenges in each academic year (Ackerman & Barnett, 2005; Pearson & Paris, 2008).

Early Childhood Education has serious implications for the child’s future development. Studies on the state of early literacy development revealed the relevance of early experience before the start of schooling that Goodman (1980) referred to as, the roots of literacy. According to the Goodman, literacy training should commence before schooling. In the United States of America, MacArthur, Ferrell, Okolo, and Cavalier, (2001) revealed that reading abilities among learners could be developed by the use of Computer Assisted Instruction, improved decoding skills and phonological awareness creation.

Various aspects of the school environment have been shown to affect learners’ reading readiness in schools within Africa. Mwamwenda & Mwamwenda (1987) carried out a study on the effects of schools physical or learning facilities on reading readiness of children in Botswana. It was established that the availability of facilities had a direct link with reading readiness of the pupils.

Picture books which have attractive images described in the text have been reported to have positive impact in study of language concepts in pre-primary learners. Generally, pictures and story books have long lasting memory in children enabling them to remember (Arizpe and Styles, 2003; Van den Heuvel-Panhuizen et al., 2016).
The Kenyan society has become more and more literate and therefore reading has become an integral part of Kenyan’s life. The Government is committed to the academic well-being of young children throughout the nation. It has demonstrated this by signing numerous international policy frameworks geared towards this end. The international policy frameworks signed include the 1990 African Charter on the Rights and the Welfare of the Child (ACRWC), 1989 United Nations Convention on the Rights of the Child (CRC), and the Millennium Development Goals (MDGs).

In the year 2000 Kenya was party to and endorsed the deliberations on World Education Forum in Dakar, Senegal. All these global policy frameworks emphasize the importance of education of the young children, in particular, the Dakar Framework which contains six goals. The goals include but are not limited to ensuring excellence of all so that recognizable and measurable learning outcomes are achieved in literacy skills and improving all aspects of the quality of education (K.I.E. 2008; Mwanamwende, 2004).

One aim of ECD in the country is to provide an education geared towards the development of the child’s exploration skills, creativity, discovery and self-expression (K.I.E. 2008). For this objective to be achieved, the learning environment must be suitable with the necessary learning materials. The National Early Childhood Development Policy Framework (2006) observed that parents and local communities manage over 70% of the Childhood Development Centres with limited money and inadequate materials in Kenya. The reason being many parents are poor and are not able to raise even the minimal fees which is required to pay salaries of teachers, to buy equipments, learning and play materials for reading readiness. Uwezo, (2012) notes that lack of basic reading skills due to inadequate learning materials has resulted
in a low quality of learning throughout primary schools. There was, however, no study in Mathira East Sub-county addressing the determinants of reading readiness among pre-primary learners prompting the researcher’s interest.

1.2 Statement of the Problem

According to Lerner (2006), reading readiness problems can lead to academic failure. However, this author does not show specific variables that influence pre-primary learners reading readiness. In Kenya, Njoroge (2000) revealed that learners with difficulties in reading have problems in school activities in general. This study also acknowledges the effects of reading readiness on academic performance in later years. This report does not reveal the determinants of reading readiness among learners. According to Mercer and Mercer (2001), between 10% and 15% of school-going learners have reading difficulties. Lerner (2006) claims that more than 17.5% of learners have reading difficulties.

With the introduction of free primary education, about 8.6 million learners attend primary schools which increased the number of learners with reading difficulties ranging from 860,000 to 1.29 million or 1.5 million on the higher estimates in Kenya (Ruto, Ongwenyi&Mugo, 2009). Children’s reading readiness is the most fundamental stage for the introduction of reading skills. Several pre-primary learners in Mathira east Sub-County experience reading difficulties prompting the researcher to assess the determination of the same.

1.2.1 Purpose of the Study

This study assessed the determinants of pre-primary school children’s reading readiness in Mathira Sub-county, Nyeri County Kenya.
1.2.2 Objectives of the Study

The following objectives were addressed by this study:

i. To determine the levels of reading readiness of pre-primary children

ii. To assess the availability of teaching and learning materials

iii. To find out the relationship between availability of teaching/learning materials and children’s reading readiness.

iv. To establish the relationship between teachers use of teaching /learning materials and children’s reading readiness

v. To establish the relationship between teachers’ level of experience and children’s reading readiness.

1.2.3 Hypothesis

i. There is no relationship between availability of teaching/learning materials and children’s reading readiness?

ii. There is no relationship between teachers’ use of teaching/learning materials and children reading readiness?

iii. There is no relationship between teachers’ level of experience and children’s reading readiness?

1.3 Significance of the Study

The results of this study has shed light on the levels of reading readiness among pre-primary pupils in Mathira East Sub-county and prompt necessary actions to be taken by education stakeholders. The findings may also be used by curriculum planners and implementers in selecting and developing instructional materials and equipment that can aid reading readiness at this level of education. Policy makers might also benefit as the findings of the study may guide them in formulating policies that may improve
the teaching and learning of reading at pre-primary school level. Children are the greatest beneficiary because potential inadequacies in teaching and learning materials were highlighted and stakeholders may work towards improving their availability hence pupils will learn better and in an interesting way as it may be easier for them to grasp concepts as well as making education an enjoyable experience. The findings may also assist specialists in the improvement of reading readiness strategies right from the grassroots’ level.

1.4 Delimitations and Limitations of the Study
This section presents issues that were used to ground the study in delimitations and issues that were expected to affect the study during field work in the limitations of the study.

1.4.1 Delimitations of the Study
The study was limited to pre-primary schools in Mathira East Sub-county. Consequently, the findings were applicable only to this geographical area and are not generalized to the whole country. The study was confined to teachers in ECD centers who are directly involved in the provision of ECE and are familiar with ECD learners with reading readiness challenges. The study was further delimited to reading readiness and not any other form of learning inability.

1.4.2 Limitations of the Study
The major constraint experienced was that some participants were unwilling to get involved as they thought that the information collected may affect them in one way or another. The study area was also expansive and required a lot of time and resources from the researcher. Lastly, the academic nature of the study did also put pressure on the researcher to finish the study on time. This was a quantitative correlation study.
To have sufficient numbers to be able to test the hypothesis on the relationship between variables, the researcher measured children’s reading readiness levels using the teachers’ estimates drawing from their familiarity on children reading related behavior.

1.5 Assumptions of the study

The assumptions of the study were as follows;

i. The target group was knowledgeable of the subject matter under investigation.

ii. Information provided was accurate and reflective of the situation on the ground.

1.6 Theoretical and Conceptual Framework

Here, the researcher presented theories relevant to the study that supports the relationship between the dependent and independent variables. The researcher also presented the relationship between the dependent and independent variables by explaining how they affect one another in a diagram.

1.6.1 Social Interactionist Theory of Language Development by Bruner 1972

While disagreeing with the nativist view on how language is acquired as advanced by Noam Chomsky in 1980, Bruner on his part developed social interactionist theory of language development. This theory emphasized social as well as interpersonal nature of language.

Bruner’s theory argued that social interaction is important for cognition development in language. His theory observed that toddlers acquire language for communication purposes and learn the linguistic code in the process. The theory further observes that
appropriate language is acquired in interaction between parent and child or by the child’s Language Acquisition Support System (LASS) (Kennison, 2013).

From birth, toddlers are surrounded by individuals who talk to and with them. This behaviour influences how they learn to speak their mother tongue. Others observe that nature is completely responsible for how a child learns a language. Others note that nurture is to blame for how a baby picks up their mother tongue. Social Interactionists argue that the way a baby learns a language is both biological and social. They strongly believe that children are conceived with brains which enable them to acquire language. Their brains also have a need to communicate. Some Interactionists also believe that children cue grownups into assisting them with linguistic exposure they need to learn language. The Interactionist Theory posits that children can only learn language from someone who wants to communicate with them (Palmer, 2001).

Bruner believes that learners, learn best when they discover knowledge on their own. He believed that a child learns to retain knowledge best when they discover it on their own. Bruner argues that an adult and an infant have conversations despite the children’s inability to speak. The interaction between an adult and an infant through games and non-verbal communication, build the structure of language long before the child can speak.

Learners struggle when faced with learning a second language. They are unable to converse with teachers except through non-verbal communication. It is up to educators to be adults in the infant-adult relationship. The educator is accountable for spearheading all interaction at first, and as the child is more familiar with the newly acquired language and is able to use it, the control of the interaction should be relinquished a bit and the child can take more control of their own language learning.
If children are encouraged to experiment with language and make mistakes, they will learn on their own how to combine words and phrases to form full sentences and conversations. Therefore, this theory recognizes that for reading or language development, learners depend on those around them for assistance and also the availability of materials and resources in their environment. That is why the researcher chose this theory to be a guide for this particular study.

