

**TEACHER FACTORS INFLUENCING USE OF PLAY AS A TEACHING
STRATEGY IN PRE- PRIMARY S CHOOOLS IN
KIAMBU COUNTY, KENYA**

**BY
GRACE KABURA NJUGUNA**

E55/CE/34053/2016

**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL
FULFILMENT OF THE DEGREE OF MASTER (EARLY CHILDHOOD
STUDIES) IN THE SCHOOL OF EDUCATION OF KENYATTA
UNIVERSITY**

JULY, 2020

DECLARATION

I declare that this research project is my original work and has not been presented in any other university for consideration. This research proposal has been complemented by referenced sources duly acknowledged. Where texts, data (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.....

Grace Kabura Njuguna

E55/CE/34053/2016

Supervisor's Declaration

This research project has been submitted for appraisal with my approval as the University Supervisor.

Signature.....

Date.....

Dr. Esther Waithaka

Department of Early Childhood and Special Needs Education

Kenyatta University

DEDICATION

This work is dedicated to my dear parents John and Agnes, due to their moral and financial support throughout my years of study. May God bless you abundantly.

ACKNOWLEDGEMENT

My deepest gratitude and profound thanks to the Almighty God, who granted me His sufficient grace and favour throughout my years of study. My supervisor Esther Waithaka, for her patience, endless support, encouragement, guidance and mentorship. You are my great role model and you will remain in my heart forever.

I sincerely thank Ann and Nicholas, who helped me typing and printing the work. Geoffrey and Martin who added sufficient knowledge on data analysis. I am thankful to my siblings and parents for their financial and moral support.

Finally I am grateful to all the teachers who participated willingly during this study. Not forgetting my friends especially Henry, Vero and Naomi who offered their moral support fully.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION.....	iii
ACKNOWLEDGEMENT.....	iv
LIST OF TABLES.....	ix
LIST OF FIGURES	x
ABBREVIATIONS AND ACRONYMS.....	xi
ABSTRACT.....	xii
CHAPTER ONE:INTRODUCTION AND CONTEXTUALIZATION OF THE STUDY	1
1.1 Introduction.....	1
1.2 Background to the Study	1
1.3 Statement of the Problem.....	5
1.4 Purpose of the Study.....	5
1.5 Objectives of the Study.....	6
1.6 Research Question and hypothesis	6
1.6.1 Research question	6
1.7 Assumptions of the Study.....	7
1.8 Limitations and Delimitation of the Study	7
1.8.1 Limitations of the Study	7
1.8.2 Delimitations of the Study	7
1.9 Significance of the Study.....	8
1.10 Theoretical and Conceptual Framework.....	9
1.10.1 Theoretical Framework.....	9
1.10.1.1 Theory of Reasoned Action by Ajzen and Fishbein(1967)	9
1.10.2 The Conceptual Framework	11
1.11 Operational Definition of Terms	13
CHAPTER TWO:REVIEW OF RELATED LITERATURE.....	14

2.1 Introduction.....	14
2.2 Teacher’s use of play as a teaching strategy	14
2.3 Influence of teachers’ attitude on use of play as a teaching strategy.....	17
2.4 Teachers’ Teaching Experience and use of play as a teaching strategy	22
2.5 Influence of Teachers’ Training on the use of play as a teaching strategy in pre-school	25
2.6 Summary of Literature Review	29
CHAPTER THREE:RESEARCH DESIGN AND METHODOLOGY	31
3.1 Introduction.....	31
3.2 Research Design	31
3.3 Study Variables.....	31
3.3.1 Independent Variables	32
3.3.2 Dependents Variables	32
3.4 Location of Study	33
3.5 Target Population.....	33
3.6 Sampling Techniques and Sample Size	34
3.6.1 Sampling Technique	34
3.6.2 Sample Size	34
3.7 Research Instruments.....	35
3.7.1 Questionnaire for Pre-primary School Teachers	35
3.7.2 Observation Checklist for Pre-primary School teachers	36
3.8 Piloting of Research Instruments.....	36
3.8.1 Reliability of the Research Instruments.....	36
3.8.2 Validity of the Research Instruments	37
3.9 Data Collection	37
3.10 Data Analysis.....	38
3.11 Logistical and Ethical Considerations	38

3.11.1 Confidentiality and Privacy	39
3.11.2 Anonymity	39
3.11.3 Informed Consent	39
3.11.4 Storage of Data Collected.....	39
CHAPTER FOUR:PRESENTATION OF FINDINGS, INTERPRETATION, DISCUSSIONS.....	40
4.1 Introduction	40
4.2 General and Demographic Information	40
4.2.1 General Information.....	40
4.2.2 Demographic Information	41
4.2.2.1 Gender of the Respondent	41
4.2.2.2 Education level	41
4.2.2.3 Teachers’ experience	42
4.3 Results.....	43
4.3.1 Teachers’ use of play as a teaching strategy	43
4.4 Influence of attitudes on use of play.....	45
4.5. Influence of teaching experience on use of play	48
4.6. Influence of training on use of play	52
CHAPTER FIVE:SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	55
5.1 Introduction	55
5.2 Summary of the findings	55
5.3 Conclusion	57
5.4 Recommendation	58
5.5 Suggestion for further Research	59
REFERENCES.....	60
APPENDICES.....	67
Appendix I: Questionnaire for Pre-Primary School Teachers.....	67

Appendix II: Observation Checklist Guide for Teachers	70
Appendix III: Informed Consent Form.....	71
Appendix IV: Letter of Introduction	72
Appendix V: Graduate School Approval	73
Appendix VI: Research Authorization	74
Appendix VII: Research Clearance Permission	75
Appendix VIII: Research Authorization from NACOSTI	76
Appendix IX: Map of Ruiru Constituency Showing Ruiru Sub-County	77

LIST OF TABLES

Table 3.1 Target Population.....	34
Table 3.2 Sample Size.....	35
Table 4.1: Observation findings on use of fun activities	43
Table 4.2 Teachers' Attitude on use of Play in teaching	45
Table 4.3 Correlations on teacher's attitudes.....	47
Table 4.4 ANOVA of different categories of teaching experience and use of play	49
Table 4.5 LSD Test on different categories of teaching experience and use of play ...	50
Table 4.6 ANOVA on different levels of training and use of play	52
Table 4.7 LSD Test on different levels of training and use of play	53
Table 4.8 Summary of hypothesis testing.....	54

LIST OF FIGURES

Figure 1: The influence of teacher factors on use of play.....	12
Figure 4.1 Education level of respondents.....	40
Figure 4.2 Teachers' experience	42

ABBREVIATIONS AND ACRONYMS

KNBS	:	Kenya National Bureau of Statistics
MoE	:	Ministry of Education
NACOSTI	:	National Commission for Science, Technology and Innovation
NAEYC	:	National Association for the Education of Young Children
PP2	:	Pre- Primary two
RoK	:	Republic of Kenya
SPSS	:	Statistical Package for Social Sciences
SEL	:	Social-Emotional Learning
UNICEF	:	United Nation Child Education Funds
US	:	United States

ABSTRACT

Globally, play has been found to contribute immensely to the holistic growth and development of preschool learners. Although local studies have reported that the use of play in pre-schools is limited, the issue of teacher factors influencing utilization of play as a strategy for teaching has not received much attention. Therefore, this study aimed at establishing teacher factors influencing the utilization of play as a strategy of teaching, in public pre-primary schools in Ruiru Sub-county, Kiambu County. The objectives of the study were to examine teachers' use of play as a strategy for teaching; and the influence of teachers' attitudes, experience and training on the use of play as a strategy for teaching in pre-primary schools. The study was guided by the Theory of Reasoned Action by Fishbein and Ajzen. The study employed the correlational design. The population targeted comprised pre-primary school teachers from 32 pre-schools in Ruiru Sub-county. The study applied stratified sampling to form eight strata. Simple random technique was used to select the respondents from the strata. The research instruments used were questionnaires and observation checklist guide. Study instruments were piloted in four pre-primary school teachers from another similar sub-county. After the fieldwork, all questionnaires were adequately checked verified. Thematic analysis was used to analyze qualitative data based on the study objectives and presented narratively. Quantitative data were organized and analyzed using descriptive statistics and inferential statistics. Statistical Package for Social Science (SPSS 23) was used to aid the analysis. Findings were presented using tables and charts. Pearson correlation was used to test the first null hypothesis while Analysis of Variance (ANOVA) was used to test the second and third null hypotheses at a significance level of 0.05. All the three-null hypotheses were therefore, rejected. The findings revealed that use of play as a strategy for teaching was moderately present in most of the preschools. The findings further established that there was a significant relationship between teachers' attitude and use of play as a teaching strategy. Teachers with positive perception of play were more likely to use it as a teaching strategy. There was a significant association between teachers' training and use of play. Finally, there was a significant positive association between teachers' experience and use of play. The study recommended that the education administration and the school heads should seek to cultivate a positive attitude among pre-school teachers to ensure that the teachers develop positive attitudes towards the use of play as a teaching strategy. There is also need to ensure that the teachers in the pre-primary schools get properly trained and equipped with the right skills to ensure that they are able to teach the learners through play as a teaching strategy. Finally, the study recommended further research on school factors influencing use of play as a teaching strategy.

CHAPTER ONE

INTRODUCTION AND CONTEXTUALIZATION OF THE STUDY

1.1 Introduction

A look at the study background, the problem under study stated, the purpose of the study, its objectives and the research question are given in this chapter. Also the significance of the study, the limitations and delimitations noted are presented in this chapter. The chapter discusses the theoretical and conceptual framework. Finally, it focuses on the operational definition of terms used.

1.2 Background to the Study

Play among young children forms an important component for children holistic development. Preschoolers across the globe have experienced that play affects their growth and development in a holistic manner. The emotional, cognitive, physical, emotional and social well-being of children and youth needs play as an essential component (Fromberg, & Gullo, 2012). Play activities also offer pre-school children with an idea opportunity to engage fully with their teachers.

The contribution of play to the learning process, especially in early education, cannot be overemphasized. Children in their early years prefer an environment that promotes play. Globally, available studies indicate that in an environment that supports exploration, discovery and play is where children learn best. Appropriate child care programs incorporate play for their development. Hymes (2013) points out that the cognitive, physical, emotional and social behaviours of children are connected to play.

In his study, he established that play is vital for a child's overall health and well-being.

On the other hand, Parten (2012), young children's programs value play as appreciated by early childhood teachers. Unfortunately, as pointed out by Torelli & Durrett (2011), the opportunities presented by play are not taken advantage of by teachers as they observe learning and development of children. The language abilities, emotional development, social interactions and even motor skills of children can be identified in such observations by teachers.

A study conducted in the US by Bailey (2002) to understand the benefits of playing social chess on children's play and their intelligence on a target of 111 respondents revealed that teachers who adopted play as a teaching strategy had their learners' manifest well-developed problem-solving skills, perspective-taking and social skills. It further reported that there was an increase in how students get involved in class, their reading, oral and communication skills and even motivation were developed by the use of play in the teaching process.

In most countries in Sub-Saharan Africa, the utilization of play by teachers is a common occurrence in schools at pre-primary level and there's a high perception that socialization of young children is enhanced by play materials. A child's life is affected also by the type of socialization the child undergoes (Hadley & Nenga, 2004). For example, a study conducted in Ghana by Steinke & Nickel (2007), established that play is a tool of socialization amongst children in their early years, and thus has an influence on the personality, performance of roles, perceptions and definition of roles for the child.

A report by UNICEF (2011) on the early childhood development in African countries emphasized that techniques/methods used by both teachers and pupils in teaching and learning are vital in promotion of self-mastery of skills and concepts especially at this tender age. The experts' deliberations in the report emphasized the need for staff training and underlined the importance of play for psychosocial stimulation and effective cognitive development of children. In this view, effective early childhood stimulation requires pre-primary school teachers and care givers to use play as a teaching strategy.

Play has been known to build communication and social skills, teach self-awareness, and can be used to help build social-emotional learning (SEL) skills (Kwan, 2011). A study by Lyabwene (2010) indicated that teachers play an important factor on the exploration of play as a strategy for teaching in pre-primary level. Therefore, as much as the use of play continues to be a popular method of teaching in pre-primary schools, there are crucial teacher factors that need to be improved to ensure effective exploration of play as a strategy for teaching in pre-primary level.

On the other hand, while various studies indicate play as a tool of socialization amongst children in their early years and its influence on the personality, performance of roles, perceptions and definition of roles for the child as stated by Kinjiwira (2013), many teachers related factors must be addressed if this method of teaching in pre-primary schools is going to be effective in improving grades. It is, therefore, important to consider the role teachers of in the early years of learning and the effectiveness of the use of play as an effective and learning strategy (Nasrabadi & Norouzi, 2014). Studies such as Hasalaka (2013), have revealed that teachers continue to use other methods while use of play has been minimal.

