

**FACTORS INFLUENCING PRESCHOOL LEARNERS ACADEMIC
PERFORMANCE IN NYAMACHE SUB COUNTY, KISII COUNTY, KENYA**

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UNIVERSITY**

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DECLARATION

I declare that this document and the research it describes are my original work and that they have not been presented in any other university for academic work

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This research was conducted under our supervision and is submitted with our approval as
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DEDICATION

I wish to dedicate this work to my beloved children: Clinton, Julian, Ziprose, Enock and Shem. Thank you for your priceless patience, motivation and support as I engage in my studies

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ABSTRACT

Early childhood education is a fundamental right to every child and an indispensable element for learning at the subsequent levels as the child goes through the education system. Despite the Kisii County government effort to ensure provision of quality preschool education, most of the early education centres in Nyamache Sub County were characterized with frequent conflicts between parents and teachers in regard to children's poor academic performance. The purpose of the study was to examine the factors influencing preschool learners' academic performance in public ECDE centres in Nyamache Sub County, Kisii County, Kenya. The study aimed at establishing the influence of preschool teachers' professional development, to examine the influence of supervision of preschool teacher, to assess the influence of parental involvement, and to determine the influence of head teachers' mobilization of funds on preschool learners' academic performance in public preschool centres in Nyamache Sub County. The study was premised on Cognitive Constructivism learning theory by Perry. The study adopted descriptive survey and correlation research designs. The study targeted 84 head teachers, four Curriculum Support Officers, 4200 children and 260 preschool teachers who managed and taught in Nyamache Sub County 84 public preschool centres. The study sampled 50 preschool teachers, 25 head teachers, 4 Curriculum Support Officers and 1240 preschool children. Data were collected through preschool teachers' questionnaire, head teachers' interview schedule, CSOs interview schedule and preschool learners test. Pilot testing involved teachers and head teachers from the neighbouring Bomachoge Sub County. The content and construct validity of the data collection instruments were ascertained by presenting the instruments for scrutiny by the researcher's two university supervisors. Reliability of the preschool teachers' questionnaire was ascertained through test-retest technique. Data were analysed by both descriptive and inferential statistics. Descriptive statistics such as frequencies, means, standard deviations and percentages were used. The formulated four null hypotheses were tested using multiple regression analysis. The study found that most of teachers lacked consistent professional development and were hardly supervised. Parents' involvement in their children learning was rated as moderate. Most of head teachers were found to be slack in mobilization of funds. The study four independent variables contributed 62.1 % of variance in pupils' academic performance ($R^2 = 0.621$). Supervision of preschool teachers' had the most significant relative contribution to the prediction of pupils' academic performance ($\beta = 0.561, p < 0.05$), followed by the head teachers' mobilization of funds ($\beta = 0.502, p < 0.05$), preschool teachers' professional development ($\beta = 0.474, p < 0.05$), while parents' support of pupils learning had the least influence ($\beta = 0.272, p > 0.05$). The study concluded that lack of supervision and inadequate educational resources are the major causes to preschool learners' dismal academic performance. The study recommends an extension of free education to preschool education and that the management and funding of preschools in Kenya be put directly under the national government.

LIST OF ABBREVIATIONS AND ACRONYMS

AGM	Annual General Meeting
CDF	Constituency Development Fund
CSO	Curriculum Support Officer
ECDE	Early Childhood Development Education
EFA	Education for All
FPE	Free Primary Education
KCPE	Kenya Certificate of Primary Education
KICD	Kenya Institute of Curriculum Development.
MGD	Millennium Development Goals
MOE	Ministry of Education
MOEST	Ministry of Education Science and Technology
NACOST	National Council for Science and Technology.
NGO	Non-Governmental Organization
PTA	Parents Teachers Association
ROK	Republic of Kenya
SPSS	Statistical Package for Social Sciences.
TSC	Teachers Service Commission
UK	United Kingdom
UNESCO	United Nations Educational Scientific and Cultural Organization
UNICEF	United Nations International Children Education Fund
USA	United States of America
WHO	World Health Organization

OPERATIONAL DEFINITION OF TERMS

Academic performance: Refers to the mean mark attained in a comprehensive teacher constructed test for this study

ECDE centre: Refers to an institution for children who are yet to join standard one. Used interchangeably with preschool or nursery school

Mobilization of funds: Refers to the act of soliciting funds for running ECDE centre from different sources

Quality of ECDE: Quality is a value loaded term and has several meanings. In this study, quality of ECDE was considered in terms of learners performance in language, mathematics, science, and creative activities.

Parental involvement: Refers to the support of parents in ECDE activities in and out of school for the benefit of children's holistic development and ECDE centre effectiveness.

Preschool teacher: A teacher who teaches in a preschool

Supervision of preschool teacher: All the activities which are undertaken by the head teacher to help teachers maintain and improve their effectiveness in teaching, time management, interaction with learners and general conduct

Teachers' professional development: Refers to the process of helping teachers to improve their basic teaching skills and in expanding their knowledge and use of teaching repertoires, improve the sense of purpose, the teacher's perception of students, the knowledge of subject matter and the teacher's mastery of teaching techniques

CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Introduction

This chapter provides the background to the study and the statement of the problem. The chapter also contains the purpose, objectives, hypotheses, significance, scope, delimitation, limitation and assumptions of the study. The chapter culminates with theoretical framework and conceptual framework.

1.2 Background of the Study

The Jomtien World Conference on Education for All (EFA) in 1990 articulated the significance of the early years as the foundation for the life of an individual. Research studies on brain development have established that early childhood is a crucial stage of life in terms of a child's physical, intellectual, social and emotional development (Mustard, 2013). During this period the child's brain is most malleable and also highly impressionable, hence the time when children need high quality personal care and learning experiences (Shore, 2013; Stephen, 2014). It is the period when it is very easy to mold the character of children by inculcating social norms, values and habits as well as regulation and control of emotions (O'Donnell, 2013). This is also the vital period for ensuring appropriate physiological growth and a critical period for significant health and nutrition interventions to put the child on the right track for life (Mustard, 2013).

Thus, investing in early childhood therefore is one of the best ways in which governments can reduce primary school drop-out rates and the number of children who repeat classes (UNESCO, 2012). The Early Childhood Development Education (ECDE) sector is run differently in different parts of the world. While in some countries it has received the full support from the government, in others the ECDE sector receive little or no support from

the government. In some European countries, the ECDE sector is fully supported by the state. In the Czech Republic and Poland, for example, kindergartens are state operated (Graves & Gargioulo, 1994) as cited in Githuthwa (2011). Consequently, infant and pre-school programmes are free of charge. However in many other countries, governments do only minimum funding and the rest is left in the hands of Non-Governmental Organizations, private sector and the community (Githuthwa, 2011).

In Latin America ECDE investment does not exceed 0.6% of the Gross National Product (UNESCO, 2014). In South Africa the Government mostly deals with registration, policies and supervision leaving the management to the ECDE providers (UNESCO, 2012). In Ghana, Nigeria and Botswana, government funding of ECDE is also to the minimum leaving the private providers to be in the fore front (UNESCO, 2014).

In Kenya, just like most of the countries in Africa, ECDE has been run by communities and private sector. For public ECDE centres, communities establish and provide physical facilities such as land, building materials, furniture, labour, equipment and above all provide management (Ogutu, 2015). The type and adequacy of the physical facilities therefore largely depend on the economic ability of the community. There is also the issue of teachers' training where the teachers are trained by different organizations thereby acquiring different approaches to ECDE (Githuthwa, 2011; Kamau, 2014; Mureithi, 2015; Ogutu, 2015).

Thus, without the government direct involvement, most public ECDE centres are characterized with very low quality education due to acute shortage of physical facilities, lack of trained personnel, teachers' lack of accountability due to poor supervision, haphazard curriculum implementation and high teachers turnover due to lack of support

and low pay (Makau, 2016). It is no wonder then that private sector has almost a monopoly in offering ECDE, albeit the fact that over 90% of Kenya's primary school children receive education in public primary schools (Republic of Kenya/UNICEF, 2012).

In an endeavour to ensure enhanced financing, access, quality, equity and efficient management of ECDE services, the Kenya government has made several strides. The National Early Childhood Development Policy Framework was formulated in 2006 (Republic of Kenya, 2006). Among other things, it explicitly defines the roles of parents, communities, various government ministries and departments, development partners and other stakeholders in the provision of ECDE. Further, the fourth schedule of the Kenya constitution, 2010 and the Basic Education Act 2013, places the roles of funding and development of the necessary infrastructure for conducting pre-primary education under County Government (Republic of Kenya, 2010, 2013). In addition, though the public ECDE centres are yet to be fully mainstreamed into the primary cycle, most of them have already been attached to public primary schools.

Thus, currently almost all public primary schools have ECDE centres supported by parents while some County Governments have engaged a few teachers (Makau, 2016). The primary school head teacher in which the ECDE centre is hosted becomes the chief administrator. Wangila (2017) asserts that to ensure provision of quality ECDE, the head teacher is obliged to execute certain administrative roles. These roles include but not limited to supervision of preschool teachers, support and champion continuous professional development of preschool teachers, seek parents support / involvement in their preschool children learning and above all mobilize funds to run the ECDE centres.

Through periodical training teachers keep abreast of emerging challenges and together brainstorm the appropriate techniques' and instructional materials to use in order to enhance learners understanding (Wanzare, 2013). In a similar observation, Duflo, Dupas, and Kremer (2011) proffer that children attain high test scores, better grades, better self-esteem, and show higher aspiration and motivation when assigned to teachers with effective professional development. However, for the teacher to accomplish the set goals, the head teacher is expected to provide guidance and to supervise the extent to which the ECE curriculum is implemented (Nyakwara, 2014). Dennis (2011), observes that for preschool education, parents support and involvement in their children learning is crucial in accomplishing the teachers set objectives and the learners' academic achievement. Parents are involved in teaching morals, ethics and adoptive teachings, to adjust for and accept change in their society. Additionally, parents ensure that the learners have the necessary learning resources and assist them in their homework. Nonetheless, it is the availability of adequate finance that dictates the teaching and learning resources to be purchased, the level of human resource development and the facilities to be developed. Procurement of these resources will to higher extent determine the ECDE quality and the learners' academic performance.

The current study focused on public ECDE in Nyamache Sub County, Kisii County. Though all the ECDE were entitled to get some assistance from the County government such as deployment of teaching personnel, there were notable differentials in the levels of development, quality of education and academic performance of learners (MOE, 2017). In some schools learners excelled in numeracy, literacy and creativity while in others preschool learners graduating to primary one could hardly write their names correctly (MOE, 2017). Provision of quality education and learners academic performance being a

function of several factors, the current study embarked on examining the influence of preschool teachers' professional development, supervision of teachers, parents support of preschool children learning and head teachers mobilization of school funds on the learners academic performance among public ECDE in Nyamache Sub County.

1.3 Statement of the Problem

The establishment of Guidelines for early Childhood Development (Republic of Kenya, 2012) and devolution of the ECDE sub-sector to County level was a major milestone in provision of equitable, quality preschool education in Kenya. However, the numerous challenges afflicting the public ECDE centres in different regions, have greatly jeopardized provision of equitable quality early childhood education. According to Kisii County schools census report of 2017 (MOE, 2017), more than 50% of ECDE centres in Nyamache Sub County were characterized by frequent teachers/parents conflicts over the quality of education and dismal academic performance, fluctuating children enrolment due to numerous inter schools movements, and skewed enrollment of learner within Nyamache sub county. In quest of better academic performance, parents have been shifting their children from poor to better performing ECDE centres resulting to overcrowding, and high teacher to learner ratio. Thus, while some teachers handle over 50 children in a class, others have less than 20 in other schools (MOE, 2017). To this end, the current study aimed at examining the factors influencing preschool learners' academic performance in public ECDE centres in Nyamache Sub County, Kisii County, Kenya.

1.4 Purpose of the Study

The purpose of the study was to examine factors influencing preschool learners' academic performance in public ECDE centres in Nyamache Sub County, Kisii County, Kenya.