**1.6.2 Conceptual Framework**

This study identifies the following independent variables; (availability and use of teaching and learning resources, teachers’ experience) as the ones that affect reading readiness (the dependent variable) among pre-primary school pupils in Mathira East Sub-county. These independent variables can have a positive influence on pupils learning capabilities if the variables are positive. The relationship between the variables is as shown below.
**Independent Variables**

- Availability of teaching/learning materials
- Use of teaching/learning materials
- Teachers’ level of experience

**Reading Readiness Skills**

- Language skills
- Auditory skills
- Left-Right orientation

**Intervening Variable**

- Types of schools
- Teaching approaches
- Teachers level of training

Figure 1.1: Conceptual Framework
1.8 Operational Definition of Terms

**Learning Environment:** A place where learning takes place with all the facilities, equipment, instructional materials and human resources.

**Pre-Primary School:** An education establishment offering early childhood education to children before the beginning compulsory education at primary school

**Private Schools:** These are institutions of learning that are owned by individuals or non-communal organizations

**Pre-Primary School-Children:** Children who are too young to enroll in primary school

**Public Pre-Schools:** Schools that are maintained at public expense for the education of the children of a community

**Reading Readiness:** Ability to perform tasks that prepare children for conventional reading.
CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.0 Introduction
This chapter presents reviewed literature on reading readiness among learners. Literature has been reviewed in reference to pre-primary children reading readiness, availability of teaching and learning materials, the relationship between availability of teaching/learning materials and children’s reading readiness, the relationship between teachers’ use of teaching/learning materials and children’s reading readiness, and the relationship between teachers’ level of experience and children’s reading readiness.

2.1 Levels of Reading Readiness
Reading proficiency underlies success in multiple aspects of life. Strong reading skills have implications for academic success in diverse areas of study, such as social studies, science and math (Snow, 2010). Proficient reading is equally dependent on two critical skills: the ability to understand the language in which the text is written, and the ability to recognize and process printed text (Hoover, Wesley, Gough, & Philip 2004). Children who readily understand spoken language and who are able to fluently and easily recognize printed words do not usually have difficulty with reading comprehension (Byrne, 2005). At the conclusion of reading, children should be able to retell the story in their own words including characters, setting, and the events of the story (Byrne, 2005). Children’s reading comprehension skills greatly vary starting from the beginning of elementary school years, the roots of which go back to pre-primary years, and the gap remains persistent over time. A study by Stanovich and Cunningham (1997) and Snow (2010) found that differences in reading comprehension in first grade predict reading comprehension 10 years later, at 11th
grade. These authors however do not highlight reading readiness of the studied learners.

From the global perspective, reading difficulties have been estimated to be at two to five percent among school-going children (Wong, 1998 in Mwanamkuri 2013). Findings from the study that was carried out in the United Kingdom among the English speaking children, revealed that, “of the grade two and three children whose reading was assessed, approximately a quarter were functioning at a fairly low level for their grade and approximately one in twenty, were hardly able to read at all” (Gross, 1995; Mwanamkuri 2013). These studies are however outdated and more recent research on learners is required. The studies also generalize their findings to all levels of education and not to pre-primary which is an area of great interest for the current study.

Lyon (2003) observed that children are deprived of the ability to learn about literature, science, mathematics, history and social studies because they cannot read grade-level textbooks. By middle school, children who read well read at least 10,000,000 words during the school years. However, children with reading difficulties read less than 100,000 words during the same period. Poor readers lag far behind in vocabulary development and in the acquisition of strategies for understanding what they read, and they frequently avoid reading and other assignments that require reading. This study is however a longitudinal study following the reading progress of learners while the current study is only interested in pre-primary learners levels of reading readiness.

According to the National Center for Educational Statistics (1998), 38% of fourth graders nationally cannot read at a basic level that is, they cannot read and understand a short paragraph similar to that in a children’s book. The focus of the current study is
to find out reading readiness among learners below this level of education. In many low-income urban school districts 70% of children in the fourth grade cannot read at basic level (Lyon 2003; Hindson et al., 2005; Lyytinen et al., 2006). Elbro et al. (1998) were the first to report continuity of risk for dyslexia in a study following Danish children from dyslexic families; while literacy-impaired at-risk children showed deficits on tests of letter knowledge, phoneme awareness, verbal short-term memory (STM) and the distinctness of phonological representations. They shared deficits on tests of morphological awareness and articulator accuracy with unimpaired children from similar family backgrounds. The current study intends to assess the existence of these reading readiness problems, among pre-primary learners in Mathira East sub-county, Kenya.

Pennington and Lefly (2001), following the progress of English-speaking children, reported that children who had reading difficult shared deficits in verbal STM and rapid serial naming (RAN), but only the impaired group had problems on phonological awareness tasks. Converging findings from Snowling, Gallagher, and Frith (2003) suggested that high-risk literacy-impaired children had poor phonological awareness.

According to Mwanamkuri (2013), a study which was carried out by the Southern Africa Consortium for Measuring Educational Quality in about fifteen African countries which included Zambia, Mauritius, Uganda, South Africa, Lesotho, Botswana and others revealed that most of the pupils read below what was expected of their grade level while some of them were not able to read at all. To be specific, in low performing countries like Mauritius, Namibia, Zambia and Zimbabwe, it is reported that 97.6% of the grade six learners were virtually unable to read (Kachenga,
2008). A study conducted by Matafwali (2005) found that 49.1% of the pupils could not read words at all and 57.5% children could not read any single sentence.

Mwanamkuri (2013) also revealed that most of the grade six pupils were not able to read fluently as expected of their grade level. As they read, they committed errors such as mispronouncing, substituting, adding and omitting some words. The reviewed studies have all focused on grades higher than pre-primary learners. The studies also use different methodologies and tools making it difficult to know which one presented the most accurate findings. Sample sizes used in the studies are also small and hence the findings cannot be generalized for Kenyan learners where no such study has ever been done. Therefore the current study will focus on pre-primary learners levels of reading readiness by assessing each aspect of their reading and documenting it.

2.2 Availability of Teaching and Learning Materials in Pre-Primary School Classrooms

Teaching/learning resources are instructional materials and devices through which teaching and learning are facilitated in schools (Agun et al., 1977). They include visual aids, audio aids, real objects and many others. Visual aids include wall-charts, illustrated pictures, pictorial materials and other two dimensional objects while audio-visual aids include teaching machines like radio, television, and all sorts of projectors with sound attributes. Television and radio programs provide another useful geography teaching/learning resource. Films, likewise, are a popular teaching/learning resource.

Effective teaching and learning requires wide and equitable access to learning materials (World Bank, 2008). Ensuring this requires a review of policies governing text book production and distribution. Materials other than text books are also
important. While computers are becoming the norm in classrooms in individual countries, most classrooms in developing countries may barely have a blackboard and a few text books (World Bank 2008). The World Bank study is however more general to entire academic system and not to a specific level of education while the current study is grounded in pre-primary school level of education.

It is said that a picture is worth a thousand words (Speakers, 1911). For instance a single picture can illustrate different complex scholarly concepts at the same time enabling the learner to remember. A research study by Kalb and Van (2014) in Netherlands reported that pictorial illustrations improved his student understanding of mathematics. Research has found that storybooks stimulate reading among children which is an important aspect to cultivate a reading culture and earn knowledge essential to eventually successful reading (Bus et al., 1995; Canoy et al., 2006). A study carried out in Kapkesosio zone, Bomet County found out that flashcards improved pre-primary children reading skills in learning of English (2014), a similar observation in this study. Therefore, pre-primary learners need to be immersed in a materials-rich environment populated with storybooks, pictures, charts to capture their reading interest improving their reading readiness. Children learn by interaction with instructional resources (Oladele, 2012).

2.3 Relationship between Teaching/Learning Materials and Children Reading Readiness

Instructional materials increase learning as they generate more interest and create a situation where the learner would fully engage in classroom and outdoor activities. Adequate use of instructional materials also gives the learner practical experience that can help him develop skills and concepts more easily (K.I.E, 1990). According to
Woolfolk (2004) the immediate surrounding is probably the best source of learning resources we require in our classroom and outdoor activities since it provides us with real life things. Whitebread (1996) concurs with him as he explains that interactive displays in the pre-primary schools, thematic collections of carefully selected resources entice pre-primary schoolers to explore a wide range of ideas. Materials need not be very expensive as teachers can make them from locally available materials, and they can use own initiative to suit their individual needs. The materials also make sense to the learners as they are from things that they know. Materials should be organized in such a way that opportunities for learning and discovery are maximized. K.I.E (1990) states that the provision and arrangement of the furniture and equipment can affect the way children learn.

Akolo (1978), states that instructional materials are facilitators of teaching and learning processes when used properly. They provide an opportunity for learner centered method of education. They also arouse learners’ interest, stimulates imaginations, raise questions for discussion and desire to find more or solve some problems.

The use of real objects, pictures and sketches assist in focusing children’s attention and sustain their interest in the lesson for a much longer period than would be if the teacher relied on lecture method (Kabiru&Njenga 2004). The pre-primary school teacher can use a thematic method to teach about the color, shape, and names of objects in the class. For example, a child can be asked to color the box in the second line that contains the same letter as the box on the first line. If teachers prepared the lessons well and use instructional materials effectively then reading would not be a problem in pre-primary schools and even in higher levels. The reviewed studies from
Kenya gives a general picture of the impact of availability of teaching and learning materials on learners’ education; however, they do not indicate which aspects of learning are affected by the materials and to what extent. The current research addressed this by identifying how the availability of teaching and learning materials is affecting reading readiness among pre-primary school learners and no other level of education.