Thoughts, emotions and external world are involved in pre-primary school children play and most especially cooperative play which is made up of two-thirds pretend play as revealed in a study conducted by Wafula (2010) on play and the role of teachers. Children also become imaginative and creative as seen in the different roles they play in the situations in the social play they engage in as further asserted by the study. While the importance of utilization of play as a strategy for pre-primary level has been widely agreed upon, the role of teachers in the use of this method in the delivery of quality education among the pre-primary children has not been established. Although available studies indicates extensive use of play as a teaching method, little of these studies have been exhaustive or separately addressed the role of teachers in the use of play as a teaching method. Understanding of the teacher factors such as teachers experience, teachers' attitudes and their levels of training influence on delivering play as a teaching is, therefore, crucial.

Uwezo (2011) studies on academic achievement in lower primary schools established that children perform very poorly in literacy and numeracy. Much focus has been on school and teacher factors that contribute these low grades. A local study by Kemunto (2014), on factors hindering utilization of play as a strategy for teaching in Kisii County reported that, teachers use other methods of teaching which are faster and direct to avoid pressure from parents and administration.

A study by Lucia (2016) on determinants of learning resources on use of play during indoor and outdoor activities, has also reported that the majority of teachers in lower primary and pre-primary schools use play in a very minimal manner. The study further indicates that, play is commonly used during free activities in the morning but not during the lessons, whereby not all children's get involved.

1.3 Statement of the Problem

Play is important in the early education of a child, as it contributes to the holistic growth and development of preschool learners. When play is incorporated into the learning process, it provides all elements that help engage the children's brain in pre-primary school and keep them healthy. Despite the existence of the studies on use of play and its importance in early childhood, teachers continue to use less effective methods of teaching young children.

Studies on academic achievement in lower primary established that children's performance in literacy and numeracy is very poor. Much focus has been on school and teacher factors that contribute to the lower grades. However, considering the effectiveness of use of play in integration of children's learning experiences, it was important to determine the extent to which teachers used play in teaching and learning. Several local studies also claim that exploration of play as a strategy for teaching is minimal. Therefore, it was necessary to conduct this study in order to establish teacher factors on use of play as a strategy for teaching. This study therefore, sought to determine the teacher factors that affect the utilization of play as a strategy for teaching in pre-primary schools Ruiru Sub-County, Kenya.

1.4 Purpose of the Study

The study was purposed to determine the impact of teacher factors on the utility of play as a strategy for teaching in pre-primary schools in Ruiru Sub-County, Kiambu County. Therefore, the study wanted to determine how pre-primary school teachers' attitudes, pre-primary school teachers' teaching experience and level of training for the pre-primary school teachers' influence the utilization of play as a strategy for teaching in pre-primary schools in Ruiru Sub-county

1.5 Objectives of the Study

- i. To establish the extent to which teachers use play as a teaching strategy in pre-primary schools.
- ii. To find out the influence of pre- primary school teachers' attitudes on use of play as a teaching strategy in pre- primary schools.
- iii. To determine the influence of teachers' teaching experience on use of play as a teaching strategy in pre-primary schools.
- iv. To determine the influence of teachers' level of training on use of play as a teaching strategy in pre-primary schools.

1.6 Research Question and hypothesis

The research question and hypothesis are as follow:

1.6.1 Research question

- i. How do teachers use play as a teaching strategy in pre-primary schools?

1.6.2 Research hypotheses

H₀₁: Teachers' attitude does not influence use of play as a teaching strategy in pre-primary schools.

H₀₂: Teachers' teaching experience does not influence use of play as a teaching strategy.

H₀₃: Teachers' level of training does not influence use of play as a teaching strategy in pre-primary schools.

1.7 Assumptions of the Study

The study assumed that teachers use play activities differently as a strategy for teaching in pre-primary schools. It was also assumed that preprimary school teachers have different attitudes regarding exploration of play as a strategy for teaching. The study further assumed that teachers at the preprimary level had varied teaching experiences. Finally, the researcher assumed that preprimary school teachers had different training levels.

1.8 Limitations and Study Delimitations

Limitations are elements of a study that are not under the control of the researcher, while delimitations are all the elements that work in the benefit of the research or a study (Zikmund, 2003).

1.8.1 Limitations of the Study

The major challenge was financial. Some teachers were also not willing to provide the information, others provided little information. This was due to the fear of portraying their employers negatively, which led to failure to access important information. The researcher therefore assured them that the information sourced shall be purely used for purpose of the research study only. It was unfortunate that three sampled respondents did not participate in the study due to personal issues

1.8.2 Study Delimitations

This study was based on one sub-county and therefore the findings may only be generalized to other areas that have similar characteristics. The researcher conducted the study in public pre-primary schools in Ruiru Sub-county only. Learners and teachers in the preprimary level was the population where data was collected from. This study was exclusively also focused on assessment of teachers' use of play

activities and the effect of teachers' attitudes towards play, experience and training on use of play as a strategy for teaching at pre-primary level.

1.9 Significance of the Study

Teachers may benefit from the study findings as it may help in the identification of various teachers associated factors that may affect the utilization of play as a strategy for teaching in pre-school. Findings from the study may help in the developing training initiatives that may help in nurturing good attitude and equip teachers with the right skills in using play as a strategy for teaching in pre-school. The study may also give recommendations on how teachers can gather the necessary experience to effectively use play as a strategy for teaching.

Trainers on the other hand may benefit from the study findings given that it may help the trainers in developing lessons and training on how to deal with teachers-related issue that may influence the effective use of play as a method of teaching in lower primary schools. The findings from the study may also help in developing an effective training curriculum for teachers in order to equip them with the right knowledge on the use of play as a teaching strategy.

County education officers may also benefit from the study findings given that the study will advise on how teacher-related issues can be addressed in order to achieve high levels of performance in lower primary school given they may be able to develop effective policies and teaching guidelines on how to apply the use of play as a strategy for teaching. Finally, the research findings lay a foundation for future research which may benefit other researchers and academicians who may be interested in conducting similar studies.

1.10 Theoretical and Conceptual Framework

The Theoretical and Conceptual Framework that guided the study were as follows.

1.10.1 Theoretical Framework

1.10.1.1 Theory of Reasoned Action by Ajzen and Fishbein(1967)

In the field of social psychology, there is The Theory of Reasoned Action (TRA) which is traced there and developed by Fishbein and Ajzen (1967). In this theory, attitudes, norms, behaviors and beliefs of individuals are linked. The behavioral intentions for one to do an action is what determines their behavior according to the model. A person's attitudes and norms subjectively are what determines his intentions in regards to a behavior. As defined by Fishbein and Ajzen (1967), the subjective norms are the person's perception that most people who are important to him think he should or should not perform the behavior in question (Fishbein and Ajzen, 1975).

In this theory, how one evaluates the consequences of their behaviour and his beliefs is what determines their attitudes in regards to a behavior. The subjective probability that when a certain behavior is done it will yield specific results guides the beliefs of a person. It is therefore seen that the external environment affects the attitudes of a person and modifies the structure of the person's beliefs. Normative norms affect the subjective norms of individuals which determine their behavioral intention and their motivation to comply to the norms (Sheppard et al, 1988).

Theory of Reasoned Action states that three factors influence whether or how much behavioral intent shapes our behavior. First, one must have control over their behavior that can be referred to as volitional control. Second, attitudes and behavior must be measured at the same level. Third, those attitudes do change over time (Ajzen and

Fishbein, 1980). In relation to this study the theory of planned behavior implies that use of play intention is determined by the teachers' attitude, which reflects the positive or negative feelings to optimally adapt the utilization of play as a strategy for teaching in pre-school. Subjective norm is the teachers' conceptions of the other people like employers, head teachers, other teachers, parents and education officers. If they value and embrace use of play as an effective strategy of teaching young children, they then motivate teachers it effectively and vice versa.

Their perceived behavior control indicates the internal and external constraints that the teachers encounter when they create the intention to use play as a teaching strategy. Behavioral intent can be influenced by effective training and the level of teaching experience to shape the teachers' behavior to effectively deliver play as a strategy of teaching. The more the teachers are trained, and the more experienced they are, the best they are able to overcome the obstacles that may hinder utilization of play as a strategy for teaching; hence, employ play as a teaching strategy.

1.10.2 The Conceptual Framework

The conceptual framework was based on pre-primary school teacher factors reflected through attitudes, teaching experience and training. These constituted independent variables while the utilization of play as a strategy for teaching constituted the dependent variable. The intervening variables were; government policy, availability of play materials and management support as shown in Figure 1; it also explained how independent variables which were teacher factors that include teacher's attitude, teachers training and teachers experience influence the use of play pre- primary schools in Kenya.

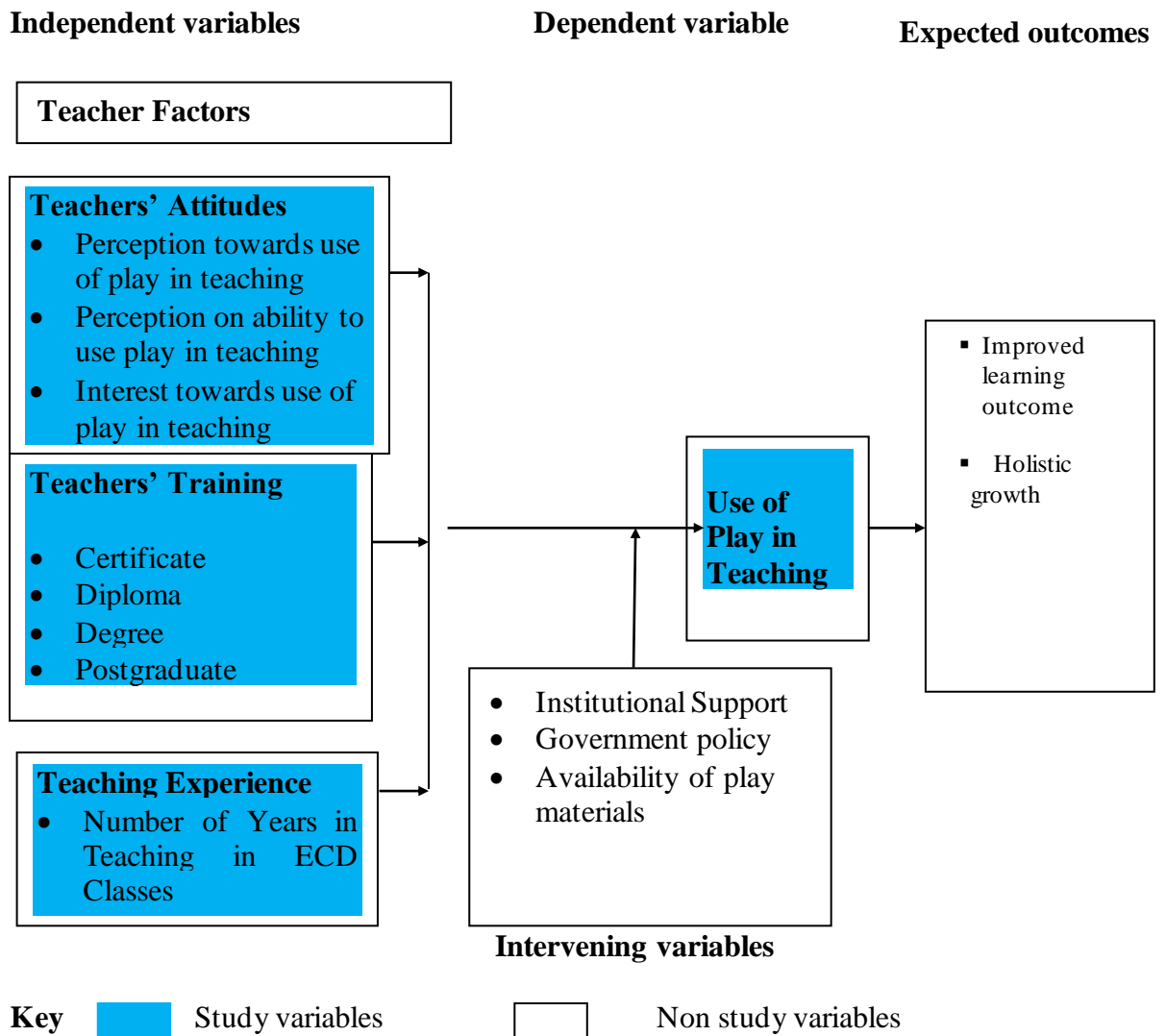


Figure 1: The influence of teacher factors on use of play

The teachers' attitude that include their beliefs, motivation to use play and their interest towards play determine their adaptation to explore play as a strategy for teaching in pre-school. Teachers' professional, education levels and whether they have a certificate, a diploma, degree or a postgraduate degree will determine their ability to use play as a strategy of teaching. Teacher's experience that include, the years worked as a teacher and the years worked in pre-school will determine whether teachers explore play as a strategy of teaching in pre-school.