1.5 Objectives of the Study

The study was guided by the following objectives:

- (a) To establish the influence of preschool teachers' professional development on preschool learners academic performance in public ECDE centres in Nyamache Sub County
- (b) To examine the influence of supervision of preschool teacher on preschool learners academic performance in public ECDE centres in Nyamache Sub County
- (c) To assess the influence of parental involvement in preschool learners academic performance public ECDE centres in Nyamache Sub County
- (d) To determine the influence of head teachers mobilization of funds on preschool learners academic performance public ECDE centres in Nyamache Sub County

1.6 Hypotheses of the Study

The following null hypotheses were formulated and tested at 95% confidence level

HO₁: Preschool teachers' professional development has no statistically significant influence on the preschool learners' academic performance in public primary ECDE centres in Nyamache Sub County

HO₂: Supervision of preschool teachers has no statistically significant influence on the preschool learners' academic performance in public ECDE centres in Nyamache Sub County

HO₃: Parents involvement has no statistically significant influence on the preschool learners' academic performance in public ECDE centres in Nyamache Sub County

HO4: Head teachers' mobilization of funds has no statistically significant influence on the preschool learners' academic performance in public ECDE centres in Nyamache Sub County

1.7 Significance of the Study

Significance of a study shows how the research benefits or impacts others in part or whole (Simon & Goes, 2013). The study findings may be important to head teachers, teachers, parents, curriculum support officers, MOE policy makers, researchers and other preschool stakeholders.

The study findings on the extent to which preschool teacher professional development influence and predict the learners academic performance may become the basis to which head teachers may appeal to County government to initiate preschool teachers professional development programme. Through such a programme, teachers could be sponsored for workshops, seminars and short courses organized within and outside Kisii County. The study findings on the influence of supervision of preschool teachers on learners' academic performance would be of crucial importance to head teachers and CSOs. The head teachers, CSOs and the members of the school management committee (SMC), are expected to monitor and ensure that preschool teachers are implementing the given curriculum as per the MOE guidelines. Thus, the findings on the state of supervision in the sub county may guide them as they plan to enhance quality of ECDE. The level of parents support and its contribution to learners' academic performance may provoke teachers and parents to seek for more consultative working relationship.

The study findings on the various ways some innovative head teachers solicit funds to run and develop ECDE centres might be of great help to all head teachers, teachers, parents and other stakeholders as they search for funds to meet the various needs in their centres.

Through the study findings, parents being the main stake holders may reassess their commitments to financial support of the ECDE centres. MOE and other policy makers may revise the ECDE existing policies as a result of the study findings. For instance, the County governments may set a certain percentage of revenue to specifically for development of ECDE. Finally, the research may enrich information on education theory and practice in early child development and above all provide useful reference material for other researchers.

1.8 Scope of the Study

Marylin and Goes (2013) proffer that the scope of the study delineates the geographical and methodology boundaries. The study was confined to public ECDE centres in Nyamache Sub County, Kisii County. The study adopted non experimental research design and as such there was no manipulation of variables. The study involved head teachers, preschool teachers, CSOs and learners in a bid to establish the extent to which some crucial factors influence the learners' academic performance.

1.9 Delimitations of the Study

Simon and Goes (2013) point out that study delimitations are those features which arise from limitations of the study as well as the sensible exclusionary and inclusionary choices made during the development of the research plan. Delimitations are within the researcher's control. Though there are several factors that may influence preschool learners' academic performance, the current study was delimited to the influence of preschool teachers' professional development, supervision of preschool teachers, parents support and the head teachers' mobilization of funds. The study considered the

aforementioned factors as the most critical in determining the quality of ECDE provided in any school based on information from similar preschool studies.

1.10 Limitations of the Study

Limitations describe issues and incidents that may crop up in an investigation that are beyond investigator's control. They restrict extensity of an inquiry and may influence the final findings and conclusions (Simon, 2011). Some respondents were unwilling to give honest responses for fear of intimidation from their employers. This was overcome by assuring the respondents of confidentiality of the responses shared and that the information would be used for academic only. Additionally, information source triangulation was accomplished by interviewing the head teachers and CSOs who provided more insight on the same information.

1.11 Assumptions of the Study

Simon (2011) explicates that assumptions are underlying ideologies that the researcher trusts or admits but that are difficult to attest in any actual way. In other words, assumptions are realistic expectations believed to be true facts necessary for the relevance of the study as they provide the basis of the development and implementation of the research. Similarly, Merriam (2014) regards assumptions in research as truthful observations acknowledged to be true but not actually confirmed. There were necessary elements required to enable and conduct this study. The study assumed that preschool teachers were occasionally exposed to capacity building seminars and workshops and that the training had an influence on learners' academic performance. The study also assumed that the respondents had relevant knowledge and information on the role of parental involvement in the preschool activities that could influence academic performance of preschool learners. Finally, the study had an

assumption that the respondents would give accurate responses to the questions raised through the questionnaire and interview.

1.12 Theoretical Framework

The theoretical framework is the configuration that supports a theory of a research study and explains why the research problem which is being studied is present (Jones, 2010). The study was premised on Cognitive Constructivism learning theory by Perry (1999). The proponents of this theory posit that in a rich enabling environment, children are capable of interpreting new information into unique knowledge by providing an enabling environment for them to initiate appropriate improvement to their intellectual framework to accommodate the new acquired knowledge. Cognitivist teaching methods aim to assist students in assimilating new information to existing knowledge, and enabling them to make the appropriate modifications to their existing intellectual framework to accommodate that information. Thus, while cognitivists allow for the use of “skill and drill” exercises in the memorization of facts, formulae, and lists, they place greater importance on strategies that help students to actively assimilate and accommodate new material.

The theory also suggests that the incorporation of images and other teaching aids creates imaginative pictures in the minds of children hence they help in improving the rate of mastering concepts in classroom. Therefore, pre-primary school teachers need to understand learners existing knowledge and integrate it in learning process. A conducive learning environment is very imperative, so do teaching and learning materials in pre-schools help in enhancing teaching and learning skills hence discovery of new knowledge (Samuel, 2009). According to constructivist's argument, the process of learning can also be explained as a process of active discovery. Moreover, children need an instructor who not only teaches them in their classroom work, but also enabling learners to explore the

different talents through use of teaching aids and good interaction with learners. Early detection of talents helps in nurturing them to ensure children can be useful in the society in future. The children are able to major in advancing their talents and scaling them to new heights in early stages. When designing new teaching and learning materials for use in pre-schools, the current level of understanding of the learners should be considered in order to ensure that these materials adds more knowledge to children. Such a conducive and enabling environment can only be provided by teachers who are professionally trained and have the capacity to shift classroom practices from content based to activity-focused teaching, and from teacher centered to learner-centered teaching.

While behaviorists maintain that knowledge is a passively absorbed behavioral repertoire, cognitive constructivists argue instead that knowledge is actively constructed by learners and that any account of knowledge makes essential references to cognitive structures. Knowledge comprises active systems of intentional mental representations derived from past learning experiences.

From this perspective, to motivate learners to strive into learning, greater opportunities can be offered through use of teaching aids, this makes pre-school children to master the system and achieve the much needed skills (Samuel, 2009). Providing a conducive learning environment for the learners is one of the strategies to be adopted to make the learning experience memorable and even more interesting for children. Teaching and learning resources can be used in creating the conducive interactive environment which creates a positive perception in children hence make the process of learning interesting. Instructional materials fall into several main categories: visual aids such as overheads; and interactive tools such as a video programme or resource pack. It is therefore incumbent for the preschool teachers to integrate Information Technology Communication (ICT) in their

teaching. This calls for mobilization of funds to sustain preschool teachers' continuous professional development. It is good to bear in mind that too much materials and too many different themes can serve to confuse the class. When instructing children, the instructor should attempt to sequentially follow a few techniques in order to avoid confusing the learners.

Cognitive Constructivism learning theory was found applicable in this study since most of the independent variables examined were inclined to enhance the preschool learners' teaching and learning environment and which would lead to better academic performance. A well informed work force, well supervised, supported by parents and provided with adequate educational resources was more likely to achieve all the set objectives through meaningful teaching and learning. The parental support and availability of funds through the head teachers' efforts, will ensure that the learners' school environment is enriched with teaching and learning resources, promoting learners' rapid cognitive development. This would be in line with the cognitive constructivism learning theory that knowledge is actively constructed by the learner rather than passively absorbed and that learning should be presented as a process of active discovery leading to improved academic performance.

It also follows that the role of the instructor is not to drill knowledge into students through consistent repetition, but rather to facilitate discovery by providing the necessary resources and by guiding learners as they attempt to assimilate new knowledge to old and to modify the old to accommodate the new. However, since preschool teachers are trained to different levels, in different colleges and varying curricula, there is a need for a professional advice and assistance on how to improvise and use the various teaching aids, interpretation of syllabus, and how and when to apply different teaching techniques. This calls for instructional internal supervision and external supervision by the head teacher and

curriculum support officer respectively. Scaffolding instruction is a useful technique to help students sort through the information effectively. Whereas building scaffolding is a structure that is built around the construction area to help support the creation of the building, lesson scaffolding is a structure that is built around the lesson to help support the understanding of the materials. For instance, the head teachers and CSOs can guide teachers in use of scaffolding technique in which learners are provided with clear directions and clarity of purpose to students on track. According to McKenzie (1999), the key to scaffolding is to help the students deduce which information is important and what information is supporting and which involves assimilating new information to existing knowledge as advanced by cognitive constructivism theory. In line with the cognitive constructivism theory, the current study conceptualized that preschool teachers' professional development, supervision, parents support of children learning and the head teachers' mobilization of funds were crucial factors influencing learners' cognitive development and eventual success in academic performance.

1.13 Conceptual Framework

A conceptual framework is a hypothetical model identifying the phenomenon under study and their relationship (Padgelt, 2007). Figure 1.1 depicts the study conceptual framework.

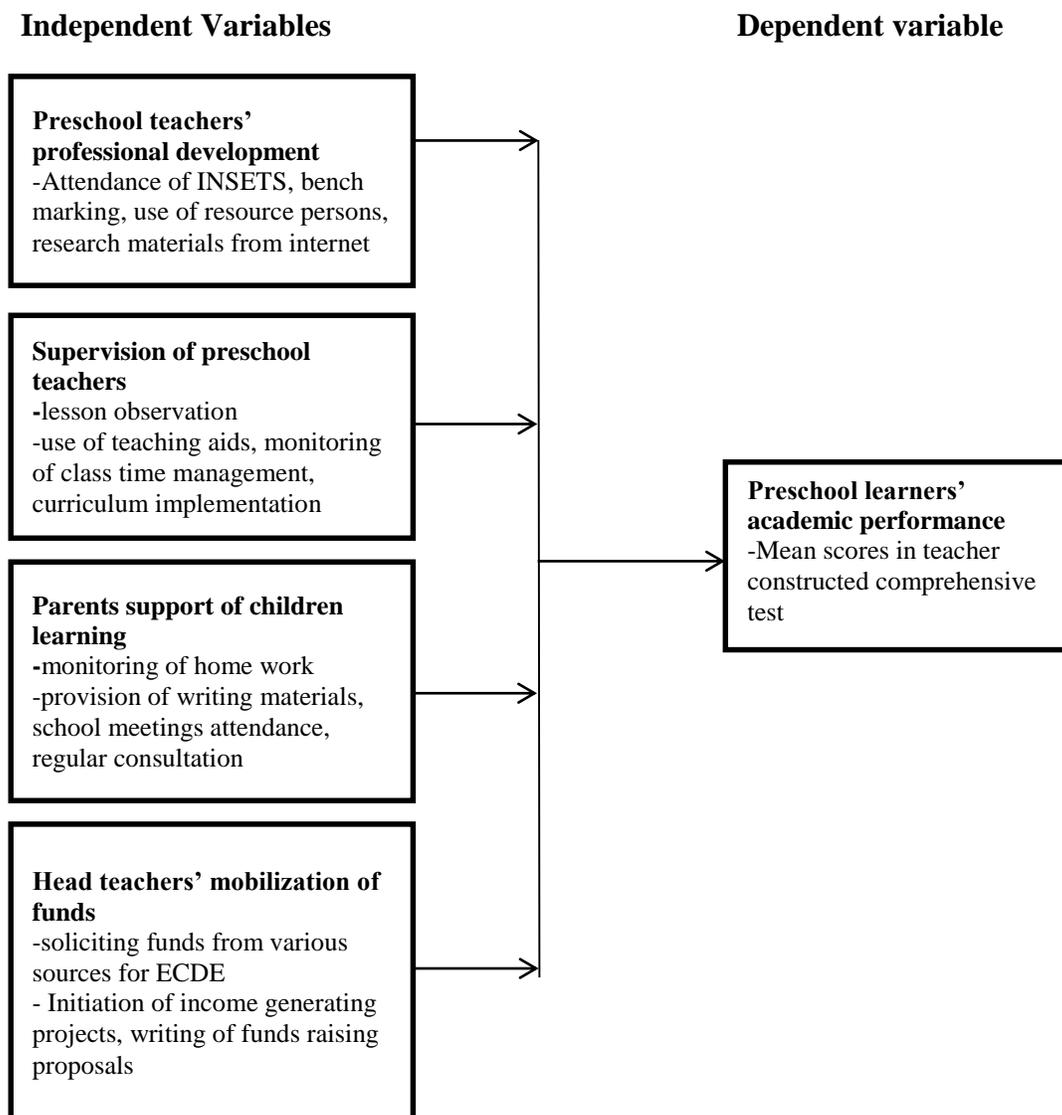


Figure 1.1: Conceptual Framework Showing the Presumed Factors that Influence Preschool Learners' Academic Performance

Figure 1.1, illustrates the study conceptual framework and which was in line with the study theoretical framework. Accordingly, each of the four independent variables has an influence on the learners' academic performance and which could be established using statistical methods. Additionally, the study conceptualized that the combination of all independent variables had a composite influence on the learners' academic performance. In other words, the preschool learners academic performance is a function of preschool

teachers' level of professional development, supervision of preschool teachers, level of parents' support and the head teachers' mobilization of funds for running and developing ECDE centres.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the review of the relevant literature in view of the research problem. The literature review was organized in accordance to the study objectives. The chapter closes with the summary of the reviewed literature and research gaps.