A study by Dhingra and Sharma (2011) in India revealed that there was lack of adequate teaching and learning materials in Anganwadicentres pre-primary schools. It was further reported that 37% of Anganwadicentres [AWC] had no materials or aids for providing education. Fifty percent had no space either for storing materials or for children to sit inside or play outside. The teaching aids mostly used by Anganwadi worker (AWW) for providing pre-primary school education (PSE) are charts which are given by Social Welfare Department (Arora et al., 2006). Lack or non-availability of teaching aids or pre-primary schoolkits is a serious constraint for organizing and conducting pre-primary school sessions successfully (CAG, 2005 cited in a report of Institute for Financial Management and Resources in 2009-10 on ICDS). The quality of pre-primary school services was found to be average due to the non-availability of teaching learning materials (TLM) (Bhadwal, 2009).

According to K.I.E (2008), there are several varieties of teaching learning resources that can be used for example audiovisual aids (television, videos) audio aids such as radio, visual aids such as, flash cards, tactile aids like dolls and toys. All these teaching learning resources can assist the child to learn and acquire new knowledge. Aids such as charts, pictures can enable a child to learn and remember concepts learnt (Karaka, 2009). Muithungu (2003), suggests that teachers should use variety of
teaching learning resources easily found within the locality. It is the responsibility of the stakeholders to ensure that the required materials are provided to enhance learning of children in ECDE centers. Though these studies recognize the need of teaching and learning resources in ECD centres, they do not provide a clear picture on the availability of these resources an area of interest for this study. In 2012, Chepsiror in a study conducted within ECDE Teacher Advisory Centres (TAC) observed that although the provision of learning materials was central to the mission of the TACs, they were equipped with very few materials which were neither well organized nor sufficient to be borrowed by teachers.

However, this study by Chepsiror focused on ECD teacher training college and shows that the teaching and learning resources are inadequate begging the question as to the status of teaching and learning resources at pre-primary school level.

2.4 Use of Teaching and Learning Materials and Children’s Reading Readiness

The type of learning and teaching materials can influence the reading achievement of learners. As the choice is a great motivator, educators can influence learners’ interest with a variety of materials and activities available in the classroom (Ginsberg, 2005). To provide the required learning experiences for various groups of children, teachers should possess several materials to accommodate each learner’s unique interests, and learning methods. As an example, classroom and library needs to have big books, smaller books, hard and soft-cover books as well as interactive books in different genres, with stimulating topics and different levels of difficulty. Though the researcher recognizes the importance of these resources in improving reading and learning, they have not shown how each of these resources may affect reading
readiness. The current study, therefore, sought to address this knowledge gap in Mathira East Sub-county pre-primary schools.

The use of computer assisted instructions [CAI] has been widely proposed as having a significant influence on reading readiness. Numerous trends are presented in studies relating to CAI. The quantity of benefits learners get from it is related to their (learners) age. Studies by Cotton, (2001) and Software & Information Industry Association, (2000) revealed that CAI had the most positive effects on elementary school learners. CIA’s ability to reduce the time children take to access and learn from online material and the instruction time for the curriculum objectives is another important determinant for its use in teaching (Reeves, 1998).

Najjars (1996) study showed that there was a 36% time saving when CAI was employed in classrooms. Cottons (2001) study, on the other hand, provided mixed findings in time-saving by noting that pupils learn the material in either the same time or less time when CAI is used. Cotton (2001) further observed that children learn 40% faster when taught using CAI as it improves learners’ time on task. Though these studies argue that computers increase the pace of learning, they do not however show how this resource assist with reading readiness an area of concern for the current study. A consensus confirms that children with disabilities or those at-risk of literacy benefit the most from CAI (Kim &Kamil, 2001). Software & Information Industry Association (2000) study results also showed a positive achievement of CAI to learners with disabilities. Similarly, Najjar (1996) revealed that when computer instruction is accessible to learners with low prior knowledge in the area being taught, it was very likely that the information will be learned. These authors do not however show the extent to which computer assisted instructions influence each aspect of
learning achievement among learners. This makes it impossible to generalize their findings to learners with reading readiness difficulties.

Various studies support the adoption of CAI in reading instruction by educators for children with various levels of disabilities as well as learners who experience challenges in the development of reading competencies (Byrd, 2001; Cotton, 2001; Hall, Hughes, & Filbert, 2000; Hook, Macaruso, & Jones, 2001). All of these trends in the research about CAI have the potential to impact readiness in reading. Unlike the reviewed studies, the current study focused on pre-primary school learners only.

In Zimbabwe, acute shortages of learning and teaching materials and poor staffing of academic staffs in rural areas of the country make it challenging for teachers to teach reading (MoE, 2008). One may possess required competency for teaching reading, but finds it difficult to effectively teach as needed because teaching and learning materials are not in place. Higher pupil-teacher ratios force the few educators to attend to more than one class creating work overload, hence inability to give each learner the required attention in class. The same worries have been noted by Mwanamukubi, (2013) who stated that lack of teaching and learning materials affected reading readiness of pre-primary school children in the country. These studies focus on the obstacles faced by teachers more than difficulties learners face when there is a lack of teaching and learning materials an area to be addressed by the current research.

2.5 Teachers Experience and Children’s Reading Readiness

The experience of the teacher is fundamental in children’s reading readiness. A phenomenographical study done in Sweden that involved 20 teachers found out that
age of pre-primary school teacher determine the kind of reading readiness they would create for the learners.

Experienced teachers have better pre-reading skills. These skills are sharpened by experience on the job over the years and an experienced teacher is more likely to be better organized than an inexperienced one since “practice makes perfect”. However, experience depends on what one had acquired earlier and how one applies it to new learning. Studies conducted by Bandura (1977) and Gumo (2003) on the above explain that a teacher with many years of teaching experience has learnt more on the job and is able to make comparisons, inter-relationships which enhance refinement on what they already know. Anderson (1994) emphasized that an experienced teacher should ensure that children with learning difficulties should be taken care of equally and without discrimination. Experienced teachers are also concerned with factors out of school since they affect children’s personal, social and education welfare in school. Teacher characteristics and experience are very important in pre-reading skills. For a teacher who has been on the job for years, time keeping will naturally be embedded in the mind.

How the teachers who are trained will also affect reading readiness. An instance of this is seen in pre-primary schools in Japan where the curriculum is less structured and teacher focused than in many countries. Pre-primary school teachers are trained to create a classroom climate that enhances learning. The training of pre-primary school teachers reflects a belief that children should develop their own ability to interact with each other and learn consequences of behaviour without excessive adult intervention.

A skilled teacher who employs proper management techniques in a pre-primary classrooms end up with an effective classroom climate that brings positive child
development results. Experience depends on what one had acquired earlier and how one applies it to new learning. Studies conducted by Bandura (1977) and Gumo (2003) on the above explanation suggests that a teacher with many years of teaching experience has learned more on the job and is able to make comparison inter-relationships which enhance refinement on what they already know. This would make a more experience teacher better to choose a variety of teaching approaches and the learners feel that the classroom climate is friendly and suitable for all. Anderson (1994) advocates for this experience in terms of length of service and interaction between children and the teacher.

Kabiru (1993) and Mambo (1986) suggested that training helps in performance. It helps teachers to understand what to teach. Teachers experience is therefore important to equip teachers with relevant reading skills and knowledge in order to create reading readiness skills. Teacher’s academic qualifications are also important as far as pre-primary schools children performance is concerned. Barnett (2004) asserts that, children are learning and development thrives to positive reading readiness which depends on the educational qualifications of their teachers. This is done based on research studies done in U.S where pre-primary school teachers with a college education have been shown to be more effective. Teacher education was found to be related to the quality of pre-primary school education and the development of children in pre-primary school classrooms.

A study done in Scotland by the government that involved 336 pre-primary schools in order to ascertain the effects of teacher qualification on the pre-primary school children found out that where a teacher has a background in early years, methodology, contributes to making a positive difference to children’s learning. Low academic
levels hinder teachers understanding and grasping content taught in training courses they attend. Mambo (1986) and Kabiru (1993) in their research findings on the effect of teacher academic qualification on the children’s achievements noted that low pre-primary school teachers academic grades, were attributed to how he/she handles the pre-primary school pupils.

Sifuna (1977) viewed college training programmes as avenues to equip the teachers with the necessary knowledge, skills and attitudes in handling individual problems among pre-primary children. Pre-primary educators must emphasize oral fluency which can enhance learners’ ability to read unfamiliar text comprehensively. High levels of comprehension among learners can be realized only if educators attend to variations in oral language and emergent literacy capabilities earlier. Additionally, an appropriate combination of instructional methods may vary by a child as a function of linguistic background. This often requires a detailed and objective evaluation of children’s language and literacy proficiency to enhance developmentally appropriate instructional strategies from early ages (NORC, 2013). Teachers experience is a cornerstone of productivity in education sector. Harris and Sass (2007) established that teachers with more than twenty years of experience are more effective compared to teachers with less or no experience.