1.11 Operational Definition of Terms

Often use of play:	Use of fun activities throughout the lesson.
Play activities:	A game or fun activity in which a pre-school child is engaged in.
Sometimes use of play:	Use of fun activities in some instances during the lesson.
Teacher factors:	Teachers' attitude, teachers' level of training and experience.
Teachers' experience:	The number of years of teaching in Pre-school.
Teachers' training:	Categories that include Certificate, Diploma, Degree and Postgraduate.
Teaching strategy:	Ways which are adopted by pre-primary school teachers.
Rarely use of play:	When there is no evidence of fun activities being used in the whole lesson.
Use of play:	Involving fun activities with or without objects to facilitate learning of concepts.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter explores on the views of other investigators. It was based on the importance of play as a strategy for teaching at the pre-primary level, and the effect of teachers' attitudes, experience and training on utilization of play as a strategy for teaching at the pre-primary level. It also provides a recap of the reviewed literature indicating the research gaps to be addressed.

2.2 Teacher's use of play as a teaching strategy

Play is an activity of enjoyment which basically creates a relaxed environment among those involved and those watching the same (Csikszentmihalyi, 2014). Play serves as an important tool for promoting children's learning and development besides their emotional, intellectual and social skills. The teacher has a duty to set up an environment that facilitates play experience. While investigating the effects of the play method in the numeracy skills among pre-primary schools learners in Ekiti State Nigeria, Popoola (2014) utilized a quasi-experimental research design and random sampling to select 120 learners aged 4 to 5 years from pre-primary schools. The researcher interacted with and observed the learners for six weeks with the goal of exposing learning. They were exposed to play and demonstration and the findings revealed that the different groups showed a significant difference in the performance in favor those who were in the play-guided group.

The findings of the study were important in filling the literature gap of the use of play method. However, the researcher only focused on the learners yet the teacher's input

to the study would have been significant. The current examined the problem from the teacher's perception to fill the gap. In a study seeking to find out the determinants of pre-primary school teacher's exploration of play as a strategy for teaching, Tarimo (2013) also came to a similar conclusion. The findings revealed that use of play-method enhanced the learners learning.

In a study to investigate the instructional approaches utilized by teachers in teaching reading in selected schools from Dagoretti and Westlands Division in Nairobi County, Marima (2014) utilized a descriptive research design using surveys and observation techniques to collect data. The study randomly sampled 40 early childhood education teachers and 20 head of departments from twenty schools. The researcher found that the instructional methods adopted by the teachers are not sufficient to improve learning among the learners. She noted that teachers underutilized the role of play-method as an instruction method that can suffice to improve literacy learning outcomes. The findings are handicapped by the researcher's wide scope of instructional methods examined in the study. The current research only sought to examine play-method as an instruction strategy.

While investigating on the outcomes of using play to teach, Ali & Aziz (2014), investigated the outcomes of using play to teach. Their findings revealed that learning outcomes were positive when teachers adopted a play approach to learning. It facilitates the learner's acquisition of skills and provides an opportunity to learn. They conclude that play-methods fosters learners learning.

In a study investigating the relationship between play activities implementation and the academic performance of learners in public ECDE centers in Pokot County and Andeima & Kemboi (2013), used a descriptive research design study. The study

utilized stratified, simple random and purposive sampling techniques to select 90 teachers and 16 head teachers who were issued with questionnaires. The findings revealed that creativity is enhanced when learners use play and other fun activities that enhance their learning. The study contributes to the existing literature by highlighting how different play activities contribute to different skills. However, the researchers did not examine teacher factors and how it influences use of play in preprimary classroom. The current study overcame the gap by looking at teacher factors and how they influence use of play methods. Teacher's use of play methods is a valuable tool for preschoolers. It exposes the learners to a variety of skills that enhance their learning. They commend the teachers who ensure that lessons are integrated with play as it fosters quick learning and comprehension in a fun manner (Aziz & Ali, 2015). The use of pretend activities according to Benhard, Stebler, Rechsteiner and Urech (2013) helps sharpen the learner's cognitive abilities while engaging their creative sides.

Uwezo (2011) report in Kenya has shown that there is low literacy and numeracy in Kenya which is as a result of high child-teacher ratio. Therefore, this may influence teacher's utilization of play as a strategy for teaching which is an effective method of teaching young children. Teachers may be forced to use fast and direct methods which may not enhance holistic development of a child.

A study carried out in Kisii County Kenya, reported that teachers use other methods of teaching which are faster and direct to avoid pressure from parents and administration Kemunto (2014). Another study carried out in a different area supported the same by stating that use of play in pre-primary is minimal. Since most schools are academic oriented hence use easier and direct methods to produce grades

only. This leads to ignorance of the other aspects of growth and development of a child Lucia (2016).

2.3 Effect of teachers' attitude on use of play as a teaching strategy.

Attitude can be described as the predisposition or the tendency to respond positively or negatively towards a certain idea, object, person, or situation. In most cases, attitude influences an individual's choice of action, and responses to challenges, incentives, and rewards which together can be referred to as stimuli. Four major components of attitude are; affective or emotions or feelings; cognitive or belief or opinions held consciously or conative that can be referred to as inclination for action. The other major component of attitude that would influence how teachers perceive teaching include; positive or negative response to stimuli that is based on the evaluation of idea, object, person, or situation (Lynn & Valette, 2012).

While deciding on the indicators of a positive attitude among teachers in Kindergarten Lapinski & Franklin (2011), stated that first and foremost, the teacher must be passionate about the subject he is teaching. A really passionate teacher can be highly influential for the students to pursue their passion too and must be a continuous learner. Students like the teachers who learn things with them. On the other hand, the teachers must be humble, and as stated by Hasalaka (2013), they must realize that the students know something that they do not know and that they must not discourage any student if they had failed in exams.

One of the other qualities influenced by teachers' attitude, is the teachers' realization of their responsibility. The proposal provided by Russell & Olson (2009), argues that each and every teacher in the country is responsible for the students they teach, and that each and every criminal activity that a student involves in the future falls directly

in the hands of the teacher. On the other hand, a student coming out of an institution must not have only the technical education; the teachers must be good with their attitudes.

Through an observation made by Davidson (2015), components that affect the quality of teaching which is an art are attitude, the love, devotion and dedication of the teachers towards the knowledge of the subject. The quality the teacher which is depended on their attitude determines the quality of any teaching programme which cannot rise above the quality of its teachers. In learning institutions, it is the teacher who is responsible for influencing a student's learning of any subject and it will highly depend on their attitude.

In an investigation carried out a study on the attitude of teachers towards teaching in Michigan Medical School, the study assessed the attitude of 31 teachers working at Michigan Medical School. Among the teachers, 21 of them were ranked readers and above with teaching experience of five or more years. The other 10 were ranked lecturers with a teaching experience of three years. A Likert type scale was used to do the assessment that had 20 teaching items. The participants were to mark in agreement or otherwise on the scale in the format; strongly disagree, disagree, cannot say, disagree, strongly agree. The findings of the study established that there was not much difference in the attitude of teachers in different group. This indicated that the study group has predominantly positive attitude for most of the items. Teachers with this positive attitude become role models for the future generation of students (Yugen, 2010).

There is evidence to state that effects of the quality of teaching are depended on what teachers believe in concerning teaching, the conceptions of teaching, different

teaching approaches, the intentions of what teachers feel students should learn and the approaches employed in teaching. A study on how teachers' attitudes affect their approaches to teaching international students was conducted by Arenas (2011). The researcher sampled 20 academics teaching international students in a medium-sized regional Australian university. They participated in the study by responding to the widely used Approaches to Teaching Inventory. From the study, it was found that the teaching approaches adapted by teachers match the context and also focus on the teacher knowledge transmission to the students in their approach. Based on this understanding, programmes for teaching practices need to be implemented that have a focus on the student for knowledge to be created and have a change in the concept of teaching international students.

In 2016 another study was carried out by Antonio *et al* 2016 to find out the impact made on the perceptions and attitudes of teachers by training program related to the implementation of cooperative learning in educational contexts. The influence of these was done on the basis of the age, gender of the teachers, their knowledge, the stage in education and the amount of time one has been in teaching. The study had a total of 990 teachers from 60 schools. Across the different ages and educational stage of the teachers, they indicated a positive attitude. However, significant differences were found regarding age and teaching experience. It was noted that a powerful success predictor was positive teachers' attitude in the implementation of cooperative learning in educational settings.

Attitude can influence the way an individual responds to issues. In terms of work, the way an employee views their work will determine the way they execute their work. The more positive one is about their job, the more they positively perform their work.

in any given area. Parvand (2013) pointed out that globally people's attitudes towards their profession have an effect on their performance.

Many are of the position that teachers' attitudes play a critical role in the exploration of play as a teaching and learning strategy at the early childhood education centers. The nature of attitude which teachers have towards play can either inhibit or promote efforts to effectively use play activities as a tool for instruction in pre-primary school settings, Safavi (2016). A study conducted by Anderson (2011) on increasing teachers' effectiveness in teaching process in the Chicago elementary schools, indicated that the effectiveness of a teaching method is as good as the teacher employing the method.

A quantitative study by Nasrabadi & Norouzi (2014), to evaluate approach to pre-service primary school teachers' attitudes towards collaborative learning with video games which was aimed at investigating whether previous experience with video games can make the difference establish a significance relation between attitude and work performance. The study done in Malaysia indicated that pre-service primary teachers have a positive attitude towards collaborative learning with video games.

While assessing the teachers' attitude towards teaching profession in Midwestern Nigeria, where the study covered 678 teachers sampled from different levels of education in Midwest, Awanbor (2012) findings indicated that those teacher trainees had a negative attitude towards teaching. This is due to poor remuneration and lack of motivation from educational authorities and employers.

In another study on the tension between traditional and modern teaching-learning approaches in Ethiopian primary schools, Derebssa (2013) pointed out that active

learning method improved teacher-learner classroom interaction. The fruitful support of an active learning method utilization becomes realized, only when equipment are available, class size is small, teachers have the right attitude and the English language teachers have necessary training on active learning method utilization.

A study on the impact of teacher-directed and child-directed pretend play on cognitive competence in kindergarten children in pre-school in Mwanza, Tanzania by Gmitrova & Gmitrov (2014), established that teachers underlined the paramount significance of use of play in learning as it helps them improve their English teaching methods. It was seen in the study that there were factors that led to poor utilization of active learning method approach by the teachers due to some reasons in as much as the teachers had a positive attitude towards the same. These reasons included; little budget to buy the instructional materials, seats not being enough for the students and lack of enough training and experience.

A local study which evaluated the teacher's attitude among teachers in service trainees in Gucha Districts by Bichage (2015), established that teachers at all levels had negative attitude as they rendered their services with some feeling that they were not being paid and therefore even if they gave their best, their efforts were not appreciated. Teachers' attitude continues to be crucial in the implementation of any teaching strategy or methods and, therefore, needs to be critically evaluated to find out the far it may influence the use of play as a method for teaching in pre-school.

Though the available studies may have covered the teachers' attitude in the utilization of play as a teaching strategy in pre-school, none were done in Ruiru Sub-county. Therefore, the studies are not sufficient and cannot form the basis for generalization. A review of local studies too has not addressed the effect of teacher factors on

utilization of play as a strategy for teaching in pre-primary schools. It is, therefore, imperative to note that an understanding of the teachers' attitude and its influence on play as a strategy is crucial in ensuring that the method is used effectively in impacting the right knowledge to pre-school children.

2.4 Experience of Teachers in Teaching and utilization of play as a strategy for teaching

Teachers experience can be considered to have a direct impact on the utilization of play as a strategy in teaching and method in pre-primary schools. Different scholars have different opinions on whether the numbers of teaching years have an influence on teacher's attitude and self-efficacy. Reviewing an earlier study by Aiken (1970), on whether experience influences teachers attitude towards arithmetic in Ports View, Parten (2012) supported the studies position that experienced teachers had more positive attitude towards the subject than the less experienced teachers.

While evaluating the effect of experience on behavior Bennet (2010), asserted that people confident of their abilities will seek challenge while those who lack confidence will avoid it. A comprehensive analysis of 60 studies by Greenwald & Laine (2006), established that there was a positive relationship between years of teacher experience and utilization of play in teaching in pre-primary schools.

The above study further confirms the position of Muller & Alexander (2004). The study while evaluating data from Texas schools project indicated that, pre-primary school learners of experienced teachers in using play activities in teaching attained significantly higher levels of achievement than did learners of new teachers, that is, those with one to three years of experience though the magnitude of the effect of

teacher experience in using play activities in teaching varies in reference to the level of education of the teacher and the area of subject the teacher handles.

The extent to which play-way method is used in pre-schools in Indonesia Mupois (2014), established that across Indonesia in preschools play method of teaching has been introduced. This is for the children to enhance their imaginative and creative power, boost their motor skills as they engage in play. The modification of the curricula to accommodate play-way methods is a great idea but needs to meet the requirements of children and be done by skilled and experienced teachers as advised by the study.

In a study to evaluate the teaching content in pre-school curriculum in Malawi, Mavhu (2009) established that play-way method is structured on activity-based learning which is meant to encourage creative skills and self-expression among young children. The study expressed fears that while the method is ensuring that playing is the predominant factor in this method, many of the teachers are not experienced enough to directly use this method effectively and sometimes overdo it. The method is meant to reinvigorates children while also enhancing their learning abilities.