2.2 Preschool Teachers Professional Development and Pupils Academic Performance

Teacher professional development is regarded as the process of helping teachers to improve their basic teaching skills and in expanding their knowledge of subject matter and the teacher's mastery of teaching techniques (Quattlebaum, 2013). Through periodical training teachers keep abreast of emerging challenges and together brainstorm the appropriate techniques' and instructional materials to use in order to enhance learners understanding. Wanzare (2013) avers that supervision of the teacher by the superiors or by a colleague is also a form of professional development. Sergiovanni and Starratt (2007) views instructional supervision as a co-operative venture in which supervisors and teachers engage in dialogue for the purpose of improving instruction leading to student improved learning and success.

Wanzare (2013) postulates that instructional supervision deals with monitoring teachers' instruction-related duties, providing teachers with teaching resources, visiting classrooms to observe lessons, and providing assistance and support to help teachers do their work effectively. According to Osman and Mukuna (2013), instructional supervision roles performed by head teachers include; monitoring of teachers' attendance during lessons, preparation and use of lesson plan, checking and ensuring adequacy of teaching resources. Another role of head teachers is in staff professional development. In countries like

Belgium, Sweden, UK and Northern Ireland the head teacher is directly involved and responsible for the training policy of the teaching staff (Balanskat & Gerhard, 2010).

Depending on which type of training staff needs, the head teacher should have an indirect influence on crucial pedagogical choices within the schools, because classroom teachers are the school's most precious resource. It is through the training of the staff that the head teacher can achieve the school's goals of providing quality education. Hence, the head teacher must provide the support that ECE teachers need and allow them to train and develop their knowledge and skills as they work and exploit their potential (Toywa, 2011).

According to Teklemariam, (2009), head teachers frequently do not play an active role in implementation of the ECDE program, because they do not understand it well. Teklemariam, therefore advances that head teachers should be willing to enter into training with the ECDE teachers especially on the job-training, classroom training and the self-directed learning methods. Additionally, head teachers should organize for their teachers' training and development through the afore mentioned methods or send them to workshops, seminars, colleges/universities for further education and to computer based training to learn new technology.

However, professional development programs without structured support and proper follow-up evaluations may undermine the teacher ability to provide quality service. Killion (2002) as cited in Quattlebaum (2013) contends that well designed, logical and research-based staff development programs, would have a greater likelihood of producing results. Further, back mapping was suggested where factors under assessment are analyzed for congruence, with both educator and student learning needs. By doing so, the desired impact of the targeted professional development and establishment of goals and benchmarks

would concurrently be examined. It would also assist in organizing a system of support for a clearer understanding as to whether teacher knowledge and skills presented are understood and subsequently implemented.

For workers who have passed several stages in their career and are comfortable, professional development involves a change which can be intimidating. As noted by Quattlebaum (2013) there are four conditions are needed for teacher change: an understanding of the underlying theory, or the rationale for a change; demonstrated practice in a class situation, the ability to practice new behavior associated with change, and collegial support and feedback from colleagues and supervisors. Thus, when developing professional development programs, it is important to consider these aspects of accepting change.

Ganira, Odundo and Muriithi (2016) considers professional development as a rigorous and continuous exercise to improve teachers' effectiveness in enhancing learner's achievement. In order for teachers and school managers to accomplish the set goals and objectives, they need keep abreast with the emerging information and maintain the best practices in education. In this regard, Githae, Odundo and Mwangi (2015) maintain that financing professional development for preschool teachers should be a priority in order to equip teachers with problem solving skills and creativity which are crucial at that level. Further, a well-planned professional development is expected to influence quality instruction, team building, curriculum development, leadership and mentoring skills. Cognate to this observation, Duflo et al., (2011) found out that children attained high test scores, better grades, better self-esteem, and show higher aspiration and motivation when assigned to teachers with effective professional development. However, Ganira et al., (2016), disclosed teachers who manage to receive sustained, intensive, and content focused professional

development are few. On the other hand, when a teacher fails to apply new acquired ideas from professional development, the anticipated benefit to the learner is thwarted. Additionally, Voss, Kunter, & Baumert, (2011), opine that professional development improves teacher skills, knowledge, and pedagogy translating into enhanced performance in examinations. It is therefore, important to ensure professional development is content focused, intensive, well defined, coherent, and strongly implemented. Duflo et al., (2011), observe that where the acquired knowledge from professional development is effectively utilized, learners in preschools are likely to experience quality instruction, effective curriculum implementation and improved school performance.

A number of empirical studies done in Kenya show that majority of teachers in both private and public preschools are relatively young (30years and below), inexperienced, female, and either untrained, undergoing training or are ECDE certificate level holders (Githuthwa, 2011; Makau, 2016; Melly, 2017; Nyakundi, 2014). For instance, in a study to investigate the problems faced in the development of early childhood education in Lari, Kiambu County, Githuthwa (2011) established that out of 139 preschool teachers who took part in the study, only seven were male constituting 5%. The study further found that 13.7% of teachers had no training at all while a large majority of teachers (64.7%) had attained a certificate in ECDE. Similarly, in a recent study investigating influence of selected factors on the level of implementation of preschool creative activities curriculum in Njoro Sub-County, Nakuru County, Melly (2017) found that over 80% of preschool teachers were females, trained to certificate level, young and inexperienced.

Kamau (2015) examined the influence of managerial practices on classroom performance of pre-school children in Embu West, Embu County. Using descriptive survey design and a sample of 11 schools, Kamau study found that children at public preschools scored the

least scores in the three domains of instructional objectives namely; cognitive, affective and psychomotor as compared to those in private and faith based schools. However, since the scores arose from just observation by one person (the researcher) they were liable to be subjective. The researcher could have been easily influenced by the environmental differentials existing in public, private and faith based preschools. The current study overcame such subjective weaknesses by administering a sit in test which had earlier been checked for validity and reliability as opposed to one person observation.

Lack of adequate training, high turnover and inexperienced preschool teachers has impacted preschool education quality in Kenya. It is therefore incumbent for the head teacher to spear head professional development of preschool teachers for provision of quality education leading to learners' proficiency in numeracy, literacy, creativity and other crucial areas.

2.3 Supervision of Preschool Teachers and Preschool Pupils Academic Performance

Wanzare (2014) postulates that instructional supervision deals with monitoring teachers' instruction-related duties, providing teachers with teaching resources, visiting classrooms to observe lessons, and providing assistance and support to help teachers do their work effectively. According to Osman and Mukuna (2013), instructional supervision roles performed by head teachers include; monitoring of teachers' attendance during lessons, preparation and use of lesson plan, checking and ensuring adequacy of teaching resources. Likewise Sergiovanni and Starratt (2007) views instructional supervision as a co-operative venture in which supervisors and teachers engage in dialogue for the purpose of improving instruction leading to student improved learning and success.

Instructional supervisors must be highly skilled in their supervisory responsibilities. As Oliva and Pawlas (2004) emphasized, a supervisor must have a wide repertoire of knowledge, skills, and techniques to fulfill the various supervisory tasks to which they are called. The involvement of head teachers in instructional supervision is particularly crucial. According to Sergiovanni and Starratt (2007), head teachers are expected to observe both the instructional activity of the teachers and the learning activities of the students.

In European countries, such as Germany, Portugal, Slovenia, Sweden, and Northern Ireland, the role of head teachers is balanced between the administrative, the pedagogical and the strategic plans in their schools (Balanskat & Gerhard, 2010). According to Fullan (2010), the head teacher is the most likely person to be in a position to shape the organizational conditions necessary for success such as the development of shared goals, collaborative work structures and climates and procedures for monitoring results.

Gumo (2013) asserts that curriculum implementation process is in need of the administrators' active support and participation, not necessarily as curriculum experts, but as supervisors of change. Thus, the school heads' level of commitment to supervising the staff in ECDE for quality performance is a crucial feature. The degree to which the head teachers are committed to a goal is reflected in the time and energy they devote to its' implementation and in the extent to which they remain faithful to their supervisory role in the face of opposition and operational difficulties (Balanskat & Gerhard, 2010).

Head teachers should therefore be familiar with curriculum objectives for effective supervision during implementation, since the preschool teachers look upon the head teachers for guidance and support in curriculum implementation (Wanzare, 2013). In this context, it is the head teacher's responsibility to provide guidance and to supervise the

extent to which the ECE curriculum is implemented (Nyakwara, 2014). This makes him/her accountable and responsible for effecting pre-school goals (Gardener & Mahler, 2013). One of the priorities of head teachers is to monitor the teaching and learning process in their schools. He also needs to watch the degree of teachers' involvement in the implementation of the curriculum, accurate records keeping of the children's progress, (Martinez, Nandau & Preira, 2012).

One way in which a head teacher can gain an insight into the quality of teaching and learning is physical observation of lesson presentation. Gachoya (2005) observed that through this visit, the supervisor can have an insight into quality benchmarks and performance. However, Fisher (2011) cautions that observed lessons should be properly analyzed, for little purpose is served if, after a lesson, and observer simply exudes goodwill, mumbles vaguely, or appear to be uncertain as to the purpose.

Likewise, Karanja and Githinji (2011) emphasizes that there is a need for a supervisor to use an observation schedule indicating the teacher's level of class management, teaching approaches, the lesson presentation, mastery of content, learner involvement as well as relevance of content given. In addition, the supervisor can enhance the collected information by videotaping the lesson without being disrupting the class. The videotaped information can later be very useful as the teacher and supervisor discusses the strength and weaknesses of the lesson during post conference session.

Kamau (2014), asserts that, lack of effective management in most ECDE centers, impacts negatively on the operations of the early childhood education. At the same time, Njue (2014), states that staff in the ECDE centres, do not have the guidance they need from the head teachers to operate as an effective care and education team. There are also poor

teaching practices and ineffective child management strategies which result in children getting bored and their learning needs not being met. Underdeveloped self-review and inadequate centre planning in public primary schools in Kenya further hinders progress (Gumo, 2013).

Kiragu (2014), conducted a study on primary school head teachers' role in implementation of the early childhood education curriculum in Makuyu Division, Murang' a County. Among other findings, the study established that most of primary school head teachers never checked the pre-school teachers' professional documents, and that primary school did not provide guidance and counseling to pre-school teachers. The study also found that head teachers provided pre-school teachers with curriculum support materials but did not supervise implementation of the ECE curriculum. The study however, did not link preschool teachers' supervision and preschool learners' academic performance.

Kamau (2014) investigated parents' satisfaction with quality of services offered in early childhood development programmes in Mang'u division, Kiambu County, Kenya. The study also investigated how the type of programs, parents' income, parents' educational level and location of the program influenced parents' satisfaction with the quality of services offered in Early Childhood Development Programs provided to their children. Among other things, the study found that there was no significant difference in the parents' satisfaction with the quality of services across parental education level, location of the programs and house hold income. However, there was a significant difference in parental satisfaction with the quality of ECD services between public and private ECD centres. This difference was most likely due to the disparate head teachers' supervision strategies and which were not investigated by the study. The proposed study aims at examining among

other things the influence of the extent of preschool teachers' supervision on the preschool learners' academic performance in public ECDE centres in Nyamache Sub-county.

2.4 Parents' Support of Preschool Children and Pupils' Academic Performance

Schools are faced with the task of implementing various strategies to involve parents in the education of pupils. Krainer (2011) observes that, in Australia, programs involving parents who volunteer to work in the classroom have benefits; they indicate the need to have a welcoming classroom environment as well as being sensitive to parent diversity and availability.

Parents take part in monitoring of resources such as funds in the public primary schools. Parents are involved in teaching morals, ethics and adoptive teachings, to adjust for and accept change in their society (Dennis, 2011). Parents are involved in discipline, guide and counsel, monitor, supervise and organize their children at home before attending school. Although America, UK and China education has developed, parents are so involved in their collar jobs where they are paid according to hours and lack time to attend forum meetings to discuss school matters with teachers, a gap need to be filled.