2.6 Conclusion of Reviewed Literature

The study concludes that, an earnest attempt had been made to establish variables affecting reading readiness among learners. Among variables of concern for the reviewed studies are availability of reading and learning materials, relationship between availability of teaching/learning materials and children’s reading readiness, use of teaching and learning materials and children’s reading readiness and
relationship between teachers level of experience and children reading readiness. Among the gaps identified was the fact that majority of such studies are only from western countries.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the research design, study variables target population, sample size and sampling procedures. It also focuses on research instruments, piloting, validity and reliability of research instruments, data collection procedures, data analysis and, logistical considerations.

3.2 Research Design and Locale

A correlational design was employed to carry out this study. This design involves collecting data in order to determine whether and to what degree a relationship exists between two or more quantifiable variables (Mugenda and Mugenda, 2003). The current study was aimed to investigate determinants of pre-primary children’s reading readiness and establish whether reading readiness was related to availability of teaching/learning materials or teacher experience. This design allowed the research to collect quantitative data whereby structured questions were used to obtain data in numerical form. This design was therefore most appropriate for assessing reading readiness among pre-primary learners in Mathira East Sub-County without manipulating any variable under study.

3.2.1 Study Variables

The study aim was to investigate how the independent variables influenced the dependent variable. For the purposes of this study, the following variables were investigated;

Independent Variables: These include, teaching and learning materials which include storybooks, posters, charts, flash cards, signposts, pictures, letter sounds
among others. Another independent variable was teachers’ level of experience and children’s reading readiness.

**Dependent Variable:** This is pre-primary school children’s reading readiness. It was measured using a reading readiness checklist (Appendix B.2) that measure the frequency at which the child was able to perform different activities. The frequency of performance of the actions was rated at different levels namely below average, average and above average. Below average was scored 1, average 2 and above average 3. The child reading readiness score was obtained by adding the score for the 24 actions in the reading readiness checklist.

### 3.2.2 Location of the Study

The study was carried out in Mathira East Sub-county, Nyeri County, Kenya. The location is approximately 127km from Nairobi on the way to Nyeri. The researcher chose this area specifically because of the increasing cases of reading difficulties among pre-primary learners in the Sub-County. Furthermore, there was no evidence of a similar study conducted in the study area.

### 3.3 Target Population

The target population in this study comprised of 600 pre-primary school class teachers in public pre-primary schools in Mathira East Sub-County.

### 3.4 Sample Size and Sampling Procedure

This involves calculation of the number of participants needed for the study (sample size) and providing methods of sampling and ways to choose the sample using the stated methods.
3.4.1 Sample Size

The sample size of the study was obtained from the target population. From this population a sample size was calculated in order to assist in the generalization of the final results. It was calculated according to the formula proposed by Rodeo, (2004 & 2005), who observed that an adequate study sample should have at least 20% of the entire study population in a small population and 10% in a large population. The study used a sample size of 120 participants, which made 20% of the total number of respondents in the target population.

3.4.2 Sampling Procedure

Simple random sampling was used to select the participants. A list of the all names of six hundred pre-primary teachers was written in a computer random simulation which helps select one twenty participants. This means that all the pre-primary school teachers had equal chance of being selected.

3.5.0 Research Instruments

The following research instruments were used in this study;

3.5.1 Structured Questionnaires

This instrument was used in collecting quantitative data as it would have closed ended questions. In closed-ended queries, response categories were provided. Closed-ended question enabled the respondents to select from a predetermined category of answers and help save time. This instrument was used to gather data from all the respondents who were the pre-primary class teachers. Section A of the instruments gathered demographic information of the respondents, Section B gathered data on the influence of teaching/learning materials on pupils reading readiness
3.5.2 Piloting of Research Instruments

Pilot testing of the instruments was done by administering the instruments to a selected sample of targeted respondents. A sample of ten respondents from Mathira town with characteristics similar to the study population was randomly selected to participate in the pilot study. Similar sampling techniques as those employed in actual field work were used during sampling respondents for the pilot study. These respondents were excluded in the final sample. This assisted the researcher to establish if the proposed study is feasible and also identified possible drawbacks in the research instruments. Through this, validity and reliability of the study tools was verified.

3.5.3 Validity of the Instruments

To determine the content validity of the instruments, expert judgment was used. The instruments were scrutinized by the researcher as well as the supervisors to judge the items on their appropriateness of content, and also suggest areas that require modification in order for the objectives of the study to be adequately addressed. The researcher ensured the validity of the collected information by administering the instruments personally and with the assistance of qualified field staff. This was to ensure valid data was collected.

3.5.4 Reliability of the Instruments

The researcher used consistent and systematic questionnaires. To enhance reliability test-retest method was conducted when 10 questionnaires were administered to the same group after a period of one week. Person’s product moment formula of correlation was used to establish the extent to which the contents in the questionnaires
were consistent. A correlation of 0.5 and above was considered to be high enough to judge the instruments reliable for the study.

3.6 Data Collection Procedures

Before data collection, training of the research assistants was conducted in one public school in Mathira East Sub-county. The researcher employed assistants who had knowledge in research field work in order to assist in data collection. Afterwards, discussions followed to find out the experiences gained from the practice. Actual field work then proceeded at the end of the training where structured questionnaires were issued by the assistants to the pre-primary teachers. This process took a maximum of three weeks after which the instruments were collected and prepared for data analysis.

3.7 Data Analysis

The research employed quantitative data analysis it was informed by the study hypothesis. The researcher dealt with the relationship between the availability of teaching/learning materials and also the relationship between use of teaching/learning materials. The study captured different questionnaires from the respondent. The collected data was processed whereby it was entered into the scientific package for social sciences [SPSS] software version 21.0 to generate frequencies and percentages. Chi-square was used to determine the relationship between various variables. Once the data was processed and errors removed, it was tabulated and matched with information in the instruments in order to ascertain that it is an accurate representation of the collected data.
3.8 Logical and Ethical Considerations

The researcher was guided by various logistical and ethical principals. The logical and ethical considerations were important in ensuring that the research was carried out in a smooth and humane manner.

3.8.1 Logistical Considerations

First the researcher got an introductory letter from Kenyatta University, Ethics and Review Committee. The researcher then proceeded to the National Council of Science and Research to obtain a research permit. Permission to visit the school was sought from the County Director of Education, County Commissioner of Police, and District Education Officer and also the Head Teachers of the sampled primary schools before meeting the respondents.

3.8.2 Ethical Considerations

To protect participants’ confidentiality they were identified using codes instead of names. Teachers were not required to write names of pupils or theirs. The information obtained from the respondents was also kept confidential and was not used against the respondents but only for research purpose.
CHAPTER FOUR
PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents results of the study and interpretation of the findings. The study was based on determinants of reading readiness of pre-primary children. The results are presented according to the study objectives that were stated as follows:

i. To determine the level of reading readiness of pre-primary children.

ii. To assess the availability of teaching and learning materials.

iii. To find out the relationship between availability of teaching/learning materials and children’s reading readiness.

iv. To establish the relationship between teachers use of teaching/learning materials and children reading readiness.

v. To establish the relationship between teachers’ level of experience and children’s reading readiness.

4.2 General Information

Out of the 120 questionnaires administered a total of 84 were returned which was equal to 70%. Bell (2005) argues that 50% return rate is adequate. This means that the return rate was acceptable.

4.2.1 Demographic Information

The researcher sought to determine the demographic distribution of pre-primary school teachers in the target area. This included teachers level of training and gender percentages.

4.2.2 Teachers’ Level of Training and gender

Teachers were asked to indicate their highest training level. The levels of training
considered included certificate and diploma levels which were indicators of pre-
primary teachers’ qualifications.

Table 4.1: Frequency distribution for teachers’ level of training

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>64</td>
<td>76.2</td>
<td>76.2</td>
<td>76.2</td>
</tr>
<tr>
<td>Diploma</td>
<td>20</td>
<td>23.8</td>
<td>23.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

As presented in table 4.1 the number of teachers who had trained at certificate level
was higher than thrice those with diploma level of training. It was also noted that all
the 84 respondents were female.