Young children need to be provided by essential foundations to aid later learning through stimulating play activities in early learning where appropriate adult support is provided. Imaginary and real experiences are combined to encourage children learn, Biukwayo (2013). While emphasizing on the need of teachers in preschool to impact the right knowledge among the pre-school in Kampala, Uganda Kebaabetswe (2013), emphasis that teachers should be experienced enough. To ensure that as children involve play opportunities to facilitate and extend their abilities to solve problems that

are important to improving their intellectual process, they are also able to impact the required knowledge required by the curriculum.

In Kenya, increased proportion of experienced teachers with regard to using play and outdoor activities are attempts by the Ministry of Education to provide quality education (Republic of Kenya, 2009). Although the policy of the Ministry of Education is to maintain a low student-teacher ratio as a measure of maintaining quality of pre-primary school education, that appears too expensive to sustain (Republic of Kenya, 2009). Another study conducted in Kiambu County, by Njorege (2015) on the state of education since the implementation of free education indicated that pre-primary school teachers with few years of teaching experience are less likely to deliver on quality education.

While there are various studies that include the ones above that have covered the teachers experience and aspects of play as a method of teaching, the studies setting and location are different to local setting and therefore cannot form the basis for generalization. The finding of the study does not fit the contextual relevance and the location similarities. On the other hand all the studies including the local ones though indicate the significance of teachers' experiences in teaching; the study did not cover the effect of teachers' experience and incorporation of play in teaching in pre-primary schools. This knowledge gap therefore stressed the need of understanding the impact of teachers experience on the incorporation of play as a teaching method in pre-school.

2.5 Impact of Training of Teachers on the use of play as a teaching strategy in pre-school

The current and future manpower needs of an organization are satisfied through training, in work situation where individual abilities are developed (Hasalaka, 2013). Teachers' level of training has a great impact on the way the teachers use different teaching methods (Whitebook, 2013). Measuring teachers' perceived interactions with children using a tool for assessing beliefs and intentions in pre-school in Wales, Herzog & Ward (2014), pointed that in as much as provision of materials for play and even teachers ability to use play as a teaching strategy may be effective in impacting the right knowledge among the children in all pre-schools, teachers' competence was crucial in the whole process.

The findings on Children's Perception of education Quality and teachers competency in an Icelandic Playschools, was that preschool teachers thought that the most important developmental effect of play is its efficiency as a way children learn and expand their knowledge. However the findings of the study indicated that 20% felt that they felt that they needed more training to deliver on the pre-school teaching, Einarsdóttir (2005).

Evaluated collaborative game-based learning approach to improving students' learning performance in pre-school in India .The findings of the study indicated that majority of the schools had play objects, indoor and outdoor play facilities. Teachers and children could freely use to enhance teaching and learning. The challenge was that most of the pre-schools did not have adequate teachers' competence in the use of play as a teaching method.

While evaluating the significance of teachers training on the performance of pre-school teachers in Kano State in Nigeria Igwezi (2013), carried a study using a descriptive approach hence recommends that teachers in pre-primary school should undergo training for them to be occupied with the skills required to tackle with the demands of the young children and use of different teaching methods. Training will also ensure provision, expansion and improvement of quality and relevant education. Through the training, teachers in pre-primary school will develop professional attitudes, skills and knowledge to adapt the learning environment.

A study on training and development of human resource by Kitundu (2011), revealed that out of 16,595 pre-primary teachers in Uganda, only a mere 8.6% of them were certified. Pre-primary school teachers especially in the public schools in the country are simply adopted from higher primary school classes clearly revealing that their competence towards teaching pre-primary classes is questionable.

An investigation on the relationship between pre-primary school education policy and actual practice in Tanzania, Lyabwene (2010) revealed that teacher's professional qualifications appear to influence the quality of classroom interaction 20 more than physical setting and resources. The study revealed further that much of the teachers' self-esteem and behaviors come from competency challenges. Teachers who have undergone ECE training are more enlightened on such important educational issues like the curriculum of the ECE program, philosophy of education, sociology of education and educational psychology.

Despite the importance of teachers undergoing training, the minimum academic requirements to train as a pre-primary school teacher in Tanzania are a standard seven certificate or lowest Division IV in form Four (BEST, 2009). While carrying out a

survey on early childhood stimulation in Mwanza, Mtwara Mara and Lindi regions, Mbise (2012) revealed that very low academic qualifications are likely to affect the ECE teachers, particularly their ability and confidence to articulate child centered issues which are relevant in teaching and learning in pre-primary schools.

The right training offered to teachers on the incorporation of play as a strategy in teaching for pre-school is crucial ,An earlier study by Mwaura (1987), on the influence of play opportunities in the development of cardinal numbers concept in Pre-school children in Kiambu Municipality observed that trained pre-school teachers used more effectively the play method in the number lessons. The study further recommended that further training of teachers in the use of play in cognitive development of pre-school children is required, particularly in the development of number concepts.

While pre-primary school education became compulsory after several years without a pre-primary school education program, Kinuthia (2009) established that, through the Ministry of Education, the government ensured that pre-primary teachers/caregivers acquired necessary skills, information and knowledge on how pre-primary school children should actively learn. From there on, there has been an emphasis on the utilization of teaching centered on the child and the exploration of various methods to impact knowledge on the pre-school children. As much as the studies covered the various aspects of training in exploration of play as a strategy in teaching in pre-primary schools, the findings cannot be generalized on the extent to which teachers training as a factor can impact the utilization of play as a strategy for teaching in pre-primary schools in Ruiru Sub-county.

Establishing factors influencing early childhood development teachers' motivation in Thika District, Ndani & Kimani (2012) carried out a study through a structured interview, collected data from early education practitioners and education officers working in ECE, and established that there was sufficient academic background to give them the intellectual and personal moral strength to articulate issues related to their profession. Studying on how teacher utilize play as a medium to bridge pre-school children's mathematics experiences in Kasarani division in Kenya Ngasike (2014), showed that cadres of 21 teachers who join certificate training level in ECE are rated by society as low level academically because the profession is not expected to have highly qualified people. The study further revealed training levels to have positive influence on teachers' tendencies in using child centered teaching approaches.

The effect of training on the utilization of play as a strategy for teaching in pre-school cannot be over emphasized. Though the available studies as depicted above have pointed out that, teachers' competence is crucial in teaching the whole process; they have not covered the impact of teacher factors on utilization of play as a strategy for teaching in pre-primary schools. The settings for these studies do not present any similarities and therefore cannot form any basis for generalization. The level of teachers training continues to remain a crucial factor in applying the exploration of play as a strategy for teaching in pre-school. Therefore this study as part of its objectives sought to determine the effect of training for teachers on the exploration of play as a teaching strategy in pre-school.

2.6 Summary of Literature Review

Literature reviewed revealed that utilization of play is critical in teaching in pre-primary schools. However, Local studies clearly showed that use of play in teaching in pre-primary schools is minimal. Teachers encountered a number of challenges in using play. Some of them being: pressure from the management and parents, high child-teacher ratio among others.

Much still needed to be done to assess the extent to which teachers attitude influence the different utilization of play as a strategy for teaching in pre-school. Since it was not clear on how teacher factors interplay to influence their exploration of play as a strategy for teaching in pre-primary schools. The empirical researchers covered in the previous studies were unable to determine how teachers' attitude factors affect the different use of play methods as a strategy for teaching in pre-school.

On the experience of teachers in pre-primary school, the findings of the available literature covered by the study they did not indicated the effect of teachers experience on the exploration of play as a strategy for teaching and more over the study are not based on local context and therefore cannot form the basis of generalization. The empirical review also did not specify the specific number of years a teacher needs to have practiced in order to be effective in using play activities in pre-primary school teaching and learning.

The study also sought to find out the effects of pre-primary school teachers' training on the exploration of play as a strategy for teaching. The available literature covered by the study though indicated that training of teachers is crucial in teaching of pre-school students, the available studies did not indicate how training of teachers would effectively enable the use play as a teaching strategy in pre-school. While it may be

assumed that teaching of pre-school may be easy, there was little evidence on the academic background and preparedness that can guarantee effective use of play as a method of learning in pre-school.

Based on the review in this chapter, most of the generalizations regarding utilization of play, as a method of teaching, in the studies covered in the literature are opposed to the extent to which the teacher factors influence the utilization of play as a method of teaching in pre-school. This provides support for a subjective reference but adds little value in objectivity and exclusivity which are the basis for deduction. It is this argument that informed the need for this study. None of the studies had been done exclusively on the effect of teacher factors on the utilization of play as a method of teaching in pre-school with the intent of adding diversity to the existing subjective knowledge.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The methodology used for this research and carrying out the study is described in this chapter. It focuses on the research design, study location, the population targeted, the size sampled, the techniques for sampling, instruments for research, reliability and validity, techniques used in collecting data, its analysis, logistical and ethical considerations.

3.2 Research Design

This study utilized correlational research design. Mugenda & Mugenda (2013) states that correlation design entails collecting data to determine the relationship between two or more variables. It also determined the degree as to which the variables are related. This study aimed at investigating teacher factors influencing utilization of play as a strategy for teaching. Therefore the relationship between teacher factors and use of play was established. A computation of correlation coefficient was done to show the relationship's strength and direction.

3.3 Study Variables

The independent variables included teachers' attitude, level of training and teaching experience. While the dependent variables teachers' utilization of play as a strategy for teaching. The measurement of variables was as follow:

3.3.1 Independent Variables

There were three independent variables namely; teachers' attitude, level of training and teaching experience.

(a) **Teachers' Attitudes:** the first variable of the study sought to determine the teacher's beliefs towards play, Motivation to use play and Interest towards play activities. Attitude was measured based on teachers' responses in a Likert scale of 1 to 5 (1-strongly agree, 2-agree, 3-neutral, 4-disagree, 5-strongly disagree). Pearson's correlation coefficient was used to correlate self-report teachers attitude and use of play.

(b) **Teachers' Experience:** The second variable focused on the number of years in teaching pre- primary grades. The teachers were asked to indicate the years they had taught within the following categories (less than 1 year, between 1-5 years, between 6-10 years and more than 11 years). Analysis of Variance (ANOVA) was used to compare different categories of teachers experience and use of play, to check whether there is significance difference at .05 level of confident.

(c) **Teaching Experience:** the third variable sought to determine how teacher's training levels like Certificate, Diploma, Bachelors and postgraduate Levels. To measure this variable, teachers were asked to indicate their highest level of education. To check whether there was a significant difference at .05 level of confidence, Analysis of Variance (ANOVA) was used to compare the different level of training and use of play.

3.3.2 Dependents Variables

Use of Play in Teaching: the dependent variable in the study focused on the use of fun activities which was measured through observation of 5 lessons per class. In each

lesson, the researcher used a scale of 3 to determine the extent to which fun activities were used (often- when fun activities were used throughout the lesson, sometimes- when fun activities were used in certain instances during the lesson and rare- when there was no evidence of fun activities being used in the whole lesson).

3.4 Location of Study

The research study was conducted in Ruiru Sub-county. The Sub- County has 8 administrative wards as listed in the Table 3.2. The area has about 4675 pre-school going children. This high population was an advantage for the study, for adequate data. Most of schools in Ruiru are academic oriented, which can easily leads to ineffective method of teaching hindering an effective strategy like play. Therefore, the area was accurate for investigating teacher factors influencing play as a teaching strategy. The area was also targeted since most schools has faced a continuous reduction in pre-school playground spaces, hence there is great need to incorporate fun activities during classroom instructions.

3.5 Target Population

The study focused on public PP2 Teachers in Ruiru Sub-county. There were 32 pre-primary schools in Ruiru Sub-county spread within 8 administrative wards as displayed in table 3.1. 20 schools had one stream, while 12 schools had two streams, hence the number of PP2 teachers targeted were 44 since each stream had one teacher.

Table 3.1 Target Population

Zone Name	Number of Schools	PP2 teachers
Gitothua Ward	4	6
Biashara Ward	5	7
Kahawa/Sukari Ward	2	5
Gatongora Ward	3	3
Kahawa Wendani Ward	4	7
Kiuu Ward	4	4
Mwiki Ward	5	5
Mwihoko 1 Ward	5	7
Total	32	44

Source: Field Study (2017)

3.6 Sampling Techniques and Sample Size

This section presents the sampling techniques and the sample size.

3.6.1 Sampling Technique

The researcher stratified the target population based on the eight administrative wards. All the teachers with only one PP2 class were included in the sample. In schools where there were more than one PP2 classes, one teacher was selected through simple random sampling.

3.6.2 Sample Size

A sample is a part of the target population that is procedurally selected to represent the population (Cooper & Schindler, 2001). In this study, the researcher used a census method to select all the schools within the eight administrative wards in Ruiru Sub-

county. The sample size of the study was 32 teachers that is one teacher from each school. Table 3.2 shows the summary of the sample size.

Table 3.2 Sample Size

Zone Name	Sample schools	Sample PP2 teachers
Gitothua Ward	4	4
Biashara Ward	5	5
Kahawa/Sukari Ward	2	4
Gatongora Ward	3	3
Kahawa Wendani Ward	4	4
Kiuu Ward	4	4
Mwiki Ward	5	3
Mwihoko 1 Ward	5	5
Total	32	32

Source: Field Study (2017)

3.7 Research Instruments

Data collection were questionnaires and observation checklist guide.