According to Ediger (2013), in India, parents are involved in making sure children communicate in English while they are at home to promote learning at school. Parents should monitor children's behavior during holidays and guide them on school matters (Caroline, 2006). They should be involved in providing structural facilities such as good water supply, sports facilities and medical facilities.

Smith (2006) points out that parents should be involved so much on counseling children to avoid problems like violence, drugs and alcohol abuse, sexual activities, truancy and other problems that hinder learning in school. In Tanzania as one of East African country, parents

are involved in education as stakeholders to participate in learning (Nkuba & Kyaruzi, 2015). Parents should have authority over children variety of reading materials at home and therefore, should the materials available have the appropriate in depth and relevance (Davies, 2013). Parents especially in Africa are below poverty line and are involved in casual labour. In Tanzania, parents mainly work in Ujamaa villages and lack time to discuss matters on education leaving everything to teachers (Nkuba & Kyaruzi, 2015).

Parents' involvement is very vital in education as stakeholders to promote learning (Bartle 2011). Watson (2013) points out that every parent in traditional society was a teacher to still morals to their children. Introduction of formal education all over the world had led parents to be involved in schools in various ways. Parents are involved in promoting communication, social events and fundraising in schools (Celewa, 2011). Dweck (2010) asserts that parents are involved in provision of learning and teaching materials especially in lower classes.

In a study conducted by Burroly (2011), parents of children aged 5 – 16 years attending schools in England participated to establish their degree of involvement in their children's education. According to the study, parents felt very much involved the more in primary than in secondary schools. Out of the households surveyed, majority wanted to be more involved and participate in school's management activities to ensure that their children could obtain the best from the school.

Houtenville and Conway (2008) observe that children are more likely to be active and perform better in school when their parents/guardians demonstrate interest in their school work, do assist them with homework, and are willing to ensure completion of school assignments. They further confirmed that the more parents get involved or participate in

schooling in a sustained way at every level in decision making, advocacy and oversight roles as fund raisers and boosters as volunteers and as a home teachers, the better for learner's achievement. A study conducted in USA, sought to evaluate the efficacy of teacher communication with preschool parents as a means of increasing preschool engagement (Myers & Myers, 2015). The study used the randomized field experiment to establish the causal effect of teacher communication in which children were assigned to receive a daily phone call home and a text/written message during a mandatory summer school program. It was established that, the frequent teacher-parent communication increased parents' preschool engagement as measured by homework completion rates, class participation and on-task behavior.

Garcia (2016) argues that, in a much as the parent involvement in the school can reinforce the preschool's efforts and further benefit children's social competence and academic skills, preschool children's characteristics may prompt parental involvement. That is, children may prompt parental involvement through their behaviors and their social and academic skills. For instance, an errant child may trigger more parental involvement in the school as the parent tries to work with teachers to reduce undesirable behaviors. On the other hand, parents of children who are excelling may feel the urge to increase their involvement in the school to develop the skills to facilitate even further development in their gifted children (Tucker-Drob & Harden, 2012). The concept of children encouraging changes in parents' behaviors is referred to as child elicitation. Garcia (2017) conducted a study on child elicitation of parental involvement in preschool.

Precisely, Garcia (2017) study examined the extent to which children's academic and social skills contribute to parents' Head Start involvement, and whether barriers and social support serve to moderate those associations. Head Start is the largest federally-funded

early childhood program in the United States (Administration for Children and Families, 2014). Head Start provides two-generation programming: early childhood education for young children and parent training and opportunities to encourage parents to learn new skills and to participate in the classroom (Garcia, 2017). Among other findings, the study found that children's characteristics did not directly elicit parental involvement. The lack of direct associations suggested that parents' involvement may vary depending upon factors that support or hinder parents' abilities to participate, such as the levels of social support and barriers to involvement experienced by parents.

In a similar study done in Ohio USA, Koch (2018), embarked on a qualitative study to examine parent involvement practices of the Early Beginnings Head Start program and to determine the impact that parent involvement has on the early language and literacy development of preschool children. This research study revealed that the Early Beginnings program utilizes several different methods of involving and educating parents including the use of workshops, home visits, conferences, and newsletters. Workshops were found to be the most valuable method of parent involvement used by the program to educate parents regarding early language and literacy skills. The use of multilingual facilitators, hands-on learning, and discussions at the workshop proved to benefit parents greatly.

In Britain, ElNokali, Bachman and Votruba-Drzal (2010), conducted a study on Parent Involvement and Children's Academic and Social Development in Elementary School. Using a sample of 1364 children, the study investigated children's trajectories of academic and social development across first, third and fifth grade. The study found that improvements in parent involvement predicted declines in problem behaviors and improvements in social skills but predicted no change in achievement. It was, however, noteworthy that ElNokali et al., (2010) study considered older children who might not have

required much academic assistance from their parents. The current study focus was on the preschool learners whose parental assistance was much needed.

Ajayi, Haastrup & Arogundade (2009) carried out a research on parent involvement in school administration as a correlate of effectiveness of secondary school in Nigeria. The study examined the relationship between parent's involvement in school administration and effectiveness in secondary schools in Nigeria. The study revealed that parents were much involved in the administration of secondary schools. The study further revealed that secondary schools in the area covered were moderately effective though there was no significant relationship between parents' involvement in the administration of secondary schools and effectiveness in the schools.

Osei-Akoto, Chowa and Ansong (2012) investigated the extent of parental involvement in academic performance in Ghana using randomized cluster sampling of 100 schools from eight out of ten regions. The results indicate that majority of the parents (83%) hardly assisted children in homework. However, the study failed to establish the effect of parental involvement on academic performance. In Namibia, Guolaung Erlendsdottir (2010) conducted a qualitative survey study on the extent of parental involvement in students' academic performance. The study involved seven parents of students who had achieved high grades in examinations. All parents reported very high level of involvement in their children's education but the study was limited in design since the sample was too small to make generalization to a larger population.

Dube (2015) explored on parent involvement in ECDE centres in Masiphumelele, Cape Town. The researcher aimed to gain an understanding of how parents are involved in Early Childhood Development centres and factors that enhance and hinder parent involvement

in ECD centres. The study adopted a qualitative, exploratory approach using a semi-structured interview schedule. The researcher used non-probability, purposive sampling to select 19 participants. The Tesch's (1990) method of analysis was used to analyze the data. The research findings revealed that even though there are parents who participate in activities taking place at ECD centres, parents' involvement was still unsatisfactory. The study also affirmed that, factors that enhanced involvement of parents included; unity among parents, hosting general parent meetings, take-home activities, effective communication between parents and ECD staff especially teachers, hosting parent workshops, teachers' adoption of a positive attitude towards parents. However, the study did not focus on how the parents' involvement enhanced preschool learners' academic performance. Dube (2015) further, found that single parenthood, lack of time, lack of interest, lack of education, poverty and unemployment are factors that inhibit parent involvement in ECD centres.

Kibet (2010) investigated the role of parents in enhancing preschool children's education in Uasin Gishu district, Kenya and found that parental involvement in education was low. Ciaraka (2003) sought to establish the role of parents in facilitating learning processes in selected primary schools in Egoji- Meru. The study found that parental involvement in homework was high but majority (93%) of the parents did not provide supplementary learning resources. Spernes (2011) study, also found that in most of Kenyan rural primary schools, sharing of responsibility between parents and schools was minimal and that there was hardly any relationship between parental involvement and students' academic performance.

Kaberere, Makewa, Muchee and Role (2013) found that in Rwanda parents of children in high performing schools were significantly more involved than their peers with

children in low performing schools particularly in support for learning and assisting children in homework. Nyarko (2011) investigated the effect of parental involvement in school on students' academic performance in Ghana. The results revealed a positive and significant correlation between mothers' school involvement and academic performance of children. Interestingly, there was non-significant correlation between father's school involvement and students' academic performance.

Muiru, Thinguri, Njagi and Ngunu (2014) conducted a study on parental involvement and primary school academic performance in Teso North District. Among other findings, the study found that about a quarter of parents could turn up for a meeting to discuss school academic performance, most of head teachers indicated they had a feeding program, learners absenteeism was caused by domestic chores, and that most head teachers faced great problems due to parents poverty and lack of interest in school programmes. However, Muiru et al., (2014) study did not sought to relate the actual learner grades or marks attained in an examination and the extent of parents' involvement and thus rendering their deductions weak. The current study used inferential statistics to establish the influence of parents' involvement and learners' academic performance and thus the results could be generalized to the entire population.

Chemagosi, Odongo and Aloka (2016) set out to establish the parental strategies enhancing their level of involvement in pre-school pupils' learning in Nandi Central Sub-County, Kenya. The study sample size consisted of 74 public head teachers, 74 preschool lead teachers and 320 parents. The study findings showed that parents' school meetings attendance, providing snacks to their children, assisting their children's homework, providing education basic needs and attending organized school forums/conferences/visits were among the strategies that enhanced their involvement in their children learning. Such

level of involvement could lead to preschool children improved academic performance (Chemagosi et al., 2016). Though, Chemagosi et al., (2016) study established the strategies that could get parents more involved in their children learning, it did not attempt to statistically establish the link between involvement and academic performance. The current study aimed at establishing the extent to which the parents' involvement influenced preschool learners' academic performance using quantitative methods and validated using qualitative methods.

Sang (2016) investigated the parental involvement in the provision of Education in public Early Childhood Development and Education centres in Njoro sub-county, Nakuru County, Kenya. The study aimed at investigating the extent to which parents provide feeding programmes and teaching and learning materials; parental involvement in the payment of levies and in facilitating their children's learning at home; and challenges affecting parental involvement in the provision of ECDE. The study adopted a mixed methods approach and using Interview schedules and questionnaires data was collected from forty six pre-school teachers, twenty three head teachers and forty six parents. The study found out that most children carried their own packed food due to absence of school feeding programme. It was also found that the parents were the main financiers of pre-schools and due to poverty and high unemployment rates, most could not meet their obligations. A few pre-schools got little government grants. Further, Sang (2016) found that most of the parents assisted their children with homework and in reading and writing. The study, however, did not investigate how the extent of parents' involvement influenced the learners' academic performance. The identified lacuna spurred the undertaking of the current study.

2.5 Head Teacher's' Mobilization of School Funds and Preschool Learners Academic Performance

Provision of public education involves mobilization and consumption of resources. Ngware (2007) views the act of resource mobilization as a concerted effort to generate resources for a specified entity to fulfil a planned purpose. Such resources include, finance, material, human, machines, time, and nature itself. Of all the resources, financial capital is one the most significant resource since it is actually the basis for procurement, utilization, and maintenance of all types of resources. Without a strong financial base, it will be difficult to produce the right types of goods and services in desirable quantity and quality. The availability of funds in any organization or institution is vital to its productive process and quality of its products and services. Mbiti (2007) notes that although manpower is the basic input in effective education programme implementation, it is the availability of adequate finance that dictates the teaching learning resources to be purchased, the level of human resource development and the facilities to be developed. Sallis (2002) observes that one of the most underrated issues in total quality management is the nexus between quality and institutional financial management.

Manoj (2011) as cited in Wangila (2017) observes that apart from payment of ECDE teachers' salaries, Early Childhood Education receives very little funding in Kenya. Most of the ECDE centres have been run by parents for many years. The funds collected from parents cater for the teacher's salary, provide subsistence and provide the teaching facilities. However, prevalence of poverty in some areas and negativity of attitude towards the programme, many parents do not pay these services and hence making it difficult for the learners to access quality education (Manoj, 2011) as cited in Wangila (2017). It is no wonder then that private sector has almost a monopoly in offering ECDE, albeit the fact

that over 90% of Kenya's primary school children receive public education (Republic of Kenya/UNICEF, 2012). A study by Kariuki (2014) revealed that due to lack of support for Early Childhood Education (ECD) there are many children who start their education in class one and thus prompting transfer of early childhood lessons to the primary section.

Through the Session Paper No. 1 of 2005, a policy Framework on "Education, Training and Research," the government of Kenya recommended the development of a comprehensive ECDE policy framework and service standard guidelines (Republic of Kenya, 2005). The policy not only provides a co-ordination mechanism but also explicitly defines the roles of parents, communities, various government ministries and departments, development partners and other stakeholders in the provision of ECDE. Further, the implementation of this policy was to ensure enhanced financing, access, quality, equity and efficient management of ECDE services.