4.3 Levels of Children Reading Readiness

The first objective of this study was to determine the level of reading readiness among
pre-primary school children. To achieve the objective, teachers were asked to rate the
reading readiness levels of each child using three point Likert Scale, with reference to
the facets. The scale had 3 facets; below, average and above average. Reading
readiness scores were combined and calculated ranging from 41 to 68. The scores
were classified into three categories namely; below average (41 to 55) average (56 to
60) and above average (61-68). Table 4.2 shows the proportions of children according
to the teachers’ ratings in each of the facets.
### Table 4.2: Proportions of children by level of performance

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Teacher’s rating by level of performance</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below average</td>
<td>Average</td>
<td>Above Average</td>
<td>Acceptable level of performance (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>Can turn pages in a book</td>
<td>19</td>
<td>22.6</td>
<td>49</td>
<td>58.3</td>
<td>16</td>
<td>19.0</td>
<td>77.3</td>
<td>58.3</td>
<td>19.0</td>
<td>77.3</td>
<td></td>
</tr>
<tr>
<td>Knows that books are read from front to back</td>
<td>30</td>
<td>35.7</td>
<td>28</td>
<td>33.3</td>
<td>26</td>
<td>31.0</td>
<td>64.3</td>
<td>52.4</td>
<td>16.7</td>
<td>57.2</td>
<td></td>
</tr>
<tr>
<td>Remembers pictures that he or she has seen</td>
<td>32</td>
<td>38.1</td>
<td>44</td>
<td>52.4</td>
<td>8</td>
<td>9.5</td>
<td>61.9</td>
<td>44.0</td>
<td>15.5</td>
<td>56.0</td>
<td></td>
</tr>
<tr>
<td>Is able to recognize most of the letter sounds</td>
<td>30</td>
<td>35.7</td>
<td>50</td>
<td>59.5</td>
<td>0</td>
<td>0.0</td>
<td>59.5</td>
<td>44.0</td>
<td>15.5</td>
<td>56.0</td>
<td></td>
</tr>
<tr>
<td>Child knows the proper way to hold a book</td>
<td>36</td>
<td>42.9</td>
<td>34</td>
<td>40.5</td>
<td>14</td>
<td>16.7</td>
<td>57.2</td>
<td>42.9</td>
<td>15.5</td>
<td>56.0</td>
<td></td>
</tr>
<tr>
<td>Can read syllables</td>
<td>37</td>
<td>44.0</td>
<td>34</td>
<td>40.5</td>
<td>13</td>
<td>15.5</td>
<td>56.0</td>
<td>44.0</td>
<td>15.5</td>
<td>56.0</td>
<td></td>
</tr>
<tr>
<td>Attempts to read labels on tins, clothes, signposts etc</td>
<td>39</td>
<td>46.4</td>
<td>32</td>
<td>38.1</td>
<td>13</td>
<td>15.5</td>
<td>53.6</td>
<td>35</td>
<td>43.1</td>
<td>53.6</td>
<td></td>
</tr>
<tr>
<td>Can identify an odd-on out by looking at things</td>
<td>39</td>
<td>46.4</td>
<td>35</td>
<td>41.7</td>
<td>10</td>
<td>11.9</td>
<td>53.6</td>
<td>35</td>
<td>41.7</td>
<td>53.6</td>
<td></td>
</tr>
<tr>
<td>Has interest in books</td>
<td>41</td>
<td>48.8</td>
<td>33</td>
<td>39.3</td>
<td>10</td>
<td>11.9</td>
<td>51.2</td>
<td>48.8</td>
<td>15.5</td>
<td>51.2</td>
<td></td>
</tr>
<tr>
<td>Can speak in complete sentences</td>
<td>41</td>
<td>48.8</td>
<td>31</td>
<td>36.9</td>
<td>12</td>
<td>14.3</td>
<td>51.2</td>
<td>48.8</td>
<td>15.5</td>
<td>51.2</td>
<td></td>
</tr>
<tr>
<td>Can tell simple stories</td>
<td>41</td>
<td>48.8</td>
<td>43</td>
<td>51.2</td>
<td>0</td>
<td>0.0</td>
<td>51.2</td>
<td>48.8</td>
<td>15.5</td>
<td>51.2</td>
<td></td>
</tr>
<tr>
<td>Child pretends to read</td>
<td>41</td>
<td>48.8</td>
<td>34</td>
<td>40.5</td>
<td>9</td>
<td>10.7</td>
<td>51.2</td>
<td>48.8</td>
<td>15.5</td>
<td>51.2</td>
<td></td>
</tr>
<tr>
<td>Enjoys being read to</td>
<td>44</td>
<td>52.4</td>
<td>31</td>
<td>36.9</td>
<td>9</td>
<td>10.7</td>
<td>47.6</td>
<td>52.4</td>
<td>15.5</td>
<td>47.6</td>
<td></td>
</tr>
<tr>
<td>Asks to be read to</td>
<td>45</td>
<td>53.6</td>
<td>30</td>
<td>35.7</td>
<td>9</td>
<td>10.7</td>
<td>46.4</td>
<td>53.6</td>
<td>15.5</td>
<td>46.4</td>
<td></td>
</tr>
<tr>
<td>Shows interest in books</td>
<td>45</td>
<td>53.6</td>
<td>39</td>
<td>46.4</td>
<td>0</td>
<td>0.0</td>
<td>46.4</td>
<td>53.6</td>
<td>15.5</td>
<td>46.4</td>
<td></td>
</tr>
<tr>
<td>Can identify objects or people in a picture</td>
<td>46</td>
<td>54.8</td>
<td>27</td>
<td>32.1</td>
<td>11</td>
<td>13.1</td>
<td>45.2</td>
<td>54.8</td>
<td>15.5</td>
<td>45.2</td>
<td></td>
</tr>
<tr>
<td>Reading comprehension</td>
<td>46</td>
<td>54.8</td>
<td>27</td>
<td>32.1</td>
<td>11</td>
<td>13.1</td>
<td>45.2</td>
<td>54.8</td>
<td>15.5</td>
<td>45.2</td>
<td></td>
</tr>
<tr>
<td>Can answer simple questions from a story</td>
<td>46</td>
<td>54.8</td>
<td>38</td>
<td>45.2</td>
<td>0</td>
<td>0.0</td>
<td>45.2</td>
<td>54.8</td>
<td>15.5</td>
<td>45.2</td>
<td></td>
</tr>
<tr>
<td>Is keen on looking at pictures</td>
<td>46</td>
<td>54.8</td>
<td>38</td>
<td>45.2</td>
<td>0</td>
<td>0.0</td>
<td>45.2</td>
<td>54.8</td>
<td>15.5</td>
<td>45.2</td>
<td></td>
</tr>
<tr>
<td>Can follow simple instructions (e.g sit down, look here etc)</td>
<td>49</td>
<td>58.3</td>
<td>35</td>
<td>41.7</td>
<td>0</td>
<td>0.0</td>
<td>41.7</td>
<td>58.3</td>
<td>15.5</td>
<td>41.7</td>
<td></td>
</tr>
<tr>
<td>Can remember simple stories</td>
<td>50</td>
<td>59.5</td>
<td>24</td>
<td>28.6</td>
<td>10</td>
<td>11.9</td>
<td>40.5</td>
<td>59.5</td>
<td>15.5</td>
<td>40.5</td>
<td></td>
</tr>
<tr>
<td>Can identify small differences in pictures</td>
<td>51</td>
<td>60.7</td>
<td>28</td>
<td>33.3</td>
<td>5</td>
<td>6.0</td>
<td>39.3</td>
<td>60.7</td>
<td>15.5</td>
<td>39.3</td>
<td></td>
</tr>
<tr>
<td>Is interested on writings in the environment</td>
<td>44</td>
<td>52.4</td>
<td>16</td>
<td>19.0</td>
<td>12</td>
<td>14.3</td>
<td>33.3</td>
<td>52.4</td>
<td>15.5</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td>Is able to arrange patterns from left to right</td>
<td>60</td>
<td>71.4</td>
<td>19</td>
<td>22.6</td>
<td>5</td>
<td>6.0</td>
<td>28.6</td>
<td>71.4</td>
<td>15.5</td>
<td>28.6</td>
<td></td>
</tr>
</tbody>
</table>

Those children rated at average and above average were considered to have attained an acceptable level of reading readiness in specific behaviour. Likewise those below...
average were considered as not having attained reading readiness. The ability to turn pages in a book as an indicator of reading readiness had the highest percentage of acceptable performance followed by the knowledge that books are read from front to back and then followed by rating on whether the child remembers pictures that he or she has seen. The ability of children to recognize most of the letter sounds was ranked fourth in the acceptable level of performance. The behaviour with the lowest proportion of children with acceptable performance was the ability to arrange patterns from left to right followed by interest in writings on the environments and identification of small differences in pictures. The ability to remember simple stories was ranked fourth from the bottom. The frequency distribution for proportion of children according to the level of performance is shown in table 4.3.

Table 4.3: Frequency Distribution for Proportions of Children’s Level of Performance

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above Average</td>
<td>13</td>
<td>15.5</td>
<td>15.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Average</td>
<td>32</td>
<td>38.1</td>
<td>38.1</td>
<td>53.6</td>
</tr>
<tr>
<td>Below Average</td>
<td>39</td>
<td>46.4</td>
<td>46.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Majority of the children in the study area had average and above levels of reading readiness. According to the results the proportion of children with average and above levels of readiness was above 50% however those with below average performance were slightly below 50%. Therefore, some proportion of the children in the study area had low levels of reading.