3.7.1 Questionnaire for Pre-primary School Teachers

A questionnaire is given as a set of few questions that follow a logical sequence in asking. A self-administered and structured questionnaire was used in this study to collect quantitative data from the pre-school teachers. Two sections were made in the questionnaire where information on respondents' demographic profiles were in the first section while the second part had a Likert scale question structure, (1 – strongly agree, 2 – agree, 3 – neutral, 4 – disagree, 5 – strongly disagree). Drop and pick

method will be used to administer the questionnaires to the respondents. The respondents will also be assured of their confidentiality.

3.7.2 Observation Checklist for Pre-primary School teachers

The study also used observation checklist to collect data from the sampled class units. The method was based on observation checklist technique which in this case was appropriate and helped in the gathering of information from learners in pre-primary schools in consideration of the study objectives. The checklist was based on the observation made on the selected PP2 classes which included the observation of pre-primary teachers' use of play. The researcher used a scale of three to determine the extent to which fun activities were used, (often, sometimes and rarely).

3.8 Research Instruments Pilot

Validity and reliability of the research instruments was obtained through conducting a pilot of the instruments. The pilot study was conducted on four pre-primary schools from Juja Sub-County. This is a different Sub-County from Ruiru Sub-County but with similar characteristics.

3.8.1 Reliability of the Research Instruments

For the instruments, the test-retest technique was used by the researcher to improve their reliability. This meant that to a group of respondents, the items for test were administered twice. This later led to a correlation done on the two sets of scores obtained using Pearson's Product Moment Correlation Method. A coefficient of $r \geq 0.75$ was obtained, therefore stated a high internal reliability.

3.8.2 Research Instruments Validity

For the validity of the instruments to be enhanced, the structure and content validity of the research instrument were carefully considered in developing the instrument for this study where all items in the instruments were meticulously matched to the conceptual framework. This ensured that the items were relevant and represented the constructs being measured. This helped in the identification of any ambiguity and unclarity of the items through examination of the research instruments. In-case of ambiguity, items were retested for the respondents to understand them clearly. to ensure that the respondents clearly understood them. The researcher improved the quality of the instruments by rephrasing questions and even replacing them with more suitable ones.

3.9 Data Collection

It was prudent for the researcher to ask for an introductory letter from Kenyatta University Graduate School which allowed NACOSTI to grant the research permit and issue the Authorization Letter. The County Commissioner and County Director of Education, Kiambu issued the researcher with authorization letters. These letters enabled the researcher to get introduced to the different respondents for the study in Ruiru Sub-county.

For the study to be done, the researcher requested for permission from head teachers to conduct interviews and with teachers to administer questionnaires and carry out data collection for the study. The researcher administered the questionnaires to the respondents. Upon completion of filling the questionnaires, they were collected ready to go through the analysis of the data. The researcher in person also did observation schedules to get other information.

3.10 Data Analysis

For data to be effectively and easily communicated, it needs to be packaged and structured in a manner that its main components processed through data analysis. This meant that after fieldwork, the questionnaires were checked well for reliability and verification done before data analysis was done. The use of thematic analysis was employed for qualitative data in consideration to the objectives of the study and a narrative presentation done. Quantitative data were organized and analyzed using both descriptive and inferential statistics. Descriptive statistical analysis included frequencies, percentages, mean and standard deviation and the findings presented using tables and charts. While inferential statistics included Pearson's correlation coefficient and Analysis of Variance (ANOVA).

The study tested the following hypotheses at a significant level of 0.05.

- H₀₁: Teachers' attitude does not influence use of play as a teaching strategy in pre-primary schools.
- H₀₂: Teachers' teaching experience does not influence use of play as a teaching strategy.
- H₀₃: Teachers' level of training does not influence use of play as a teaching strategy in pre-primary schools.

3.11 Logistical and Ethical Considerations

The concept of looking at how informed consent was obtained from participants, outlining the research contents to the participants and an assurance of confidentiality of the participants is termed to as ethical considerations in research.

3.11.1 Confidentiality and Privacy

For the study, aspects that touched on the private lives of the participants and their private information were kept out of the study. The respondents received assurance that whatever information they provided for the study was only used for the study and not shared to any third party.

3.11.2 Anonymity

The individual identity of the respondents was not revealed as assured by the researcher.

3.11.3 Informed Consent

The respondents were explained to the purpose and the nature of the research. This included the procedures followed during the process of collecting data for them to willingly participate in it.

3.11.4 Storage of the Collected Data

Filing of the raw data collected was done for future use and referral purposes. Filing was also done for the print-outs upon analysis while softcopy information kept in devices such as flash discs and CDs.

CHAPTER FOUR

PRESENTATION OF FINDINGS, INTERPRETATION, DISCUSSIONS

4.1 Introduction

The purpose of this study was to establish the impact of teacher factors on the utilization of play as a strategy for teaching in pre-primary schools in Ruiru Sub-County. This chapter, therefore, presents the results and discussions of the study guided by the study objectives that were stated as follows:

- i. To establish the extent to which teachers use play as a teaching strategy in pre-primary schools.
- ii. To find out the influence of pre- primary school teachers' attitudes on use of play as a teaching strategy in pre- primary schools.
- iii. To determine the influence of teachers' teaching experience on use of play as a teaching strategy in pre-primary schools.
- iv. To determine the influence of teachers' level of training on use of play as a teaching strategy in pre-primary schools.

4.2 General and Demographic Information

This section presents the general, demographic information and response rate.

4.2.1 General Information

Out of the 32 respondents and classes sampled for data collection, three of them did not participate hence their classes were not observed as well. This means the response rate was 90.6% (29 PP2 teachers). According to Creswell (2013), a respondent rate of 70% and above is adequate to calculate the findings of a field study.

4.2.2 Demographic Information

The demographic aspects that were taken into consideration were gender, level of education and years of experience in pre-school teaching.

4.2.2.1 Gender of the Respondent

Out of the pre-primary school teachers who were sampled for the study, 93.1% were female while only 6.9% were male. This indicates that preprimary teaching profession in the area is female-dominated.

4.2.2.2 Education level

Respondents were also asked to indicate their highest level of education. The results showed that more than 70% of the respondents had diplomas and degrees. The actual percentages in each level of education are presented in figure 4.1.

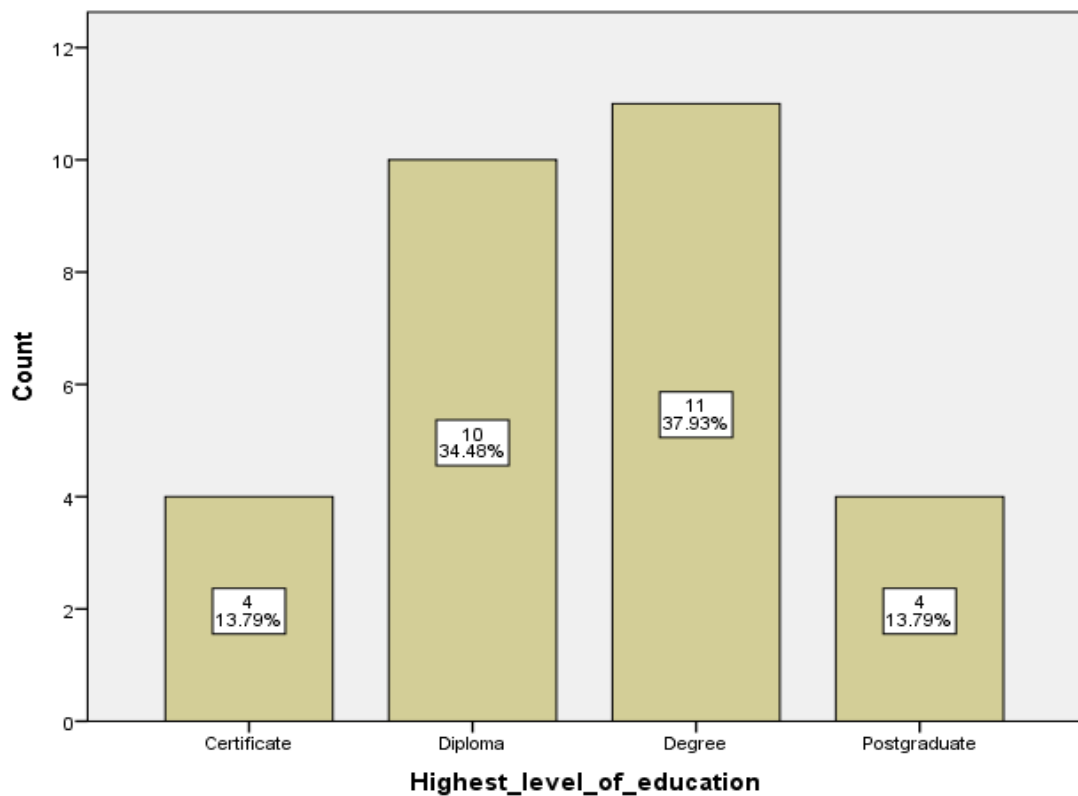


Figure 4.1 Education level of respondents

The findings of the study indicated that, the greatest number of teachers had degree level of early childhood education or related field with 37.93%. The least were those with certificates in the related field, and post graduate holders, in different fields though not specified with 13.79%. 34.48% of the respondents had diploma. This indicated that most of the respondents had the required knowledge on the use of play as a teaching method and related issues under investigation. Therefore the answers provided were from valid and reliable respondents.

4.2.2.3 Teachers' experience

Teachers' experience was measured according to the years a respondent had taught in pre-primary school. Figure 4.2 represent the information.

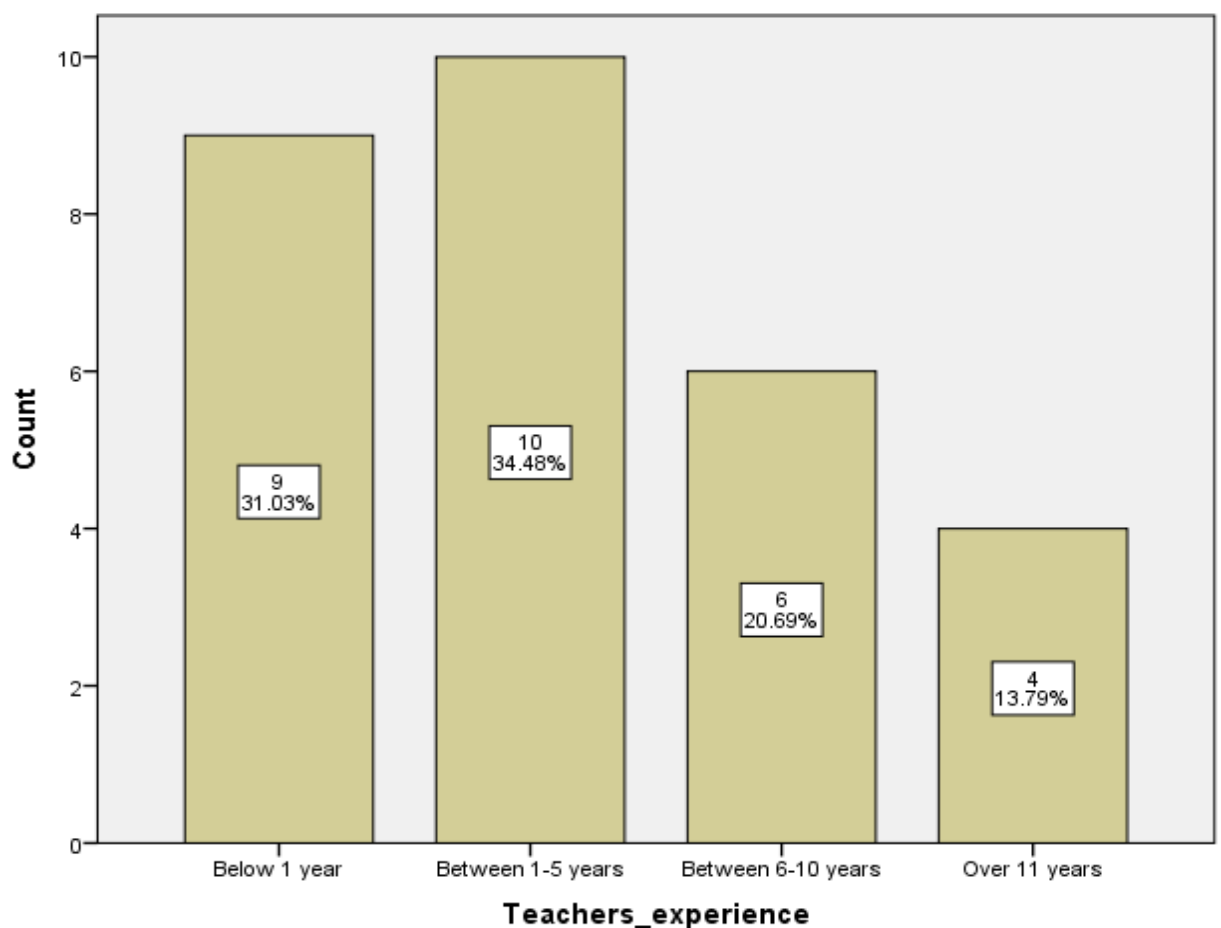


Figure 4.2 Teachers' experience

As the figure 4.2 displays, the highest number of teachers had an experience of between one year and five years. Only 4 (13.79%) had taught for more than 10 years.