Despite the fact that the fourth schedule of the Kenya constitution, 2010 and the Basic Education Act 2013, places the roles of funding and development of the necessary infrastructure for institutions of basic education and training used for conducting pre-primary education under County Government, there are many ECDE centres which are yet to receive such assistance and solely rely on parents support. In addition, the FPE policy greatly aggravated the situation since some parents prefer keeping their children at home until the age of six to seven years to join free education in class one (Kirathi, 2014; Ngaruiya, 2008; Shinali, Githui & Thinguri, 2014). Besides there are so many sections of ECDE national policy and various policies formulated by different counties that do conflict and that require urgent harmonization. Yet in the midst of this conundrum, the head of institution hosting the ECDE centre is expected to accomplish the various objectives and

promote principles and virtues as espoused by Early Childhood Development (ECD) Policy Framework in Kenya (Republic of Kenya, 2006; Murunga, 2015).

Thus, in order to ensure quality education and enhance learners' academic performance, the head teacher has several options of mobilizing funds for ECDE. These sources include: the County government, the parents contribution, NGO's inclined to ECDE, capitation from National government and other stake holders. The Government of Republic of Kenya (GOK) has demonstrated its commitment to the wellbeing of young children, this is by signing various global policy frameworks. These forums underscore the importance of Early Childhood Education and Development, and identify challenges facing ECD sub sector (Republic of Kenya 2006).

The government through Sector Wide Approach to Programme Planning (SWAP) and development partners worked together to come up with the Kenya Education Sector Support Programme (KESSP). The programme Comprised of twenty three investment programmes which focused on the education sector as a whole. Early Childhood Development and Education programme, is among the twenty three investment programmes mentioned in KESSP and aimed at expanding access in order to enhance ECDE services that are of high quality for the vulnerable children aged 4 years to 5 years.

The ECDE investment programme comprises of the provision of Community Support Grants (CSG) or ECD capitation grant to selected ECDE centres across the country. CSG is paid by the MOE directly to a special bank account established by each ECDE centre. Before funds are sent to the ECDE centre, the ECDE management committee must prepare an ECDE centre improvement plan which explains how the centre will use the CSG to increase the enrolment and improve the quality of education of children aged 4 to 5 years.

The ECDE centre improvement Plan is formally presented and approved at a special meeting of parents and community members before a centre can receive CSG from the MOE. The ECDE management committee members are trained on how to develop a quality centre improvement plan and how to successfully manage their CSG (Republic of Kenya, 2007, MOE 2009)

Studies by Murunga (2015), Kirathi (2014), Shinali, Githui and Thinguri (2014) and Wangila (2017) have found that ECDE in Kenya is still bedeviled by serious underfunding issues such as understaffing and high teacher turnover, lack of essential play materials and facilities, feeding programme, teaching resources and buildings. These issues impact negatively on the quality of ECDE and pupils academic performance. It therefore calls for appropriate head teacher managerial and funds mobilization strategies in order to solicit adequate resources for quality preschool education.

Shinali, Githui and Thinguri (2014) established that the ECD capitation grant has led to an increase in the enrollment of learners in ECDE centers, availability of the teaching and learning materials resulting to enhanced learning albeit the grant inadequacy. The ECDE capitation grant programme was started in 2007 and was aimed at enhancing access, quality and equity to early childhood development education (ECDE) services. It targets all children aged 4-5 years mostly from Arid and Semi-Arid Lands (ASALs), urban slums and other regions in acute need of resources (Ngaruiya, 2008). However, Shinali et al., (2014) noted that provision of ECDE capitation inadvertently led to loss of crucial funding from parents in some preschools due to the perception that capitation is a provision of free preschool education. The study however, did not investigate the strategies employed by some head teachers who despite receiving the ECDE capitation were still able to mobilized

funding from parents and thus maintaining continuous improvement in ECDE quality. The current study embarked on assessing the influence of head teachers' mobilization of school funds on preschool learners' academic performance in Nyamache Sub County.

Most of the studies done on ECDE, identify management, lack of clear policy and finance inadequacy as the genesis of the problems afflicting the preschool education sub sector. A recent study by Wangila (2017) on the challenges facing the implementation of Early Childhood Development and Education Policy in Bungoma County, found that inadequacy of teaching and learning resources, financial constraints, poor teacher training, high turnover, and poor teacher remunerations were the main hindrances to provision of quality ECE. While Wangila (2017) study recommended a joint funding by Counties and Central government, and that the central government should hire ECDE teachers on permanent and pensionable terms, it did not explore on the cardinal managerial role of the head teacher in mobilizing resources and ensuring that the engaged teachers are offering services as per prescribed curriculum.

Kelonye (2012), did a study on factors influencing parental involvement in the provision of ECE in Kenya. The study adopted a descriptive research design, simple random sampling was used to select 50 ECE centers, convenient sampling to select 200 parents, purposive sampling to select 50 teachers, 50 head teachers and 2 education officers. The data collection instruments included questionnaires, interview schedules and document analysis. Data was analyzed using simple descriptive statistics including frequencies, percentages and presented in form of frequency tables, bar graphs and pie charts. The study found out that though the perception of teachers on parental involvement was positive, they failed to involve parents in decision making. Subsequently, the parents could easily

withdraw their financial support, compromising the quality of facilities in ECDE centres. Thus, it is imperative for the head teachers to apply appropriate strategies in order to persuade the school funders to remain steadfast in supporting the school.

Wanjohi (2010), did a study on Evaluation of the Impact of community support Grants on the development of ECE in Kiambu District, Kenya. The study used a survey design and targeted all public ECDE centers, ECDE teachers, community members and program officers. Stratified, simple random and purposive sampling, were used to select respondents. Data was collected using questionnaires and checklists. Data was analyzed and presented in form of tables and percentages. The study found out that there was a big impact on the part community collecting funds to pay teachers and for buying teaching/learning material. The enrolment and retention of the children had increased; the quality of service delivery was high as teachers were paid well. However, the study also established that funds were not utilized well due to corruption on the management part.

Owuor (2010), did a study on factors influencing provision of early childhood education in Madiang Division, Kenya and found out that socio-economic factors undermine provision of ECDE services, among other factors like teachers, structural and operational characteristics of ECDE services. Toywa (2011) did a comparative study of the effects of selected teaching methods on performance in early childhood education in Kenya and found out that many ECE centres were characterized by inadequate infrastructure for the use of play-way methods.

Though a plethora of studies exist on funding in primary and secondary education schools, very few studies have focused on ECE funding in Kenya. For instance, Orodho (2014) focused on the equity and quality implications of free primary education (FPE) and free

day secondary education (FDSE) policies in Kenya. Among other findings, the study found that there has been a phenomenal growth in student enrollment both in primary and secondary schools in Kenya as a result of the implementation of these free education policies. Further, the study found that education in the country was fraught with multifarious and intertwined finance related challenges of providing quality and equitable education, resulting in conspicuously wide and severe regional and gender disparities in access to, and quality of education. Orodho (2014) recommends that in order to effectively finance primary and secondary school education of high quality, all constraints related to educational financing should be eradicated through making strong and tough decisions that pragmatically translate the education policies from the current rhetoric chimera to practice. However, the study failed to appreciate the fact that in order to effectively close the gaps in equity, access and quality of education across all parts in Kenya, support in funding should begin at ECDE level. The current study embarked on determining the influence of head teachers' mobilization of funds on preschool learners' academic performance public ECDE centres in Nyamache Sub County.

Awuor, Wanjala and Muriithi (2016) examined financial resource mobilisation strategies and internal efficiency of public secondary schools in Rachuonyo South Sub County, Homabay County. The study looked at the nature and impact of resource mobilization strategies like state subsidy, user fee, community funds, student labour, NGO funds, schools foundations, and income generation activities on internal efficiency measured in terms of performance of students, the levels of retention, repetition. A descriptive survey research design was used. A head teacher's questionnaire was used to collect data from 61 schools in addition to an observation schedule and an interview schedule. The study findings indicated that more financial resources resulted into enhanced internal efficiency.

The regression analysis results showed that student academic performance as a measure of internal efficiency had positive relationship with all the considered resource mobilisation strategies. Similarly, retention rates had positive relationship with all the strategies in question a part from community funds which showed a negative relationship. Finally, repetition rates had a positive variation with income generating activities and state subsidy. The strategies of user fees, community funds and student labour however had negative relationship with repetition rates. Awuor et al., (2016) recommended that schools should exploit the resources at their disposal effectively and efficiently to reduce the cost of education and cut down wastage in schools. Also the school managers should ensure that schools are run as business entities whose profitability relies on the ability to manipulate available resources to enhance performance, increase retention rates and reduce repetition rates. However, Awuor et al., (2016) study focus was on secondary schools while the current study was focused on ECDE.

2.5 Summary of the Literature Review and Knowledge Gaps

The reviewed literature revealed the significance of head teachers' supervision of preschool teachers, mobilization of school funds, professional development of teachers, and parents' support of pupils' learning; all geared in ensuring provision of quality education (Gumo, 2013; Karanja & Githinji, 2011; Nyakwara, 2014; Wangila, 2017). However, most of these studies failed to statistically link the identified factors to preschool learners' academic performance, thus, rendering their findings and interpretations weak. Moreover, none of the reviewed studies was conducted in Nyamache Sub County. The current study used inferential statistics to establish the influence of preschool teachers development, supervision, parents' support of pupils learning and head teachers mobilization of funds

parents', on preschool learners' academic performance. In so doing, the study results could be generalized to the entire population.

Although ECDE is constitutionally under County governments (ROK, 2010, 2013), most of public ECDE centres are currently attached to public primary schools where TSC is responsible for teacher management. Thus, while the head teacher is directly under the national government (TSC), he/she is expected to manage ECDE which is under county government. The management disconnect notwithstanding, the primary school head teacher is expected to oversee the smooth running of these centres. Being a relatively new dispensation in Kenya, it was imperative to conduct a study to investigate the influence of head teachers' roles such as supervision of preschool teachers and mobilization of funds on provision of quality ECE and preschool learners' academic performance.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents a detailed description of the methodology used in the study. The contains: research design, the study locale, target population, sample and sampling techniques, description of research instruments, pilot testing, validity and reliability of data collection instruments. Further, data processing and analysis procedures are explicated. The chapter culminates with a description of legal and ethical considerations.

3.2 Research Design

The study employed both descriptive survey and correlation research designs. Descriptive survey research seeks to establish factors associated with certain occurrences, outcomes or outcome conditions (Borg & Gall, 2006). Kothari (2014), explicates that descriptive survey research design is best adapted to obtain personal and social facts, beliefs and attitudes, it involves measurement classification, analysis, comparison and interpretation of data that results in the formation of important principles of knowledge and solution to significant problems. Descriptive survey design involved asking a sample population questions about a particular issue to explore their opinions, attitudes and knowledge about the issue in question (Fraenkel, Wallen & Hyun, 2012). Correlation research design uses inferences to explain relationships among variables systematically and emphatically without direct control of independent variables (Orodho, 2012). This hybrid design was found appropriate in this study since apart from seeking opinion, attitude and knowledge about the issue at hand, the study also sought to establish the degree of each independent variable influence on the dependent variable.

3.3 Location of the Study

The study was conducted in Nyamache Sub-County in Kenya. Nyamache Sub County is 40 km from Kisii County Headquarters. The sub County is composed of productive agricultural land and has many private and public ECDE centers to cater for the large population in the area. According to Nyamache Sub County Education Office, Nyamache Sub County had 84 registered public ECDE centers as at 2017 (MOE, 2017). Further, according to Kisii County schools census report of 2017, Nyamache Sub County was one of the regions in the County with large numbers of ECDE centres but with the most fluctuating children enrollment. The region also experienced endemic parents/teachers conflict in regard to education quality and financial management resulting to frequent children movement from one school to another. The County schools census report also noted that, while some ECDE centre were chocking with high children population, some had several empty classes. It was due to these issues that the location was chosen for the current research.

3.4 Target Population

Babbie (2014) defines target population as a complete set of individuals, cases or objects with some common observable characteristics. The study targeted 84 head teachers, 4 Curriculum Support Officers (CSOs), 4200 preschool (nursery) children and 260 preschool teachers who managed and taught in Nyamache Sub County 84 public ECDE centres (Nyamache Sub County Education office). The preschool teachers were targeted because apart from nurturing the children in social and basic life skills such as toileting, they were entrusted to develop the first and the second language and creativity. Secondly they are expected to enable the child attain numeracy and literacy. The head teacher is expected to supervise the preschool teachers to ensure regular attendance, professional documents have

been prepared and that meaningful teaching has been done. In addition, they were expected mobilize parents support, solicit funds for running and developing the center, and above all initiate continuous preschool teachers' professional development. CSOs were targeted because they are the MOE agents who offer curriculum advice and ensure that quality is maintained in the implementation of the curriculum.