4.4 Availability of Teaching/Learning Materials

The second objective sought to determine the availability of teaching/learning materials. To achieve this objective materials that were frequently used were
considered. The materials included pictures, story books, chalkboards, signposts, posters and flashcards among others. The availability of materials were classified at different levels namely low, relatively low, average and highly available.

Table 4.4: Availability of teaching materials

<table>
<thead>
<tr>
<th>Material</th>
<th>Low F</th>
<th>Low %</th>
<th>Relatively Low F</th>
<th>Relatively Low %</th>
<th>Average F</th>
<th>Average %</th>
<th>High F</th>
<th>High %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalkboard</td>
<td>22</td>
<td>26.2%</td>
<td>8</td>
<td>9.5%</td>
<td>4</td>
<td>4.8%</td>
<td>50</td>
<td>59.5%</td>
</tr>
<tr>
<td>Labeled items e.g tins</td>
<td>10</td>
<td>11.9%</td>
<td>30</td>
<td>35.7%</td>
<td>11</td>
<td>13.1%</td>
<td>33</td>
<td>39.3%</td>
</tr>
<tr>
<td>Story books</td>
<td>21</td>
<td>25.0%</td>
<td>22</td>
<td>26.2%</td>
<td>17</td>
<td>20.2%</td>
<td>26</td>
<td>31.0%</td>
</tr>
<tr>
<td>Hangings</td>
<td>27</td>
<td>32.1%</td>
<td>10</td>
<td>11.9%</td>
<td>9</td>
<td>10.7%</td>
<td>33</td>
<td>39.3%</td>
</tr>
<tr>
<td>Pictures</td>
<td>30</td>
<td>35.7%</td>
<td>12</td>
<td>14.3%</td>
<td>24</td>
<td>28.6%</td>
<td>18</td>
<td>21.4%</td>
</tr>
<tr>
<td>Books</td>
<td>32</td>
<td>38.1%</td>
<td>12</td>
<td>14.3%</td>
<td>17</td>
<td>20.2%</td>
<td>23</td>
<td>27.4%</td>
</tr>
<tr>
<td>Chart</td>
<td>31</td>
<td>36.9%</td>
<td>19</td>
<td>22.6%</td>
<td>13</td>
<td>15.5%</td>
<td>21</td>
<td>25.0%</td>
</tr>
<tr>
<td>Picture books</td>
<td>33</td>
<td>39.3%</td>
<td>19</td>
<td>22.6%</td>
<td>6</td>
<td>7.1%</td>
<td>26</td>
<td>31.0%</td>
</tr>
<tr>
<td>Sign posts</td>
<td>44</td>
<td>52.4%</td>
<td>22</td>
<td>26.2%</td>
<td>6</td>
<td>7.1%</td>
<td>12</td>
<td>14.3%</td>
</tr>
<tr>
<td>Flash cards</td>
<td>44</td>
<td>52.4%</td>
<td>25</td>
<td>29.8%</td>
<td>4</td>
<td>4.8%</td>
<td>11</td>
<td>13.1%</td>
</tr>
<tr>
<td>Posters</td>
<td>54</td>
<td>64.3%</td>
<td>19</td>
<td>22.6%</td>
<td>7</td>
<td>8.3%</td>
<td>4</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

On the basis of the availability of teaching/learning materials, the study sought to establish the materials available in the schools. The materials with average and above average were considered to have achieved the acceptable levels. Majority of the pre-schools had chalkboards followed by labeled items and storybooks with acceptable levels. However, most schools lacked some materials. For instance posters were the least available followed by flashcards and signposts.

Table 4.5 indicates the cumulative general distribution of the teaching/learning materials. This shows general trend of how materials were generally distributed in all the schools involved in the study.
Table 4.5: Frequency distribution for availability of teaching/learning materials

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>31</td>
<td>36.9</td>
<td>36.9</td>
<td>36.9</td>
</tr>
<tr>
<td>Relatively Low</td>
<td>19</td>
<td>22.6</td>
<td>22.6</td>
<td>59.5</td>
</tr>
<tr>
<td>Average</td>
<td>11</td>
<td>13.1</td>
<td>13.1</td>
<td>72.6</td>
</tr>
<tr>
<td>High</td>
<td>23</td>
<td>27.4</td>
<td>27.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.5 shows that 59.5% of the schools had relatively low levels of teaching materials. Only 27.4% of the schools had a high level of training materials. This suggests that the availability of teaching materials is wanting. Teaching and learning material are encouraged so as to help children retain what they have learnt (KIE, 2008). According to World Bank (2007) teaching/learning materials are gradients in learning and the intended curriculum cannot be implemented without them. Adequate of teaching materials provide learners with sufficient learning (RTI Nigeria, 2014; Onyango, 2015). Also when materials are provided, teachers will be able to impact the knowledge and skills needed for the pre-primary children. For presented. Wilkims (1975) in his teachers guide book observed that the chalkboard is the most used teaching material. Similarly it was observed in this context, the chalkboard was the most available teaching material in the study area.

The findings of this study were similar to a study conducted by Okobia (2011) who observed a high availability of chalks, textbooks and chalkboard materials in the classroom. His study also observed materials such as posters and charts were not adequately provided. However, his study reported that pictures and charts were neglected in his study area which was not the case in this study. The findings were similar to those of Tuimor and Chemwei (2015) in a study which concluded that there were sufficient chalkboards and textbooks for teaching preschools in Nandi North.
District, Kenya. In a study conducted by Akuku (2015) it was established that there were adequate textbooks but insufficient flash cards as observed in this study. A study conducted by Karia (2016) reported that chalkboard and flash cards were the most available teaching materials while textbooks were the least available. However, Karia’s results contradict the findings of this study since textbooks were amongst the most available materials. Insufficient inexpensive material such as posters and flashcards could be attributed to negligence by the teacher. Another reason for lack of teaching materials in the study area would be associated with low income.

4.5 Relationship Between Availability of Teaching/Learning Materials and Children’s Reading Readiness

The third objective sought to assess the relationship between the availability of the teaching materials on the learners reading levels. The respondents were asked to rate how every teaching material affected reading readiness of the learner from low, moderate and high. The level of effects of every teaching material on reading readiness was rated as shown in table 4.6.
Table 4.6: Relationship of Availability of Teaching/Learning Materials and Children’s Reading Readiness

<table>
<thead>
<tr>
<th>Material</th>
<th>Low effects</th>
<th></th>
<th>Moderate Effects</th>
<th></th>
<th>High effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F.</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
</tbody>
</table>
| Labeled items e.g tins | 0 | 0.0 | 0 | 0.0 | 84 | 100.0  
| Story books         | 0 | 0.0 | 0 | 0.0 | 84 | 100.0  
| Books               | 0 | 0.0 | 0 | 0.0 | 84 | 100.0  
| Charts              | 0 | 0.0 | 0 | 0.0 | 84 | 100.0  
| Picture books       | 0 | 0.0 | 0 | 0.0 | 84 | 100.0  
| Chalkboard          | 0 | 0 | 9 | 10.7 | 75 | 89.3 |
| Pictures            | 10 | 11.9 | 27 | 32.0 | 57 | 68.0  
| Flash cards         | 0 | 0.0 | 40 | 47.6 | 36 | 42.9  
| Posters             | 40 | 47.6 | 24 | 28.6 | 35 | 41.7  
| Sign posts          | 20 | 23.8 | 45 | 53.6 | 35 | 41.7  
| Hangings            | 26 | 31.0 | 40 | 47.6 | 14 | 16.7  

The materials that had the highest effects on reading readiness included labeled items, story books and charts. However, hangings had the lowest effect on teaching. Those were followed by signposts, flash cards and posters. Chi-square test was used to statistically test the null hypothesis that was stated as:-

*Ho1: There is no significant relationship between availability of teaching/learning materials and children’s reading readiness at .05 level of significance.*

Table 4.7: Chi-square Test results for Availability of materials versus children’s reading readiness.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>89.183a</td>
<td>51</td>
<td>.001*</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>107.934</td>
<td>51</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.001</td>
<td>1</td>
<td>.972</td>
</tr>
<tr>
<td>Number of valid cases</td>
<td>84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The relationship between availability of teaching/learning materials and children’s reading readiness was significant at .05 level of significance (p value = .001). The
hypothesis was accepted. This suggests that children’s reading readiness increased with the availability of teaching/learning materials.

It has been reported that some teaching materials have significant positive impact in children reading readiness.

### 4.6 The Relationship between use of Teaching/Learning Materials and Children Reading Readiness

The fourth objective sought to determine the effects of use of teaching materials on learners reading readiness. First, the researcher focused on the frequency of instructional materials used by teachers during teaching of pre-primary learners activities. The levels were classified as; rarely used, sometimes used and frequently used.