4.3 Results

4.3.1 Teachers' use of play as a teaching strategy

The first objective sought to establish how teachers utilized play as a strategy for teaching in pre-primary schools in Ruiru sub-county. These data were collected through the use of an observation checklist. The table 4.1 shows the descriptive findings on the researcher's observation on the use of play activities during five lessons.

Table 4.1: Observation results on use of fun activities

	N	Mean	Std. Deviation
Lesson 1	29	1.93	.704
Lesson 2	29	1.69	.761
Lesson 3	29	1.93	.799
Lesson 4	29	2.00	.886
Lesson 5	29	2.31	.806
Average	29	1.972	0.7912

As the table displays, an average mean value of 1.972 implies that during all the lessons, the teachers used fun activities in lessons sometimes. The average standard deviation of 0.7912 also implies that the use of fun activities in class were slightly

varied. Specifically, during the first lesson, second and third lesson, the teachers used fun activities sometimes seen in the mean values of ($m=1.93$, $SD=0.704$), ($m=1.69$, $SD=0.761$) and ($m=1.93$, $SD=0.799$) respectively. During the fourth lesson, a mean value of 2.00 was found which implies that the teachers used fun activities sometimes and rarely. The same case was observed during the fifth lesson where the mean value of 2.31 shows that the teachers rarely used fun activities during their lessons.

Generally, it can be observed that teachers did not majorly incorporate fun activities during their lessons. From these findings, it can be deduced that the teachers underutilize the utilization of play as a strategy for teaching in Ruiru Sub-county. This may limit the development of crucial skills for pre-schoolers as Aziz & Ali (2015) asserts that the teacher's use of play methods is an invaluable tool for preschoolers. It exposes the learners to a variety of skills that helps build their creativity, their numeracy and language skills. They commend the teachers who ensure that lessons are integrated with play as it fosters quick learning and comprehension in a fun manner. Tarimo (2013) further argues that different play methods in pre-schools have varying level of effect deadening in the target skill. In this case, use of social activity play methods including babysitting dolls will be effective in improving the learner's social-interaction skills. Furthermore, a quasi-experimental study conducted by Popoola (2014) in Nigeria has been replicated in this correlational study conducted miles away in Kenya, a clear indication that use of play in teaching is not specialized for learners on in the study area but a strategy for all young learners. Indeed Andeima & Kemboi (2013) had similar sentiments after conducting almost a similar study in Pokot.

4.4 Influence of attitudes on use of play

The second objective of the study sought to determine the influence of pre- primary school teachers' attitudes on utilization of play as a strategy in teaching of pre- primary schools in Ruiru Sub-county. The teachers were presented with a Likert scale table and asked to indicate their opinion based on whether they strongly agreed, agreed, neutral, strongly disagreed or disagreed with the parameters of attitudes presented in table 4.3

Table 4.2 Teachers' Attitude on use of Play in teaching

Aspects of Attitude	Agree	Neutral	Disagree	Mean	STDV
	%	%	%		
I believe that play contributes to effective delivery of lessons	69.0	10.3	20.6	2.41	1.240
It is motivational to use play in teaching in pre-primary schools	55.2	20.7	14.1	2.59	1.268
It is Interesting to participate in play activities with the children	55.2	17.2	27.3	2.66	1.421
I am motivated to use play in teaching	55.2	20.7	14.1	2.59	1.268
I have interest in using play activities as a teaching strategy	69.0	6.9	14.1	2.31	1.365

The findings of the study indicated that the majority of the respondents (69.0%) believed that play contributes to effective delivery of lessons and have interest in using play activities as a strategy during teaching. However, 20.6% of the respondents

asserted that they do not contribute to effective delivery of lessons. The findings also indicated that 55.2% were of the opinion that it is motivational to use play in teaching in pre-primary schools.

Similarly, a section of the respondents 14.1%, disagreed that it is motivational to use play in teaching in pre-primary schools. Similarly, majority of the respondents 55.2% indicated that they are motivated use play in teaching as compared to 14.1% who differed with the claim. Lastly, the majority of respondents 69% asserted that they have interest in using play activities as a teaching strategy

Generally, it can be discerned that the majority of teachers are not only motivated to use play, but are also interested in it. The findings are supported by Bichage (2015), who found that attitude continues to be crucial in the implementation of any teaching strategy or methods and therefore needs to be critically evaluated to find out the extent to which it may influence the incorporation of play as a method of teaching in pre-school.

On the use of play as a teaching method in pre-primary only 20.6% of the respondents did not believe that play contributes to effective delivery of lessons. These findings deviate from Yugen (2010), whose study established that there was not much difference in attitude of teachers in different group. This indicated that the study group has predominantly positive attitude for most of the items of service trainees in Gucha Districts.

The study established that teachers at all levels had negative attitude as they rendered their services with some feeling that they were not being paid and therefore even if they gave their best, their efforts were not appreciated. Teachers' attitude continues to

be crucial in the implementation of any teaching strategy or methods, and therefore, needs to be critically evaluated to find out how it may influence the incorporation of play as a teaching method in pre-school. Therefore, for learners to perform better and comprehend learning, teachers need to adjust their attitudes to ensure that they utilize every strategy available to them including the use of play. The researcher then conducted a correlational analysis to determine the strength of the relationship between the teacher's utilization of play as a strategy in teaching and their attitudes towards its use. The findings are as displayed in table 4.4

Table 4.4 Correlations on teacher's attitudes

	Use of play in teaching	Teachers attitude
Pearson Correlation	1	-.588
Use of play in teaching		
Sig. (2-tailed)		.003
N	29	29
Pearson Correlation	-.588	1
Teachers attitude		
Sig. (2-tailed)	.003	
N	29	29

As displayed in the table 4.4, there is correlation between the teacher's use of play and their attitudes towards the use of play as a teaching strategy. From the table, it can be seen that teacher's utilization of play as a strategy of teaching and their attitudes are significantly correlated ($r=-0.588 < 0$, $p=-.003 < 0.005$). Therefore, it can be deduced that the teacher's attitudes negatively affect their utilization of play as a strategy of teaching.

The findings are similar to Safavi (2016), who in his study, found that a teacher's attitudes is crucial for the learning outcomes in class. Attitude is an important factor that motivates or demotivates a teacher from going the extra mile to ensure that the learners get the necessary information. He warns that the nature of attitude which teachers have towards play can either inhibit or promote efforts to effectively use play activities as a tool for instruction in pre-primary school settings. Moreover, Davidson (2015) asserts that teaching is an art and the quality of teaching relies on the love, attitude, dedication and devotion of the teacher towards the subject of the knowledge. The implication is that, for teachers to use certain strategies for teaching such as use of play, they must grow in love with it and portray dedication and motivation to use the same. This is actually similar to the findings from this study, where it was found that the attitude of the teacher has a great determination on whether they use play in teaching or not.

4.5. Effect of experience in teaching on use of play

The third objective of the study was to determine the relationship between the experience in teaching and utilization of play in teaching pre-primary schools in Ruiru Sub-county.

The researcher sought to determine whether the observed mean in use of play in teaching and teacher's experience was statistically different. One-Way ANOVA was used at 95% confidence level to test the hypothesis that 'There is no significant relationship between teachers' teaching experience and utilization of play as a strategy for teaching.' ANOVA was used since there were 4 groups of teaching experience being compared (<1, 1-5, 6-10 and >10).

Table 4.5 ANOVA of different categories of teaching experience and use of play

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.136	4	.045	.565	.004
Within Groups	2.002	25	.080		
Total	2.138	29			

The ANOVA results displayed shows that there was a statistically significant difference in use of play in teaching based on the teacher's years of teaching experience at p value ($p=0.004<0.05$). Therefore, the results implied that there was a need to establish the nature of the differences observed. LSD post-hoc test was done and the findings displayed in the table 4.7

Table 4.5 LSD Test on different categories of teaching experience and use of play

(I) Experience	(J) Experience	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<1	1-5 years	-.11111	.13003	.401	-.3789	.1567
	6-10	-.07778	.14915	.017	-.3850	.2294
	>10	-.21111	.17006	.000	-.5614	.1391
1-5 years	6-10	.03333	.14614	.002	-.2676	.3343
	>10	-.10000	.16742	.022	-.4448	.2448
	<1	.07778	.14915	.017	-.2294	.3850
6-10	1-5 years	-.03333	.14614	.002	-.3343	.2676
	>10	-.13333	.18268	.000	-.5096	.2429
	<1	.21111	.17006	.000	-.1391	.5614
>10	1-5 years	.10000	.16742	.022	-.2448	.4448
	6-10	.13333	.18268	.007	-.2429	.5096
	<1	.11111	.13003	.000	.1567	.3789

*. The mean difference is significant at the 0.05 level.

From the findings in the table, it can be observed that the mean difference between one year' experiences and 1-5 years' experience was not statistically significant a p value ($p=0.401>0.05$). However, the difference between teachers with one year's experience and between 6 and 10 years was statistically significant at ($p=0.017<0.05$). Moreover, the difference between the teacher's use of play was found to be profound in those with one years' experience and those with more than ten years' experience at p value ($p=0.000<0.05$). From the findings, it shows that teachers with more than ten years experience used play activities the most followed by those with six to ten years then those with less than five years' experience. These findings are supported by

Mavhu (2009) who conducted a study to evaluate the teaching content in pre-school curriculum in Malawi and established that play-way method is structured on activity-based learning which is meant to encourage creative skills and self-expression among young children.

The study expressed fears that while the method is ensuring that playing is the predominant factor in this method, many of the teachers are not experienced enough to directly use this method effectively and sometimes overdo it. The method is meant to reinvigorates children while also enhancing their learning abilities, but with lack of experience, the method can yield negative results.

Moreover, as Kebaabetswe (2013), emphasizes on the need of teachers in preschool to impact the right knowledge among the pre-school in Kampala, Uganda advised that teachers should be experienced enough. To ensure that as children use play opportunities to encourage and extend the problem-solving abilities that are essential to developing their intellectual process, they are also able to impact the required knowledge required by the curriculum.

Play-method is a strategy meant to improve teaching and learner's comprehension. However, the play methods listed in the curriculum require understanding and prior exposure for them to achieve its desired effects. Therefore, depending on the teacher's experience, the method can be effective or not. Parten (2012) concurs with the findings claiming that experienced teachers had more positive attitude towards the subject than the less experienced teachers. The level of experience gives the teacher the confidence necessary to execute the play something most inexperienced teachers lack.

4.6. Influence of training on use of play

The fourth objective of the study sought to examine the level of training for teachers on incorporation of play as a teaching strategy, in pre-primary schools in Ruiru Sub-county. The researcher used One-way ANOVA at 95% confidence interval to test the hypothesis that ‘there is no significant relationship between teachers’ teaching experience and use of play as a strategy for teaching.’ ANOVA was preferred since there were 4 groups of teachers based on their years of teaching experience

Table 4.6 ANOVA on different levels of training and use of play

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.309	3	.103	1.407	.002
Within Groups	1.829	25	.073		
Total	2.138	28			

The ANOVA results displayed in the table 4.9 shows that there was a statistically significant difference in the teacher’s training and use of play activities at p value ($p=0.002<0.00$). The results therefore imply that there was a need to establish the nature of the difference seen. The researcher then conducted LSD post-hoc test displayed in the table 4.10.

Table 4.7 LSD Test on different levels of training and use of play

(I) Highest level of education	(J) Highest level of education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Certificate	Diploma	-.10000	.16002	.538	-.4296	.2296
	Degree	.00909	.15793	.005	-.3162	.3344
	Postgraduate	-.30000	.19126	.000	-.6939	.0939
Diploma	Certificate	.10000	.16002	.538	-.2296	.4296
	Degree	.10909	.11818	.365	-.1343	.3525
	Postgraduate	-.20000	.16002	.022	-.5296	.1296
Degree	Certificate	-.00909	.15793	.005	-.3344	.3162
	Diploma	-.10909	.11818	.365	-.3525	.1343
	Postgraduate	-.30909	.15793	.062	-.6344	.0162
Postgraduate	Certificate	.30000	.19126	.000	-.0939	.6939
	Diploma	.20000	.16002	.022	-.1296	.5296
	Degree	.30909	.15793	.062	-.0162	.6344

*. The mean difference is significant at the 0.05 level.

The findings shows that the mean difference between the teachers with certificate training and those with a diploma was not statistically significant at p value ($p=0.538>0.05$). However, the mean difference between teachers with a certificate and those with a degree was statistically significant at p value ($p=0.005<0.05$). The difference between teachers with a post graduate training and those with a certificate was statistically significant at p value ($p=0.000<0.05$). Therefore, the findings show that teachers with post graduate training, followed by those with degree training, then those with a diploma and the least ones were those with a certificate used play as a teaching strategy. These findings are supported by Kinuthia (2009), who argues that a

teacher's level of education is important in their ability to use appropriate instructional resources. Mbise (2012) while carrying out a survey on early childhood stimulation in Mwanza, Mtwara Mara and Lindi region concluded that very low academic qualifications are likely to affect the ECE teachers. Particularly their ability and confidence to articulate child centered issues, which are relevant in teaching and learning in pre-primary schools.