3.5 Sample Size and Sampling Techniques

Kothari (2014) defines a sample as a representative part of a population that is studied to give information about the entire population without having to study the entire population. Gay, Mills and Airasian (2009) posit that a sample size of 10% to 30% of the population is sufficient for reliable findings. The study sampled 30% of head teachers to get 25 head teachers from 25 ECDE centres. Since the study was designed such that the information collected from teachers was to be triangulated through the head teacher and vice versa, two preschool teachers from each of the 25 ECDE centres were sampled. Thus, the 50 sampled preschool teachers constituted 19.2 % of the targeted teachers and which was within the 10 % to 30% margin.

Nyamache Sub County is divided into four educational zones. Using the stratified sampling technique, the ECDE centres were put into 4 stratas. The 25 ECDE centres from where the 25 head teachers came from were proportionately drawn from the four educational zones. From each strata, six schools were selected through simple random sampling. However, from one of the zones, 7 ECDE centres were selected to make a total of 25 centres. Further, the study used census sampling to select all the four CSO representing the four educational zones. The study involved all the 1240 Pre Primary 2 (PP2) learners from the 25 ECDE centres that were sampled. Thus, the total sampling matrix gave total of 1319 respondents

comprising of 25 head teachers, 50 preschool teachers, 4 CSOs and 1240 PP2 children.

Table 3.1 shows the sample size distribution.

Table 3.1 Sample Size Distribution

Category of Respondents	Population	Sample	Proportion %
Head teachers	84	25	30.0
Preschool Teachers	260	50	19.0
CSOs	4	4	100.0
Preschool Learners	4200	1240	29.5
Total	4548	1319	29.0 %

3.6 Data Collection Instruments

The study employed four data collection instruments: preschool teachers' questionnaire, head teachers' interview schedule and curriculum support officers' interview schedule and preschool learners' assessment test. Altrichter, Feldman, Posch and Somekh (2008) and Creswell (2012) posit that the use of several research instruments or source triangulation is the surest way of minimizing threat to both internal and external validity. They further contend that triangulation gives a more detailed and balanced picture of the situation.

3.6.1 Preschool Teachers' Questionnaire

The teachers' questionnaire was semi-structured in that it contained closed ended Likert type items and open ended questions. It consisted of sections A, B, C, D and E (Appendix II). Section A sought demographic information, section B sought information on preschool teachers' professional development, while section C sought information on supervision of preschool teachers. Section D sought information on parents' involvement in children learning while section E gathered information on head teachers' mobilization of funds.

3.6.2 Head teacher' Interview Schedule

Bhattacharjee (2012) aver that interview method of collecting data is superior to other instruments in that it creates rapport between the respondent and the researcher. In addition, it guards against confusing the questions since the interviewer can clarify the questions thereby helping the respondent give relevant responses. The head teachers' interview guide (Appendix III) was semi structured. It sought to gather demographic information, information on teachers' professional development, supervision of preschool teachers, parents support of children learning, and the head teachers' mobilization of school funds. In addition, the head teachers were to give their opinion on how these factors contributed to the preschool learners' academic performance.

3.6.3 Curriculum Support Officers' Interview Schedule

The CSO interview schedule was structured (Appendix IV). The interview questions were set according to the study objectives. However, through probing questions the CSOs were allowed to give any pertinent information or emerging themes but which had an influence on the preschool learners' academic performance.

3.6.4 Preschool Learners Assessment Test (PLAT)

This was a comprehensive teacher constructed assessment test (Appendix V) that was adopted from Karanja (2017) study. The test aimed at assessing the extent to which learners had acquired the skills and knowledge in various subjects offered in the preschool curriculum. The test assessed knowledge in science, creativity, number work, language and social environment. According to Karanja (2017), PLAT was had high reliability coefficient ($r = 0.83$) and thus suitable for the study. It was noteworthy that all the ECDE centres involved had not commenced the competency based curriculum.

3.7 Piloting

According to Hesse-Bibber and Leavy (2010), Pilot testing is done to ensure validity and reliability of the instruments used in research. Gay, Mills and Airasian (2010) maintain that participants in the pilot test should have similar characteristics to the intended participants. Orodho (2012) posit that for pilot testing, 10% of the sampled population was sufficient. Therefore, the study involved 3 head teachers, 5 teachers, 1 CSO and all the preschool children from the three ECDE centres in the neighbouring Bomachoge Sub County. The participants were encouraged to make comments and suggestions on the veracity of the data collection instruments.

3.8 Validity of Data Collection Instruments

Hesse-Biber and Leavy (2010) explain validity as the accuracy and scientific soundness of the research instruments used in a study to capture data. Validity is also the extent to which results got from the analysis of data actually represent the issue under study. The researcher sought the expert opinion on content and construct validity. The data collection instruments were availed to the university supervisors assigned to the researcher for review. The results from the piloting together with the comments from the supervisors were incorporated in the final instrument revisions to ensure its validity.

3.9 Reliability of Data Collection Instruments

Reliability refers to the extent to which a research instrument gives measures that are consistent each time it is used to the same individuals (Creswell, 2014). Test and re-test method was used to gauge the consistency of the study questionnaires. During the pilot study, questionnaires were administered twice to the same group of teachers with a duration gap of two weeks. Test-retest reliability of the teachers' questionnaire was measured by

correlating the two sets of data and a Pearson coefficient of 0.75 was obtained. According to Creswell (2012), in social sciences, a reliability coefficient of 0.6 and above is satisfactory for any research instrument. Thus, the preschool teachers' questionnaire was found to be appropriate for this study.

3.10 Data Processing and Analysis

Data analysis is the process of bringing order and the meaning of information collected (Kombo & Tromp, 2006). The researcher conducted data cleaning, which involved identification of incomplete or inaccurate responses to remove outliers. Data were coded and analyzed using statistical package for social sciences (SPSS version 22) to generate descriptive statistics in terms of means and percentage and standard deviations. The findings were presented in tables, charts and bar graphs for clarity. The dependent variable was derived from the preschool pupils mean test (PLAT) score from each of the sampled schools. The four hypotheses of the study were tested by use of multiple regression analysis. The regression equation was in the form: $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$ and where

Y = preschool learners academic performance,

X_1 = level of preschool teachers' professional development,

X_2 = supervision of preschool teachers,

X_3 = parents support of pupils' learning and

X_4 = head teachers mobilization of school funds while ϵ is the error term.

Analysis of the interview data started as soon as each session ended. Notes taken during the interviews were checked for gaps immediately in order to record all that could be remembered and had not been written down. Identification labels were given according to the respondent such as (HI) for the first head teacher interviewee while (CSO1) as the first

curriculum support officer to be interviewed. Qualitative data generated from questionnaires and interview schedule was put into themes for easier interpretation. However, verbatim quotations were also used in order to maintain the message as given.

3.11 Legal and Ethical Considerations

Legal and ethical considerations form a key part in research since it helps to ensure that no one suffers harm or undesirable consequences as a result of the research activities. Due to the normally sensitive relationships between the researcher and the respondents, reasonable safeguards were built during the field work study that is based on appropriate ethical requirements and measures. The researcher got a letter of introduction from Africa Nazarene University. The letter assisted the researcher secure a research permit from National Council of Science, Technology and Innovation (NACOSTI). A preliminary visit was made to schools to inform the head teachers of the intended research. A date to administer the tools was arranged during these visits. This helped the researcher to establish a work plan. In order to avoid suspicion and scepticism the researcher assured the respondents of utmost confidentiality and that the information provided would be used for academic purposes only. Furthermore, while collecting data the researcher acknowledged all the sources of information collected from textbooks and other research materials.

CHAPTER FOUR

RESULTS AND ANALYSIS

4.1 Introduction

This chapter presents the results and analysis of the data collected in this study. The chapter contains the response rate, analysis of demographic data, and analysis of teachers' response quantitative data in accordance to research objectives. This was followed by analysis of preschool learners' academic performance (dependent variable), and analysis of qualitative data from the open ended section of teachers' questionnaires, the head teachers' interview schedule and the CSOs interview schedule. The chapter ends with hypotheses testing.

The purpose of the study was to examine the factors influencing preschool learners' academic performance in public ECDE centres in Nyamache Sub County, Kisii County, Kenya. The study objectives were: to establish the influence of preschool teachers' professional development on preschool learners academic performance, to examine the influence of supervision of preschool teacher on preschool learners academic performance, to assess the influence of parental support on preschool learners academic performance, and to determine the influence of head teachers mobilization of funds on preschool learners academic performance in public ECDE centres in Nyamache Sub County, Kisii County. Data were collected through the preschool teachers' questionnaire, the head teachers' interview schedule, the CSOs interview schedule and the preschool learners' assessment test.

4.2 Response Rate

The study sampled 50 preschool teachers, 25 head teachers, and 4 curriculum support officers and 1240 preschool learners. All teachers filled out and returned the questionnaires,

20 head teachers were available for interviews, all the 4 CSOs were interviewed while 1200 preschool learners sat for the assessment test. Thus, the return rate was 100% for preschool teachers, 80% for head teachers, 100% for CSOs and 96.8.0% for preschool learners. This rate was considered adequate for data analysis since according to Fraenkel et al. (2012), return rates of more than 60% are considered to be good.

4.3 Demographic Information

The researcher found it necessary to identify background of the respondents, which formed the basis under which some of the interpretations were made. The demographic information sought included: gender, age bracket, highest level of professional training, and teaching experience.

4.3.1 Gender of respondents

The researcher sought to establish the gender distribution of the respondents. Table 4.1 depicts the finding.

Table 4.1: Gender Distribution of Respondents

Category of respondent	Gender	Frequency	Percentage
Preschool Teachers	Male	18	36.0
	Female	32	64.0
	Total	50	100.0
Head teachers	Male	12	60.0
	Female	8	40.0
	Total	20	100.0
Curriculum Support Officers	Male	2	50.0
	Female	2	50.0
	Total	4	100.0
Preschool Learners	Male	590	49.2
	Female	610	50.8
	Total	1200	100.0

Table 4.1 shows that 64 % of preschool teachers were female implying that, female teachers dominated public ECDE centers in Nyamache Sub County. However, of the 20 head teachers that took part in the study, 60.0 % were men depicting gender inequality in headship. It was also evident that the four CSOs gender in the four Nyamache educational zones was at par. Similarly, preschool children were almost attained genderparity.

4.3.2 Age bracket of respondents

The researcher sought to establish the respondents' age bracket distribution. Table 4.2 depicts the findings.

Table 4.2: Respondents' Age Bracket Distribution

Age in years	Category			
	Preschool Teachers		Head Teachers	
	f	%	f	%
< 25	10	20.0	0	0.0
25-30	21	42.0	0	0.0
31-40	14	28.0	4	20.0
41-50	3	6.0	6	30.0
> 50	2	4.0	10	50.0
Total	50	100.0	20	100.0

As shown in Table 4.2, 45 preschool teachers constituting 90.0 % were 40 years and below, only 6.0 % were in the bracket of 41 to 50 while 4.0% were above 50 years of age. Only five preschool teachers were over 40 years implying that ECDE centres in Nyamache Sub County had mostly young to middle age teachers and could be more receptive to new innovations in curricula. However, 80% of head teachers were over 40 years implying that the most of the centres were over sighted by experienced mature teachers.

4.3.3 Preschool teachers highest level of professional training in ECDE

The study also sought to establish the preschool teachers' highest professional training. Some teachers progress from being an untrained teacher to certificate, diploma up to degree level and beyond. The higher a teacher progresses in professional training, the more one is exposed to units and methodologies appropriate for preschool learners and hence more likely to lead learners to higher academic achievement. Figure 4.2 shows the distribution of preschool teachers according to their highest level of professional training.