#### Table 4.8: The Frequency of Use of Teaching/Learning Materials

<table>
<thead>
<tr>
<th>Material</th>
<th>Rarely Used</th>
<th>Sometimes Used</th>
<th>Frequently Used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Chalkboard</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Labeled items e.g tins</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Story books</td>
<td>0</td>
<td>0.0</td>
<td>71</td>
</tr>
<tr>
<td>Pictures</td>
<td>0</td>
<td>0.0</td>
<td>31</td>
</tr>
<tr>
<td>Chart</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Picture books</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Books</td>
<td>0</td>
<td>0.0</td>
<td>30</td>
</tr>
<tr>
<td>Flash cards</td>
<td>0</td>
<td>0.0</td>
<td>32</td>
</tr>
<tr>
<td>Posters</td>
<td>0</td>
<td>0.0</td>
<td>35</td>
</tr>
<tr>
<td>Sign posts</td>
<td>0</td>
<td>0.0</td>
<td>40</td>
</tr>
<tr>
<td>Hangings</td>
<td>0</td>
<td>0.0</td>
<td>42</td>
</tr>
</tbody>
</table>
Table 4.8 shows frequency of use of various teaching/learning materials by teachers to train learners. It was observed that some teaching/learning materials were frequently used by teachers although not at the same frequency. Some materials were preferred over others. The materials that had the highest frequency of use included chalk board, labeled items, story books and charts. Hangings and sign posts were less frequently used. It was an indication that there is a difference in how teachers utilized teaching materials to train pre-primary learners for reading readiness. To determine the relationship of use of teaching materials and reading readiness chi-square analysis was applied. The null hypothesis was stated as:-

\[ H_0: \text{There is no significant relationship between the use of teaching/learning materials and children’s reading readiness at .05 level of significance.} \]

The results were as presented in table 4.9.

**Table 4.9: Chi-Square Results for Use of Teaching Materials and Reading Readiness**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>89.183a</td>
<td>51</td>
<td>.001*</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>107.934</td>
<td>51</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>.693</td>
<td>1</td>
<td>.405</td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of valid cases</td>
<td>84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The relationship between teachers’ use of teaching/learning materials and children’s reading readiness was significant at .05 level of significance (p value = .001). The hypothesis was accepted. This suggests that children’s reading readiness increased with the teachers’ use of teaching/learning materials.
In this study, it was observed that use of teaching/learning materials affects reading readiness. Utilization of chalkboard has been found to facilitate explanation, demonstrations and children exercise which enhances children reading and understanding level (Wilkims, 1975). It has been reported that learners use of instructional materials such as story books, pictures and flash cards reinforced their reading skills. Use of flash cards which are used to teach new vocabularies and letters have been found to enable learners improve their literacy in English (Glenn, 2008).

Use of Instructional materials such as books, charts, pictures and story books have significant bearing in school performance (NACECE, 2011). According to K.I.E. (2003) use of teaching/learning materials stimulate the total growth and development of children. Effective use of teaching/learning resources reflects on quality of teaching of the subject. Use of vital instructional materials has positive changes in knowledge, understanding and habits of pre-primary learners (Kochhar, 1991). Whitebread (1996) conquers with him as he explains that interactive displays in the pre-primary schools thematic collection of carefully selected resources, entice pre-primary schools children to explore a wide range of ideas.

**4.7 The Relationship Between Teachers’ Level of Experience and Children’s Reading Readiness**

The fifth objective was to establish the relationship between teaching experience and children’s reading readiness. The level of experience was classified into three categories namely; short (below 2 year), medium (above 2 to 4 years) and long (above 4 years). Table 4.8 presents the numbers of teachers in every category of experience.
Table 4.10: Level of teaching experience of pre-primary teachers

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 4 years</td>
<td>9</td>
<td>10.7</td>
<td>10.7</td>
</tr>
<tr>
<td>2 – 4 years</td>
<td>34</td>
<td>40.5</td>
<td>51.2</td>
</tr>
<tr>
<td>Below 2 years</td>
<td>41</td>
<td>48.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Majority of the teachers had a teaching experience of less than two years which recorded 48.8% while 40.5% had 2-4 years of experience and 10.7% had above 4 years of experience. Chi-square test was used to determine the relationship between teaching experience and reading readiness. The following hypothesis was tested to establish the relationship.

$H_0$: There is no significant relationship between teachers' level of experience and children's reading readiness at .05 level of significance.

$H_0$: There is no significant relationship between teachers' level of experience and children's reading readiness at .05 level of significance.

Table 4.11: Chi-square Test Results for Teachers’ Level of Experience and Children’s Reading Readiness.

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>200.399*</td>
<td>153</td>
<td>.006*</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>177.120</td>
<td>153</td>
<td>.089</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>24.319</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>Number of valid cases</td>
<td>84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The relationship between teachers’ level of teaching experience and children’s reading readiness was significant at .05 level of significance (p value = .006). The hypothesis was accepted. This suggests that children’s reading readiness increased with the teachers’ level of experience. Therefore it confirms that teaching experience affects the reading of the learner. This could be attributed to the reason that experienced teachers effectively select and utilize relevant teaching/learning materials for the needs of the learners. The instructional resources and methods of teaching used
by the teachers is based on the wealth of information and experience that the teacher has (Kochhar, 1991).
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction
This chapter presents the summary of research findings, conclusions as demonstrated by the results and the recommendations arising from the study. The summary is organized according to the objectives of the study. The chapter includes recommendations and suggestions for further studies.

5.1 Summary of the Findings
The findings obtained for the level of reading readiness among pre-primary learners in the study area indicated that levels were low. Approximately 50% of the learners had not acquired acceptable levels of reading readiness in some reading aspects. Children had the lowest acceptable levels of reading readiness in the ability to recognize most of the letter sounds, to arrange patterns from left to right, interest in writing on the environments and identification of small differences in pictures.

The results revealed that there was inadequate teaching/learning materials. Among the schools 59.5% of the schools had relatively low levels of teaching/learning materials. Only 27.4 % of the schools had a high level of training materials. The chalk board was the most available teaching resource. Books were available in pre-primary schools however not in adequate proportions.

The researcher aimed to establish the relationship between availability of teaching/learning materials and children’s reading readiness. The Chi-Square analysis showed that there was significance at 5% confidence level. This concludes that there
was a significant relationship between availability of teaching/learning materials and reading readiness of the pre-primary children. The relationship between teachers’ use of teaching/learning materials and children’s reading readiness was significant at .05 level of significance (p value=.001). The hypothesis was accepted. This suggests that children’s reading readiness increased with the teachers’ use of teaching/learning materials.

Most of the teaching/learning materials were shown to have high effects on reading readiness of the learners. Pictures, story books, labeled items and charts were identified to highly affect learners reading readiness. More so, chi-square test showed that there was significant relationship between teaching/learning materials and learners reading readiness.

The study also wanted to establish the relationship between teachers’ use of teaching/learning materials and children reading readiness. According to the Chi-Square analysis the relationship between teachers’ use of teaching/learning materials and children reading readiness was significant at .05 level of significance (p value = .006). The hypothesis was accepted. This suggests that children’s reading readiness increased with the teachers’ use of teaching/learning materials. Some of the teaching/learning materials were found to be frequently used as compared to others. The chalkboard, pictures and storybooks were observed to be the most used.

Finally, the researcher wanted to establish the relationship between the level of experience and children reading readiness. The findings of the study showed that majority of the teachers had a short period of teaching experience at 48.8% while 40.5% had medium level of experience and 10.7% had long period of experience. Chi-square analysis demonstrated significance at .05 level of significance (P value =
.006). This suggests that children reading readiness increase with teachers level of experience.

5.2 Conclusion of the Study

This study concludes that approximately less than 50% of the pre-primary learners in the study area have low levels of reading readiness. The study has found that there were a number of challenges as teachers strive to deliver their mandate of improving pre-primary learners reading readiness. The study found that there was inadequacy of teaching/learning materials and lack of experience among pre-primary teachers. The study concludes that availability of instructional materials and their use by teachers have effects on learners reading literacy. Similarly, the study observed that teachers’ level of experience affects reading readiness of the children.

5.3 Recommendation of the Study

To promote the level of reading readiness among pre-primary learners, the following recommendations are made to the stakeholder in the study area to help pre-primary learners develop their literacy levels;

5.3.1 School Management

The parents and well wishers should provide adequate learning/teaching materials to the learners. The pre-primary level of education is one of the most critical stage of every child growth and development. The foundation for successful learning and basic knowledge for productivity and satisfactory life is established at this stage of life. To achieve this mandate adequate teaching and learning materials to teachers and pre-primary learners must be provided. This will enable the learners to develop their reading literacy as they interact with the teaching/learning materials. This can be done
by enlightening parents and the community on the importance of providing adequate teaching/learning resources in pre-primary by workshops and seminars provided by facilitators.

5.3.2 Pre-Primary School Teachers

The teachers should use instructional resources adequately to provide pre-primary schoolers with activities to improve their reading literacy. Teachers should use a variety of teaching and learning materials easily found in the locality (Muithungu, 2003)

5.3.3 Policy Recommendations

The researcher therefore recommends that since the sector is still growing and very dynamic, it is important for the Ministry of Education to put in place policies pertaining to qualification of the pre-school teachers to enhance the performance of children. The government should train teachers and equip them with the relevant reading readiness skills and knowledge. According to Chemwei, Njagi and Koech (2014), the experience of teachers have a considerable influence on adoption and use of pedagogy in daily classroom activities.