These findings, are similar to the ones in this study which revealed the importance of teacher's training on their competence and ability to use play-methods as a teaching strategy. It points towards a lack of proper training and expertise among ECDE teachers, which has an overall negative effect on teacher's ability to be innovative and utilize play to improve learner's learning. Ngasike (2014) concurs with these findings and claims that teacher's utilization of play as a means of creating a bridge for pre-school children's mathematics experiences in Kasarani division in Kenya, are positively correlated to the teacher's training levels. He further posits that training is important, for teachers to have positive influence on teachers' tendencies in using child centered teaching approaches.

Table 4.8 Summary of hypothesis testing

Hypothesis	Verdict
There is no significant relationship between teachers' attitude and use of play as a teaching strategy in pre-primary schools	Rejected
There is no significant relationship between teachers' teaching experience and use of play as a teaching strategy	Rejected
There is no significant relationship between teachers' level of training and use of play as a teaching strategy in pre-primary schools in Ruiru Sub-county	Rejected

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study sought to assess the effect of teacher factors on the utilization of play as a strategy for teaching in pre-primary schools in Ruiru Sub-County. This chapter contains the summary of findings obtained from respondents, conclusions made and recommendations containing the topic of the study.

The study sought to meet out the following objectives,

- i. To establish the extent to which teachers use play as a teaching strategy in pre-primary schools.
- ii. To find out the influence of pre- primary school teachers' attitudes on use of play as a teaching strategy in pre- primary schools.
- iii. To determine the influence of teachers' teaching experience on use of play as a teaching strategy in pre-primary schools.
- iv. To determine the influence of teachers' level of training on use of play as a teaching strategy in pre-primary schools.

5.2 Summary of the findings

The first objective of the study sought to examine the teacher's incorporation of play as a strategy of teaching in Ruiru Sub-County in pre-schools. From the findings, it was seen that the majority of the teachers used social play sometimes as a strategy of teaching. Overall, it can be discerned that majority of teachers sometimes utilized the various types of play activities as teaching strategies in their schools.

The findings of the study also established that most of the respondents felt that, the use of play should be used as a method of teaching. Most of the respondents often used play as a teaching method. Majority of the pre-school teacher covered by the study found play as an effective method in teaching pre-school children. Similarly, the majority of respondents believed that play contributes to effective delivery of lessons and had interest in using play activities as a strategy to teach in pre-primary school. The findings of the study also established that majority of respondents were of the opinion that it is a motivational practice to use play in teaching in pre-primary schools. It is interesting to participate in play activities with the children, and that they were motivated to use play in teaching. Most of them argued that it improved learner's skills. Furthermore, the findings revealed that teachers' attitude influences use of play as a strategy of teaching.

The findings of the study further established that majority of the respondents agreed that the number of years in teaching, influences the teachers ability to use social play, creative play, role play and object play. The findings also established that the more experienced a teacher is, the more they are able to use play as a teaching method among young children. Additionally, the majority felt that there is a difference between how old teachers and young teachers utilize play as a strategy of teaching in pre-school. Further, the findings revealed that teachers' experience was significantly related with use play. Teachers with more experience used play more as compared to those with low experience.

The findings also established that, the majority of the respondents felt that a teacher's level of education enhanced their ability to use play in teaching. Similarly, most of them felt that training of teachers in the use of play as a method of teaching influences

the teacher's ability to use the method. They also felt that the more the teachers were professionally trained, the more they were likely to use play in teaching pre-primary learners.

5.3 Conclusion

The findings of the study established that the utilization of play was used as method of teaching to some extent. Basically, utilization of play as a strategy of teaching was not well embraced by most of the pre-primary teachers as observed by the researcher. Despite this fact, most of the teachers believed that, play contributes to effective delivery of lessons and have interest in using play activities as a strategy to teach in pre-primary school; hence leading to a disconnection between intention of using play and use of play in teaching.

While the incorporation of play is a common teaching method in pre-schools, only slightly above average teachers had a positive attitude in the utilization of play as a method of teaching. This seemed to significantly affect use of play as a teaching strategy. The hypothesis that 'there is no significant relationship between teachers' attitude and use of play' was therefore, was hereby rejected.

On the other hand, teachers experience was found to have a high influence on the use of play as a strategy of teaching. Therefore, given that most teachers had not served for so long, they find the method messy and lack knowledge about it. The number of years taught significantly influenced the teacher's ability to use play in teaching. The hypothesis that 'there is no significant relationship between teachers' experience and use of play' was hereby rejected.

For play to be effectively used as a teaching strategy in pre-primary teaching, the teachers need to be properly trained. The findings of the study indicated that the teacher's level of education enhanced their ability to use play in teaching. The more teachers had higher professional training, the more they were likely to use play in teaching. The hypothesis that 'there is no significant relationship between teachers' level of education and use of play was hereby rejected.

5.4 Recommendation

Education Administrators

Utilization of play as a strategy of teaching should be made compulsory when instructing preprimary learners. Since it fosters holistic education and learners' innovativeness and creativity. The study, therefore, recommends that the Ministry of Education develop a policy that makes use of play in classroom a mandatory practice rather than a choice.

The study established that teachers' attitudes influenced use of play as a teaching strategy. Consequently, there is a need for the education administration and the school heads to organize forums to cultivate a positive attitude towards use of play as a teaching strategy among pre-school teachers.

The study established that teachers with more experience used play more as compared to those with low experience. This led to the recommendation that schools seek for strategies that motivate experienced teachers to remain in the profession.

Findings revealed that there was an association between a teacher's level of training and use of play as a teaching strategy. Therefore, it is necessary to ensure that the teachers in the pre-primary schools are encouraged to embark on further training, or to be exposed to in-service training in order to be equipped with skills that enable them to use play as a teaching strategy.

5.5 Suggestion for further Research

This study exclusively focused on teacher factors that influence use of play as a teaching strategy. There could be other factors that have an impact on either use or lack of use play as a teaching strategy. The study therefore recommended a study on the school factors influencing utilization of play as a strategy of teaching at pre-school level.

The study also recommended a research on the actual play activities that teachers use for teaching. This could shed light on effectiveness of the different play activities that pre-primary teachers could embrace for effective teaching.

REFERENCES

- Ajzen, I., and Fishbein, M. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Ajzen, I., and Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Ali, A., Aziz, & Majzub, R. (2015). Teaching and Learning Reading Through Play. *World Applied Sciences Journal 14 (Learning Innovation and Intervention for Diverse Learners): 15-20*.
- Anderson, L. D. (2011) *Increasing teachers' effectiveness in teaching process. 2011, Translated by Amini, M. Tehran: Madreseh*.
- Andiema, N. C., & Kemboi, G. C (2013). Relationship between Play Activities' Implementation and Learners' Academic Performance in Public Early Childhood Development Centres In Pokot County, Kenya. *Journal of Education and Practice, 4(26) 132-141*.
- Awanbor, D. (2012). *The 6-3-3-4 System of Education in Nigeria and the prospect of future: Nigerian Society of Engineers, Benin Branch*.
- Banhard, H., Atebler, R., Rechsteiner, K., & Urech, C. (2018). Learning through play – pedagogy and learning outcomes in early childhood mathematics. *European Early Childhood Education Research Journal Volume 26, 2018 - Issue 4*:
- Bennet, T.C. (2011). *The effects of teachers training on pupils' achievement: The case of elementary school, school effectiveness and improvement*.
- Berg, F., Gullo, D.P. & Gullo. D.F. (2012). *Perspective on children. Encyclopedia or Early Childhood Education*. New York: Garland Publishing inc.

- Bichage, G. (2015). *An evaluation of teachers attitude among teachers in service trainees in Gucha Districts*, Unpublished Edition, Nairobi, Kenya.
- Biukwayo, H. N. (2013). *Pre-school teachers use of scaffolding method in teaching mathematics: A case study of Mbeya Province, Tanzania*. (Unpublished M.Ed. Thesis) Dar-es salaam University.
- Cresswell, T. (2010). Towards a politics of mobility. *Environment and planning D: society and space*, 28(1), 17-31.
- Derebssa, J. (2013). *Mastering the Technique*. San Francisco: Jossey- Bas. MOE. Ethiopian Education and Training Policy. Addis Ababa.
- Dissanayaka J. (2011). The role of training on the organization performance, *Academy of Management Review*, 19, 510–536.
- Einarsdóttir, J. (2005). We Can Decide What to Play! Children’s Perception of Quality in an Icelandic Playschool. *Early Education and Development*, 16(4), 470-488.
- Gmitrova, V., & Gmitrov, J. (2003). The Impact of Teacher-Directed and Child-Directed Pretend Play on Cognitive Competence in Kindergarten Children. *Early Childhood Education Journal*, 30(4), 241-246.
- Greenspan, S.I., & Welder, S. (2012). *A theoretical overview and empirical study of mediated learning experience: Prediction of preschool performance from mother- infant interaction patterns*. *Infant Mental Health Journal*, 8, 110- 129.
- Hasalaka, R. (2013). *Principles of Training*, Houndtraills Basingstoke, Hampshire, QG21 6XS.

- Herzog, A. & Ward, S. L. (2014). Measured Teachers' Perceived Interactions with Children: A Tool for Assessing Beliefs and Intentions, *Early Childhood Education Journal*, 78(12), 231-239.
- Herzog, M. H. & Ward, C. (2014). *How the mind constitutes itself through learning. Learn percept* 1 (1): 2133- 2141.
- Hymes, D. (2013). *Models of the interaction of language and social life*. Direction in sociolinguistic: Ethnography of communication. Oxford: Blackwell.
- Igwezi, S.T. (2013). *Role of attitudes and beliefs in learning to teach*: Research Association, Abuja.
- Kebaabetswe, T. (2013). *Embracing Identities in Early Childhood education in Uganda: Diversity and Possibilities*, Teachers College Press, New York
- Kemunto (2014). Challenges facing teachers on use of play as a teaching method in pre-school in Busia. Unpublished research project.
- Kenya, U. (2011). Are our children learning. *Annual Learning Assessment Report: Uwezo Kenya, Nairobi*.
- Kim, H. (2009). *Women's reasons for attrition for a nurse home visiting program*. Journal of Obstetric, Gynecologic, & Neonatal Nursing.
- Kinuthia, D. (2009). *The determinants of pre-school teacher's attitudes towards teaching*, Unpublished Edition, Nairobi, Kenya.
- Kitundu, A. (2011). *Motivation, Training and Academics*, Unpublished PHD Thesis, Kampala University, Uganda.
- Lucia (2016). Effects of ineffective teaching methods in pre-primary schools in Kisii County. Unpublished research Thesis.

- Lyabwene, M. (2011). Early childhood Education: In the limelight at last, *International Institute for Educational Planning, 24 (1), 5-6.*
- Marima, E. W. (2014). A Survey of Approaches Used in Teaching of Reading In Early Childhood Grades in Dagoretti and Westlands Divisions, Nairobi County, Kenya. Unpublished thesis.
- Mavhu, K. (2009). The teaching content in pre-school curriculum in Malawi: A developmental perspective in early years settings, *African Journal of Education 6(18), 4277-4287.*
- Mbise, N. (2012). *Survey on early childhood stimulation in Mwanza, Mtwara Mara and Lindi regions in Tanzania.* Dar es Salaam: Government Press.
- Mupois, T. (2014). *Curriculum for play way method of teaching preschoolers in India,* Routledge Press, London, UK.
- Mwaura, P.A.M. (1987). *Influence of play opportunities in the development of cardinal number concept in pre-school children:* unpublished Med Kenyatta University, Nairobi, Kenya.
- Nasrabadi, H. A, Norouzi, R. A., (2014). *Teaching approaches and new paradigms in Lower Primary in Mbeya, Tanzania, Esfahan: 2014,* Esfahan University Press, Australia.
- Ndani, M. N., and Kimani E.N (2010). Factors influencing early childhood development teachers motivation in Thika District, Kenya. *Africa Journal of Teachers' Education, 34 - 47.*
- Ndegwa, M. (2013). *Factors influencing preschool teachers' attitude towards child centered and teachers centered teaching methods in Nairobi, Kenya,* Unpublished M.Ed. Thesis. Kenyatta University, Nairobi, Kenya.