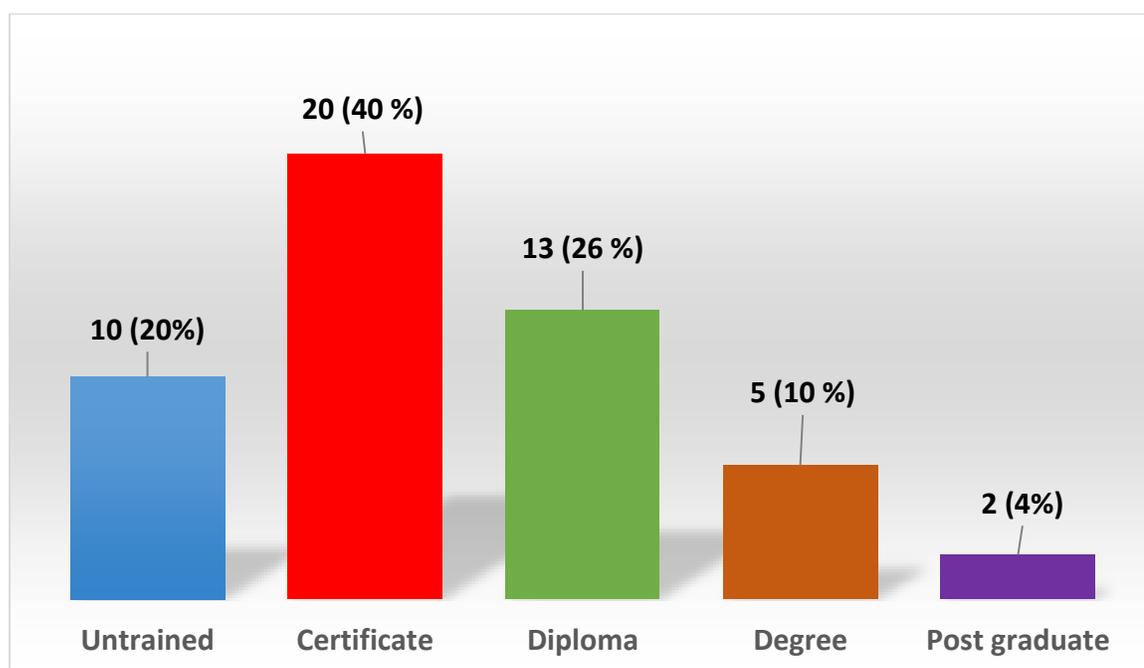


Figure 4.1: Preschool Teachers highest Professional Training in ECDE

It is evident from Figure 4.1 that 40.0 % of teachers were certificate holders, 26.0 % diploma in ECDE holders, 10 % degree holders and only 4 % had post graduated training. However, 10 teachers constituting 20 % had no professional training in ECDE. This implied that preschool teachers in Nyamache Sub County had disparate professional qualifications.

4.3.4 Preschool teachers' teaching experience in their current ECDE centres

The researcher also sought to establish the teachers teaching experience in their current ECDE centres. The more the teacher had stayed in the current station, the more likely the teachers could give accurate information. The information was considered important since the preschool teacher response was key in testing the study hypotheses. The accuracy of information gathered from them was instrumental in minimizing threat to both internal and external validity. Figure 4.2 shows the preschool teachers' distribution by their teaching experience.

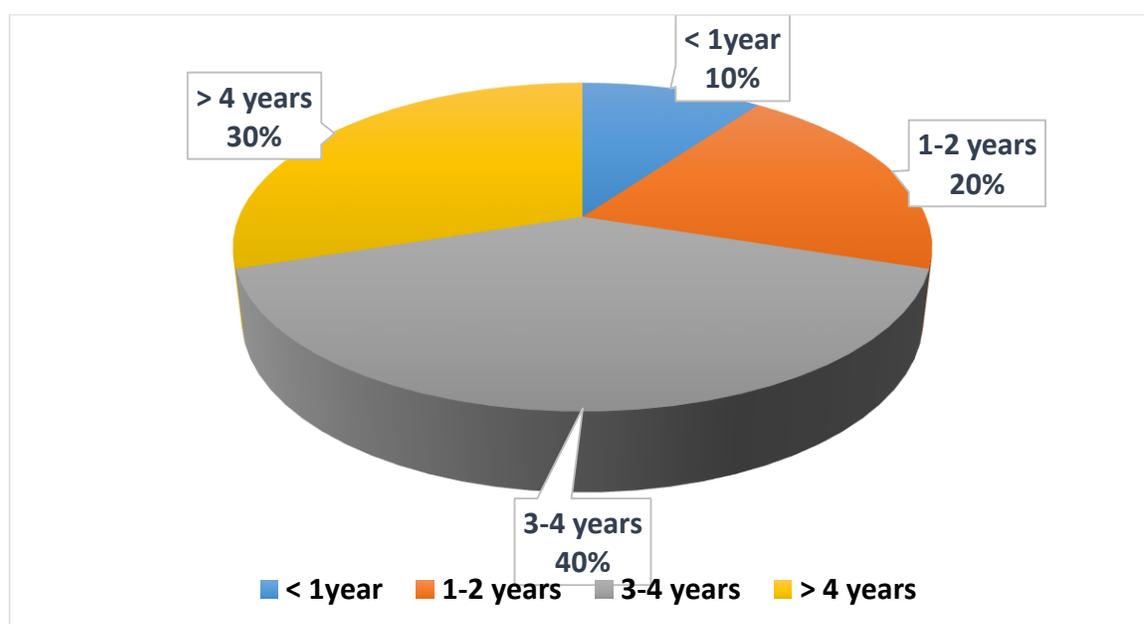


Figure 4.2: Preschool Teachers Teaching Experience in Their Current Station

As evident from Figure 4.2, only 10% of preschool teachers had an experience of less than one year, 20% teachers had an experience of one to two years while 40% had an experience of three to four years. Thus, 90% of teachers had taught for at least one year in their current ECDE centres. This implied that their output in terms of learners' performance can be fairly ascertained in the current study. In addition, they could respond with certainty in regard to

professional development, supervision, parents support and the head teachers' practices in soliciting funds in their current station.

4.4 Preschool Teachers' Professional Development and Pupils Academic Performance

The first objective of the study was to establish the influence of preschool teachers' professional development on preschool learners' academic performance in public ECDE centres in Nyamache Sub County. To achieve the objective, a set of statements in form of five points Likert scale were posed to the preschool teachers to indicate the extent to which they agreed or disagreed with them. The responses were coded such that strongly disagree (SD) was rated number 1 while strongly agree (SA) was rated number 5. However, for easier interpretation, the responses were collapsed into three columns of Agree (A), Undecided (U) and Disagree (D) as shown in Table 4.3. Further the mean responses were computed such that: a mean response of above 3.0 was considered as agree while a mean of below 3.0 was considered as disagree. Table 4.3 shows the proportion of teacher respondents in various levels of agreement, the mean and standard deviation.

Table 4.3: Preschool Teachers' Responses on Professional Development

Statement	SA	A	U	D	SD	Mean	SD
	%	%	%	%	%		
I visit other schools for bench marking	12.0	8.0	16.0	34.0	30.0	2.7	0.8
I attend refresher courses in ECDE	13.0	17.0	14.0	30.0	26.0	2.8	0.9
I normally access materials on changes in curriculum	18.0	40.0	10.0	10.0	22.0	3.2	1.0
I normally attend seminars and workshops on ECDE	24.0	20.0	6.0	20.0	30.0	2.9	0.8
I do access online ECDE resource materials through internet	14.0	14.0	4.0	39.0	29.0	2.3	0.7
I am conversant with the current government policies on ECDE	25.0	35.0	30.0	4.0	6.0	3.8	0.5
I have videos on the latest various methods of teaching creative activities in ECDE	11.0	9.0	4.0	30.0	46.0	2.4	0.9
I have learnt how to improvise some of teaching and learning resources using locally available materials	38.0	30.0	8.0	10.0	14.0	4.2	0.6
Aggregate Mean Score						3.0	0.7

In reference to Table 4.3, most of preschool teachers constituting 64% disagreed that they visit other schools for bench marking. Similarly, majority of teachers constituting 56% indicated that they did not attend refresher courses in ECDE. However, 20 % affirmed to have attended bench marking while 30% of teachers affirmed to have attended refresher courses in ECDE. This implied that most of the teachers were either not keen in acquiring more knowledge and keeping abreast with emerging innovations or they lacked support from the school management to visit other schools for bench marking and attending

refresher courses. Incidentally, most of the interviewed head teachers indicated that they allowed teachers to attend seminars and workshops to advance their knowledge in ECDE. Likewise, the interviewed CSOs affirmed that seminars and workshops were organized for teachers at both County and Sub County level. Some of the CSOs, however, added that the organized seminars and workshops were very few and despite the fact that most of the teachers' were fully catered for, they ran their own errands giving the trainings a wide berth.

More than half of the teachers (58%) affirmed that they normally access materials on changes in curriculum implying that the Ministry of Education did a recommendable work to ensure all information on changes in curriculum are availed to teachers (Mean = 3.2, SD =1.0). The relatively high standard deviation was an indicator that there were also quite a number of teachers who felt otherwise. The statement that 'I do access online ECDE resource materials through internet' was refuted by 68% of teachers while 28% affirmed. This meant that some teachers were not making use of modern technology as a media to source their teaching content but rather relied on the printed text books. Most of the teachers constituting 60% indicated that they were conversant with the current government policies on ECDE while only 10% indicated that they were not conversant. Incidentally, as high as 30% of teachers were not sure of their knowledge about the current ECDE policies. Most of the interviewed head teachers and CSOs, indicated that since most of policies and other communications are availed online, most of the schools printed only one or two copies of any policy. Thus, some teachers failed to get acquainted to these policies.

An overwhelmingly large number of teachers (76%) indicated that they did not have videos on the latest methods of teaching creative activities in ECDE. This was an indicator that

most teachers were not fond of ICT related teaching material. In conformity with this observation one of the CSO commented:

Despite the fact that some schools are well endowed with computers and other ICT apparatus, some teachers are quite averse in integrating technology in their teaching. Failure to make use of ICT denies the learners a whole spectrum of vital materials and information which can only be accessed and used easily through the mass media...I always encourage them to keep trying and insist that the ultimate success in their work and that of their learners can be realized easily if they embrace ICT. (CSO 4)

The statement that 'I have learnt how to improvise some of teaching and learning resources using locally available materials' was affirmed by 68% of preschool teachers. The art of improvisation is a necessity that teachers cannot wish away since most schools in developing countries such as Kenya are yet to realize self-sufficiency in the recommended ECDE teaching resources. Teachers can acquire the vital skills through bench marking and also self-tutoring through internet. Overall, the aggregate mean response on preschool teachers professional development was 3.0, indicating that preschool teacher's professional growth in public ECDE centres in Nyamache Sub County was moderate.

4.5 Supervision of Preschool Teacher and Pupils Academic Performance

The second objective of the study was to examine the influence of supervision of preschool teacher on preschool learners' academic performance in public ECDE centres in Nyamache Sub County. To achieve the objective, a set of statements in form of five points Likert scale were posed to preschool teachers to indicate the extent to which they agreed or disagreed with them. The questionnaire responses were coded such that strongly disagree (SD) was rated number 1 while strongly agree (SA) was rated number 5. However, for easier interpretation, the responses were collapsed into three columns of Agree (A), Undecided (U) and Disagree (D) as shown in Table 4.4. Further the mean responses were computed such that: a mean response of above 3.0 was considered as agree while a mean of below

3.0 was considered as disagree. Table 4.4 shows the proportion of teacher respondents in various levels of agreement, the mean and standard deviation.

Table 4.4: Preschool Teachers Response on Supervision

Statement	SA	A	U	D	SD	Mean	SD
	%	%	%	%	%		
We use clock in and clock out system to monitor teacher school attendance in our centre	13.0	17.0%	4.0	34.0	32.0	2.5	0.8
We seek permission to be absent from school	40.0	30.0	6.0	11.0	13.0	3.6	0.5
Our teaching is closely monitored by the head teacher	16.0	30.0	10.0	23.0	21.0	3.0	1.1
My professional documents are normally checked	16.0	40.0	4.0	23.0	17.0	3.3	0.9
Our head teachers does class observation	14.0	20.0	6.0	25.0	35.0	2.3	0.9
Our head teacher is keen on use of teaching aids	8.0	20.0	18.0	30.0	24.0	2.5	0.6
The CSO visits the school to ensure quality	12.0	18.0	4.0	26.0	40.0	2.6	0.8
Aggregate Score						2.8	0.8

n = 50

It was evident from Table 4.4, that most of the preschool teachers (66 %) had no ‘check in and check out’ system in their ECDE centres (Mean = 2.5, SD = 0.8). Clock in and clock out system has been in use in several schools to monitor teachers reporting time and time of departure. Thus, without this system, some preschool teachers might be sneaking into school later than 8 am and leave any time of the day. Nevertheless, 80% of preschool teachers affirmed that they seek permission to be absent from school. The statement that

'our teaching is closely monitored by the head teacher' elicited varied responses among the preschool teachers. While 46% of teachers agreed, 44% disagreed with the statement and 10 % were undecided. This meant that almost half of the teachers felt that they were not closely monitored. Similarly, teachers had varied response in regard to checking of professional documents. More than 50% of teachers affirmed that their professional documents were normally checked, while 40 % disagreed.

Most of the teachers (60%) indicated that their head teachers hardly did class observation. Similarly most of preschool teachers (54%) indicated that their head teachers were not keen on use of teaching aids while 66% disagreed that the CSOs visit the school to ensure quality. On average, the supervision of preschool teachers was rated as below average (Mean = 2.8, SD = 0.8).