Additionally it is important for government to enforce the various legislations put in place that guide the recruitment of pre-primary educators.

These findings indeed affirm that ensuring high availability of learning materials requires a review of policies governing text book production and distribution. Materials other than text books are also important. While computers are becoming the norm in the classrooms in individual countries, most classrooms in developing countries may barely have a blackboard and a few text books (Word bank 2008).
The government should make a contribution to finance pre-primary in the study area the same way it provides free primary education to enhance the issue of inadequacy teaching/learning materials.

5.4 Recommendations for Further Studies

The extent of this study covered the pre-primary learners in Mathira East Sub-county, Nyeri County, Kenya. Therefore, the results cannot be generalized to other regions of Kenya. Hence, it is necessary to conduct an elaborate study involving the pre-primary learners in the whole county so as to establish the levels of reading readiness of the learners, availability and use of teaching material and also the relationships between reading readiness and teachers’ experience.
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APPENDICES

Appendix I: Consent Form

My name is Dinah W Machira. I am a Master’s student from Kenyatta University. I am conducting a study on “Reading readiness among pre-school learners in Mathira East Sub-county, Nyeri County Kenya. The information will be used by the relevant ministries dealing with learning challenges, parents and even academic institutions.

Procedures to be followed

Participation in this study will require that I ask you some questions. You have the right to refuse to participate in this study. However, you will still get benefits that will arise from the findings of this study.

Please remember that participation in this study is voluntary. You may ask questions related to the study at any time. You may also refuse to respond to any questions or stop engaging in the study at any time without any consequences whatsoever.

Discomforts and Risks

Some of the questions you will be asked may make you feel uncomfortable. If this happens, you may refuse to answer these questions if you so choose. This process may take about 30 minutes to complete.

Benefits

If you participate in this study you will help us learn about determinants of reading readiness within pre-primary schools existing in Mathira East Sub-county. Through this study, you will benefit by helping the government, ministries, NGOs and schools with information upon which they may base their measures of improving reading readiness among pre-school learners.

Reward

Participation in this study in itself is a reward in that the respondents will gain knowledge on learners reading readiness and factors affecting it.
Confidentiality

Participation in this study will be private. Your name will not be recorded on the research instruments. The research instruments will be kept in a locked cabinet for safe keeping.

Everything will be kept private.

Contact information

If you have any questions you may contact Kenyatta University Ethical Review Committee.

Secretariat on chairman.kuerk@ku.ac.ke or secretary.kuerk@ku.ac.ke

Participant’s statement

The above information regarding my participation in the study is clear to me. I have been given a chance to ask questions which I hope will be answered to my satisfaction. My participation in this study is entirely voluntary. I understand that my questionnaire will be kept private and that I can leave the study at any time. I understand that I will still get the same care and protection whether I decide to leave the study or not.

Name of participant………………………………………………………………

Signature or Thumb print …………………………………………………

Date …………………………..
Appendix II: Research Instrument

Appendix A: Teachers Questionnaire

School Code………. E.g Sch A

Gender: Male □ Female □

Age:  20-29 □  30-39 □  40-49 □

50 and above □

Training: Certificate □ Diploma □ Bachelors Degree □ Master Degree

Experience: 1-5yrs □ 5-10 yrs □ 11-15yrs □ 16-20 years □

Over 20 years □

A.1: AVAILABILITY OF MATERIALS CHECKLIST FOR TEACHING/LEARNING MATERIALS

Indicate by ticking in the appropriate box the availability of the materials.

<table>
<thead>
<tr>
<th>Material</th>
<th>Low</th>
<th>Relatively Low</th>
<th>Average</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chart</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash cards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Story books</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picture books</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pictures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labeled items e.g tins etc</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hangings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sign posts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chalkboard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A.2. CHECKLIST FOR USE OF TEACHING/LEARNING MATERIALS

Indicate by ticking in the appropriate column how often you use each of the materials when teaching reading to children.

<table>
<thead>
<tr>
<th>Material</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chart</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash cards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Story books</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picture books</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pictures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labeled items e.g. tins etc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hangings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sign posts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chalkboard</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix B: Children’s information Appendix B.1: Child’s details

School…. …..  Child No…..  Child’s Age…………………………..  
Class………………

Gender: Male □  Female □  
### B.2 Children’s Reading Readiness Checklist put a tick in the appropriate box

Indicate how often the child is able to do each of the following actions by ticking in the appropriate column.

<table>
<thead>
<tr>
<th>Action</th>
<th>Is able to perform this activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below average</td>
</tr>
<tr>
<td>Action</td>
<td></td>
</tr>
<tr>
<td>Child knows the proper way to hold a book</td>
<td></td>
</tr>
<tr>
<td>Can remember simple stories</td>
<td></td>
</tr>
<tr>
<td>Is able to arrange patterns from left to right</td>
<td></td>
</tr>
<tr>
<td>Asks to be read to</td>
<td></td>
</tr>
<tr>
<td>Can speak in complete sentences</td>
<td></td>
</tr>
<tr>
<td>Is able to recognize most of the letter sounds</td>
<td></td>
</tr>
<tr>
<td>Can tell simple stories</td>
<td></td>
</tr>
<tr>
<td>Can answer simple questions from a story</td>
<td></td>
</tr>
<tr>
<td>Is keen on looking at pictures</td>
<td></td>
</tr>
<tr>
<td>Can follow simple instructions <em>(e.g. sit down, look here etc)</em></td>
<td></td>
</tr>
<tr>
<td>Shows interest in books</td>
<td></td>
</tr>
<tr>
<td>Knows that books are read from front to back</td>
<td></td>
</tr>
<tr>
<td>Enjoys being read to</td>
<td></td>
</tr>
<tr>
<td>Can identify objects or people in a picture</td>
<td></td>
</tr>
<tr>
<td>Has interest in books</td>
<td></td>
</tr>
<tr>
<td>Can turn pages in a book</td>
<td></td>
</tr>
<tr>
<td>Child pretends to read</td>
<td></td>
</tr>
<tr>
<td>Can identify small differences in pictures</td>
<td></td>
</tr>
<tr>
<td>Is interested on writings in the environment</td>
<td></td>
</tr>
<tr>
<td>Attempts to read labels on tins, clothes, signposts etc</td>
<td></td>
</tr>
<tr>
<td>Can read syllables <em>(e.g. ba, ca, ma, de, fi etc.)</em></td>
<td></td>
</tr>
<tr>
<td>Can identify an odd-on out by looking at things</td>
<td></td>
</tr>
<tr>
<td>Remembers pictures that he or she has seen</td>
<td></td>
</tr>
</tbody>
</table>
Appendix III: Approval From Graduate School

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

FROM: Dean, Graduate School
TO: Dinah W. Machira
C/o Early Childhood Studies.

DATE: 1st July, 2016
REF: E55/CE/22523/10

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board, at its meeting of 22nd June 2016, approved your Research Project Proposal for the M.Ed. Degree Entitled, “Determinants of Pre-Primary School Children’s Reading Readiness in Mathira East Sub County, Nyeri County, Kenya”.

You may now proceed with data collection, subject to clearance with the Director General, Commission for Science, Technology & Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking forms per semester. The form has been developed to replace the progress report forms. The supervision Tracking Forms are available at the University’s website under Graduate School webpage downloads.

Thank you.

[Signature]
ANN NGURU
FOR: DEAN, GRADUATE SCHOOL

cc. Chairman, Department of Early Childhood Studies

Supervisors:

1. Dr. Esther Waiithaka
   C/o Department of Early Childhood Studies
   Kenyatta University

2. Dr. Gladwell Wambiri
   C/o Department of Early Childhood Studies
   Kenyatta University
Appendix IV: Approval from NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-3223471.
Fax: +254-20-328845, 3180209
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke

Ref. No. NACOSTI/P/16/37305/12678

Date: 22nd July, 2016

Dinah Wangui Machira
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Determinants of pre primary school children’s reading readiness in Mihira East Sub County, Nyeri County, Kenya,” I am pleased to inform you that you have been authorized to undertake research in Nyeri County for the period ending 22nd July, 2017.

You are advised to report to the County Commissioner and the County Director of Education, Nyeri County before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report/thesis to our office.

BONFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:
The County Commissioner
Nyeri County.
The County Director of Education
Nyeri County.
Appendix V Research Permit

THIS IS TO CERTIFY THAT:
MS. DINAH MANGUI MACHIRA
OF KENYATTA UNIVERSITY, 0-10101
KARATINA, has been permitted to
conduct research in Kiambu County
on the topic: DETERMINANTS OF PSE PRIMARY SCHOOL CHILDREN READING READINESS IN MATHIRA EAST
SUBCOUNTY KIAMBU COUNTY KENYA

For the period ending:
22nd July, 2017

Permit No. I NACOSTI/P/16/37305/12678
Date Of Issue: 22nd July, 2016
Fee Received: Ksh 1000

[Signature]

Director General
National Commission for Science, Technology & Innovation