- Ndegwa, P. (2013). *The factors influencing preschool teachers' attitude towards child centered and teachers centered teaching methods in Nairobi*, Esfahan University Press, Australia.
- Ng'asike, J. (2004). *Teachers' use of play as a medium of bridging pre- school children's mathematic experiences: A case study of Kasarani Division, Nairobi*. Unpublished M.Ed. Thesis, Kenyatta university , Nairobi, Kenya.
- Njoroge, P. (2015). *The state of education since the implementation of free education indicated that pre-primary school*, Unpublished Edition, Nairobi, Kenya.
- Obwiji, G.H. (2015). Investigated "teachers' views on the effectiveness of active teaching methods and traditional teaching methods in learning science subject in primary school boys and girls in the city of Accra in Ghana, *Early Childhood Education Journal*, 78(3), 451-72.
- Okwiri, K. (2013). *The effects of active learning methods and cognitive education in lower primary in sub county of Bondo, Siaya County*, Ogiga Oginga University, Bondo, Kenya.
- Parten, M. and Aiken, J. (1970). Social Behavior of Pre- School Children. *Journal of abnormal and social psychology*, 27 (3): 243- 269.
- Parvand, M. (2013). *Curriculum design*, Soheyl Publication, Tehran
- Popoola, A. (2014). Effect of Play Way Method on the Numeracy Skills of Early Basic Education School Pupils in Ekiti State Nigeria. *Mediterranean Journal of Social Sciences* 5(10)
- Republic of Kenya (2009). *Teacher self- efficacy: substantive implications and measurement dilemmas*. Paper presented at the Annual Meeting of the Educational Research Exchange, College Station, TX.

- Rubin, K. and Coplan, R. (2000). *Social and nonsocial play in childhood: An individual differences perspective*. Albany: State University of New York Press.
- Safavi, A. (2016). *Teaching methodology principles*. Tehran, Moaser Publication
- Sandberg, A., & Pramling Samuelsson, I. (2005). An Interview Study of Gender Differences in Preschool Teachers' Attitudes Toward Children's Play. *Early Childhood Education Journal*, 32(5), 297-305.
- Sang, S. & Hwang, T. (2013). *Transformations: The anthropology of children's play*. New York: Plenum.
- Schuler, S.R. (2005). *The influence of changing roles and status: evidence from a study of credit programs*, *World Development* 25 (4).
- Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research*, 15, 325-343.
- Steinke, J., Lapinski, M. & Crocker, N. (2007). Assessing media influences on middle school- aged children's perceptions of women in science using the draw-a-scientist test (DAST), *Science Communication*, 29 (1), 35- 64.
- Tarimo, J. S. (2014). Teachers' use of play as a teaching strategy in pre-primary schools in Mwanza district, Kilimanjaro region, Tanzania. Unpublished thesis.
- UNICEF, (2011). *Kenya Report on Early Childhood Services Provision*. 2011 UNICEF, Nairobi, Kenya.
- Vandenberg, B. (2012). *Play theory. The young child at play*, NAEYC, Washington, DC, USA

Vygotsky, L. (2010). *The role of play in development, the development of higher psychological processes*. New York: Harvard University Press.

White Book, (2013). *Play, behavior, attitude and personality*, NY Publisher, New York, USA

APPENDICES

Appendix I: Questionnaire for Pre-Primary School Teachers

Section 1: Introduction

Dear respondent,

The researcher is a Masters' student undertaking a course in Early Childhood Education of Kenyatta University carrying out a research on Teacher Factors Influencing Use of Play as a Teaching Strategy in Early Childhood Education Centers in Ruiru Sub-county, Kenya. The data you provide will be treated with confidentiality and entirely used for purposes of this study.

Instructions

- Kindly feel free to fill the parts on this questionnaire.
- Do not write your names.
- Kindly put a tick (✓) on the space provided on the questions with a list of items.

Section 2: General Information

School:.....

Gender: Male [] Female []

Section 3: Teachers attitude

Please, state the extent to which you agree with the following statements on the influence of your attitudes towards play on using play in teaching in your pre-primary school.

Aspects of Attitude	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I believe that play contributes to effective delivery of lessons					
It is motivational to use play in teaching in pre-primary schools					
It is interesting to participate in play activities with the children					
The beliefs that the teachers have towards play enhances their use of play in teaching					
I am motivated to use play in teaching					
I have interest in using play activities as a strategy of teaching in pre-primary school					

Section 4: Teachers teaching experience

How many years of teaching experience do you have?

Number of years	Response (√)
Below 1 year	
Between 1 – 5 years	
Between 6 – 10 years	
Over 11 years	

Section 5: Level of training

What is your highest level of training in early childhood education?

Level of education training	Response (✓)
Certificate in early childhood studies	
Diploma in early childhood studies	
Degree in early childhood studies	
Postgraduate in early childhood studies	

THANK YOU FOR YOUR PARTICIPATION

Appendix II: Observation Checklist Guide for Teachers

An observation was done by the researcher on the extent to which fun activities were used in teaching. Five lessons were observed in every sampled school

	Often	Sometimes	Rarely
Lesson_1			
Lesson_2			
Lesson_3			
Lesson_4			
Lesson_5			

THANK YOU FOR YOUR PARTICIPATION

Appendix III: Informed Consent Form

Dear respondent,

The researcher is a student undertaking a degree course in Master of Education in Early Childhood in Kenyatta University carrying out a research **on Teacher Factors Influencing Use of Play as a Teaching Strategy in Early Childhood Education Centers in Ruiru Sub-county, Kenya**. For this study, I will request you to give me some time as you will be asked some questions. I will maintain your privacy and confidentiality about your information. Your name will not be written on any of the materials, and only the researcher will have access to your information. Your participation is totally voluntary, and you may change your mind and withdraw at any time before and during the study. We will not pay or give any facilities for this participation. If you want to take part to participate in this research, please sign the form below.

Participant:

-----	-----	-----
Code of Participant	Signature	Date

Researcher:

-----	-----	-----
Name of Researcher	Signature	Date

Appendix IV: Letter of Introduction

August, 2017

Dear Sir/Madam,

RE: PERMISSION TO CARRY OUT RESEARCH

I am student undertaking a course in Master of Education in Early Childhood at Kenyatta University. I am required to submit, as part of my research work assessment, a research project on *“Teacher Factors Influencing Use of Play as a Teaching Strategy in Early Childhood Education Centers in Ruiru Sub-county, Kiambu County, Kenya”*. To achieve this, your pre-primary school has been selected to participate in the study. I kindly request the respondents to participate in the study. This information will be used purely for academic purpose and your name will not be mentioned in the report. Findings of the study, shall upon request, be availed to you. Your assistance and cooperation will be highly appreciated.

Thank you in advance.

Yours faithfully,

Grace Kabura Njuguna

Appendix V: Graduate School Approval



**KENYATTA UNIVERSITY
GRADUATE SCHOOL**

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

Website: www.ku.ac.ke

**P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150**

Internal Memo

FROM: Dean, Graduate School

DATE: 18th January, 2019

TO: Grace Kabura Njuguna
C/o Early Childhood Studies Dept.

REF: E55/CE/34053/2016

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 9th January, 2019 approved your Research Project Proposal for the M.Ed Degree Entitled, “**Teacher – Factors influencing use of play as a Teaching Strategy in Pre-primary Schools in Kiambu County, Kenya**”.

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and 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.

**EDWIN OBUNGU
FOR: DEAN, GRADUATE SCHOOL**

c.c. Chairman, Early Childhood Studies Department.

Supervisors:

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

EO/lnn

Appendix VI: Research Authorization



KENYATTA UNIVERSITY
GRADUATE SCHOOL

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

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: E55/CE/34053/2016

DATE: 18th January, 2019

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

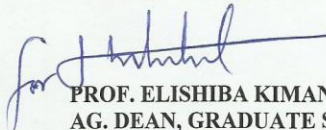
RE: RESEARCH AUTHORIZATION FOR GRACE KABURA NJUGUNA – REG. NO. E55/CE/34053/2016.

I write to introduce **Grace Kabura Njuguna** who is a Postgraduate Student of this University. The student is registered for M.Ed degree programme in the **Department of Early Childhood Studies**.

Grace intends to conduct research for a M.Ed Project Proposal entitled, “**Teacher – Factors influencing use of play as a Teaching Strategy in Pre-primary Schools in Kiambu County, Kenya**”.

Any assistance given will be highly appreciated.

Yours faithfully,


PROF. ELISHIBA KIMANI
AG. DEAN, GRADUATE SCHOOL

EO/Inn

Appendix VII: Research Clearance Permission

THIS IS TO CERTIFY THAT:
MISS. GRACE KABURA NJUGUNA
of **KENYATTA UNIVERSITY, 1038-618 Ruaraka**, has been permitted to conduct research in **Kiambu County**

on the topic: **TEACHER-FACTORS INFLUENCING USE OF PLAY AS A TEACHING STRATEGY IN PRE-PRIMARY SCHOOLS IN KIAMBU COUNTY, KENYA.**

for the period ending: **14th February, 2020**

Permit No : **NACOSTI/P/19/60763/28240**
Date Of Issue : **15th February, 2019**
Fee Received : **Ksh 1000**




Director General
National Commission for Science, Technology & Innovation


Applicant's Signature

Appendix VIII: Research Authorization from NACOSTI



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471.
2241349.3310571.2219420
Fax: +254-20-318245.318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/19/60763/28240**

Date: **15th February, 2019**

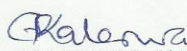
Grace Kabura Njuguna
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Teacher-factors influencing use of play as a teaching strategy in pre-primary schools in Kiambu County, Kenya*" I am pleased to inform you that you have been authorized to undertake research in **Kiambu County** for the period ending **14th February, 2020**.

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

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

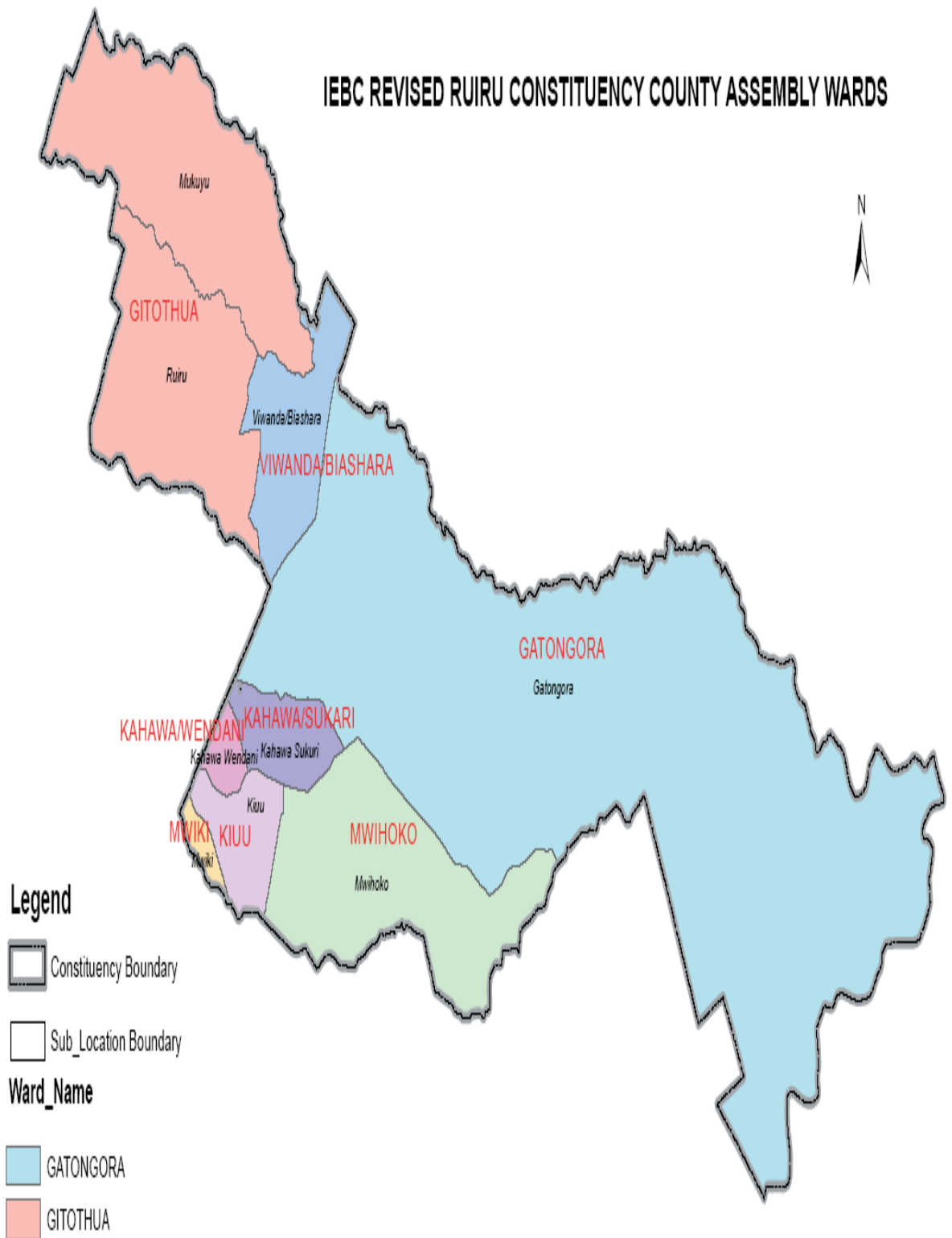

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Kiambu County.

The County Director of Education
Kiambu County.

Appendix IX: Map of Ruiru Constituency Showing Ruiru Sub-County



Source: IEBC (2012)