4.6 Parents Support of Pupils Learning and Academic Performance

The third objective of the study was to assess the influence of parental support on preschool learners' academic performance, in public ECDE centres in Nyamache Sub County, Kisii County. To achieve the objective, a set of statements in form of five points Likert scale were posed to the preschool teachers to indicate the extent to which they agreed or disagreed with them. The questionnaire responses were coded such that strongly disagree (SD) was rated number 1 while strongly agree (SA) was rated number 5. However, for easier interpretation, the responses were collapsed into three columns of Agree (A), Undecided (U) and Disagree (D) as shown in Table 4.5. Further the mean responses were computed such that: a mean response of above 3.0 was considered as agree while a mean of below 3.0 was considered as disagree. Table 4.5 shows the proportion of teacher respondents in various levels of agreement, the mean and standard deviation.

Table 4.5: Preschool Teachers Response on Parents Support of Pupils' Learning

Statement	SA	A	U	D	SD	Mean	SD
	%	%	%	%	%		
Most parents are receptive when I call them through phone about their children	34.0	40.0	12.0	6.0	8.0	4.1	0.6
Most parents monitor their children's' home work	7.0	17.0	20.0	28.0	28.0	2.8	0.9
Most parents appear when invited for deliberations about their children	28.0	30.0	14.0	18.0	10.0	3.8	0.6
Most of my class parents turn up in person when called for a meeting	27.0	13.0	4.0	22.0	34.0	2.7	0.9
Most of parents call to enquire their children's' progress	16.0	30.0	10.0	19.0	25.0	3.1	1.1
Most parents are keen on their children's health such as immunization	36.0	28.0	16.0	12.0	8.0	3.8	0.9
Most parents provide their children with writing materials such as pencils, rubber and sharpeners	14.0	30.0	2.0	30.0	24.0	2.7	1.2
Most parents ensure their children's uniform is in good form	20.0	36.0	6.0	20.0	18.0	3.5	0.7
Most parents are keen on paying the stipulated fees	8.0	10.0	14.0	48.0	20.0	2.5	0.8
Aggregate Score						3.2	0.9
n = 50							

In reference to Table 4.5, over 70% of preschool teachers affirmed that most of parents were receptive when contacted through the phone about their children. However, over 50% of teachers disagreed that most parent monitor their children's' home work. Therefore, though the parents responded positively when contacted over the phone, their follow up on

their children's' school work was wanting (Mean = 2.8, SD = 0.9). Nonetheless, 58% of teachers affirmed that most of the parents appear when invited for deliberations about their children.

The statement that 'most of my class parents turn up in person when called for a meeting' had a varied reaction from the preschool teachers in that while 40% agreed, 56 % disagreed (Mean = 2.7, SD = 0.9). Responding to the same issue, one of the head teachers commented:

Some of the parents' seem to be very busy such that when invited for a meeting...they participate through proxy by sending the house helps or relatives...theirs is only public relations...but sloppy in actions which can enhance their children academic performance. (Head teacher 24).

The statement that 'most of parents call to enquire their children's progress' was affirmed by 46% of teachers and refuted by almost the same number of teachers (44%). This implied that while half of the parents were supportive in monitoring their children academic performance and wellbeing in school, the other half were not bothered.

In regard to children's health, most of the parents (64%) were found to be keen on their children's health such as immunization. Child's health is a key determinant of their academic performance. Most parents (56%) were also found to be keen in ensuring that their children's uniform were in good form. However, most parents were rated low by over 50% of teachers in providing their children with writing materials such as pens/pencils, rubber and sharpeners. Similarly, 68% of preschool teachers indicated that most parents were not keen on paying the school stipulated fees. Overall, parents support and involvement in their children's learning was rated as moderate (Mean = 3.2, SD = 0.9).

4.7 Head Teachers' Mobilization of School Funds and Pupils Academic Performance

The third objective of the study was to determine the influence of head teachers' mobilization of funds on preschool learners' academic performance in public ECDE centres in Nyamache Sub County, Kisii County. To achieve the objective, a set of statements in form of five points Likert scale were posed to preschool teachers to indicate the extent to which they agreed or disagreed with them. The questionnaire responses were coded such that strongly disagree (SD) was rated number 1 while strongly agree (SA) was rated number 5. However, for easier interpretation, the responses were collapsed into three columns of Agree (A), Undecided (U) and Disagree (D) as shown in Table 4.5. Further the mean responses were computed such that: a mean response of above 3.0 was considered as agree while a mean of below 3.0 was considered as disagree. Table 4.6 shows the proportion of teacher respondents in various levels of agreement, the mean and standard deviation.

Table 4.6: Preschool Teachers Response on Head Teachers' Mobilization of School Funds

Statement	SA	A	U	D	SD	Mean	SD
	%	%	%	%	%		
My head teacher is proactive in soliciting funds to run ECDE programmes	16.0	30.0	14.0	30.0	10.0	3.1	1.2
Through lobbying my head teacher is able to get funding from National government	17.0	17.0	22.0	20.0	24.0	2.9	1.1
Our ECDE programme occasionally benefit from NGOs grants	5.0	15.0	16.0	40.0	24.0	2.5	0.7
Some of our ECDE programs are funded by CDF kitty	13.0	23.0	14.0	25.0	25.0	2.7	0.9
The school management conducts fund raisings to support ECDE	14.0	10.0	6.0	42.0	28.0	2.4	0.6
The school has income generating project	9.0	11.0	6.0	42.0	32.0	2.4	0.6
We are fully funded by county government	1.0	1.0	2.0	50.0	46.0	1.5	0.3
My head teacher writes proposals to solicit money from donors	12.0	8.0	40.0	25.0	15.0	2.8	0.9
Our head teacher is good in mobilizing funds from parents	13.0	27.0	10.0	28.0	22.0	3.0	1.1
Aggregate Score						2.6	0.9

n = 50

In reference to Table 4.6, 46% of preschool teachers agreed that their head teachers were proactive in soliciting funds to run ECDE programmes, while 40 % disagreed (Mean = 3.2, SD = 1.2). The relatively high standard deviation was a manifestation of the extent teachers were divided in their opinion in this issue. Some of the comments from some teachers in

their open ended section of their questionnaire supported the view that some head teachers regarded the preschool as a separate entity in the school and hardly made effort to solicit funds. The following comment from a teacher exemplifies that view:

Though we are within the school compound...we are treated as if we are not part of this school...we hardly get any cash or material assistance from the primary school section. The head teacher appears nonchalant towards our issues...when our salaries from the county get delayed, our pleading to get a soft loan from the head teacher is normally ignored. Most of the parents do not cooperate in fees payment and assume that preschool is also part of free primary education ...leaving in dire shortage of teaching and learning materials. (Preschool teacher).

The statement that 'through lobbying my head teacher is able to get funding from the National government' was affirmed by 34% of preschool teachers, 44% disagreed while 22% were undecided. The relatively high number of teachers who were undecided showed that some teachers had no clear information on the ECDE centre financial issues. Similarly, over 60% of preschool teachers disagreed while only 20% agreed that their ECDE programmes occasionally benefited from NGOs grants. This meant that apart from some teachers' salaries that were catered by the County government, parents had to cater for all the other financial obligations.

Half of the preschool teachers disagreed that some of their ECDE programs were funded by the Constituency Development Fund (CDF) kitty. However, 36% of teachers indicated that they benefited from the CDF kitty. Preschool teachers overwhelmingly (70%) disagreed that the school management conducts fund raisings to support ECDE. As one of the interviewed head teachers commented, fund raising requires proper planning and commitment and for it to be successful. It was no wonder that some of the head teachers expressed their frustrations as they attempted to solicit funds for ECDE through fundraising. One of the head teacher commented:

Organizing a fund raising for the ECDE in my school has not been easy...most of the people identified as the chief funders and main guests during the main fund raising ceremony tend to underrate the importance of ECDE and most of them never contribute neither do they attend the main ceremony. Most of the parents also fail to contribute the agreed amount and the whole event is mainly a shambolic... (Head teacher 14).

More than 70% of preschool teachers disagreed that the school has income generating project. This meant most of the ECDE centres relied on the fees from the parents. However, as high as 96% of the respondents indicated that they were not funded by the county government. The inadequacy of the county funding was best captured by the following head teacher comment:

Up to now...we have not felt any significant relief from the county financial assistance...apart from catering for one of the teacher's salary, we have never been assisted in any other way...we are hoping that the national government will extend the free education to the preschool section...a huge portion of our money is used to pay the other teachers engaged by the parents. (Head teacher 18).

The statement that 'my head teacher writes proposals to solicit money from donors' was affirmed by 20% of preschool teachers, 40% disagreed while 40% were not sure. Writing of grant proposals may have been to some extent a personal effort by proactive head teachers where 40% of teachers were not aware. Half of the teachers indicated that their head teachers were not good in mobilizing funds from parents. However, 40% of teachers felt that the head teachers were doing a good job in collecting funds parents. Overall, the head teachers mobilization of funds was rated as below average (mean =2.6, SD = 0.9).

4.8 Preschool Learners Academic Performance

The researcher in collaboration with the preschool teachers from each of the 25 sampled ECD centres conducted a comprehensive assessment test (Appendix VI). The ECD learner test comprised of science activity, creative activity, number work, language activity and

environment activity. The test was marked out of 100 marks and the mean score of each centre ascertained. Table 4.7 shows the summarized results.

Table 4.7: Pupils' Mean Academic Performance

Marks (%)	Number of Schools	Proportion of schools (%)	of Rating
30 and below	3	12.0	Weak/Poor
31-49	8	32.0	Below average
50-59	9	36.0	Average
60-69	3	12.0	Good
70-79	2	8.0	Very Good
80 and above	0	0	Excellent
Total	25	100.0	-

As evident from Table 4.7, 11 schools comprising 44.0 % had a mean score of 49 marks and below while 9 schools comprising 36.0 % got mean of 50-59. Five schools had a mean of 60 and above. Although the results showed a normal curve, the test was constructed such that pupils who had normal school attendance should have managed at least 60 marks. Thus, the high percentage (80.0 %) of schools which had a mean of 59 and below was an indicator that there were some factors hindering the expected performance.

4.8 Hypotheses Testing

Through multiple regression analysis, the study aimed at ascertaining the magnitude of influence of each predictor (independent variables) and its significance influence on the preschool learners' academic performance. Additionally, the study aimed at determining the extent to which the combined factors influence and correlate to the preschool learners' academic performance. To achieve that, the mean response values for each independent

variable were regressed against the preschool learners mean scores in a comprehensive teacher constructed test.

The regression model capturing the hypothesized relationship was given as: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$, where;

Y = preschool pupils' academic performance

X_1 = teachers professional development

X_2 = supervision of preschool teachers

X_3 = parents support of pupils' learning

X_4 = head teachers mobilization of funds

E = the error term.

Tables 4.8, 4.9 and 4.10 depict the summary of multiple regression analysis.

Table 4.8: Multiple Regression Model Summary

Model	R	R ²	Adjusted R ²	Standard error of the estimate
1	0.788	0.621	0.524	0.1823

Predictors: (constant), Professional development, supervision, parents' support, mobilization of funds

Dependent variable: Preschool learners' academic performance

It was evident from Table 4.8, that there was a strong correlation between the observed values of dependent variable and the values of dependent variable predicted by the multiple regression model ($R = 0.788$). In other words, there was a strong correlation between the predicted and observed values of the pupils' academic performance. It can also be deduced from the value of R^2 in Table 4.8, that 62.1% of variance in the preschool learners academic performance could be explained by the influence of preschool teachers' professional development, supervision of teachers, parents' support of children learning and head teachers' mobilization of funds. Table 4.9 shows the significance of the model.

Table 4.9: Multiple Regression Model Significance (ANOVA)

Model	Sum of Squares	df*	Mean Square	F	Sig.
1 Regression	55.413	4	13.853	31.413	0.018
Residual	19.833	45	0.441		
Total	75.246	49			

df*- degrees of freedom.

In reference to Table 4.9, the F -ratio in the ANOVA table, has a value of 31.413 and a p value of 0.018. Since p was less than 0.05, it was deduced that the overall regression model was a good fit for the data. That is, the model, overall, resulted in a significantly good degree of prediction of the outcome variable. In other words, the joint independent variables statistically significantly predicted the preschool learners academic performance ($F(4, 45) = 31.413, p < 0.05$). Table 4.10 shows the multiple regression model coefficients.

Table 4.10: Summary of Multiple Regression Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig. value
	Beta	Std. Error	Beta			
1 (Constant)	0.383	0.212			2.87	0.041
Teachers' professional development	0.482	0.162	0.474		3.183	0.007
Supervision of teachers	0.583	0.174	0.561		4.436	0.003
Parents' support	0.308	0.115	0.272		2.91	0.175
Head teachers' mobilization of funds	0.528	0.224	0.502		4.272	0.024

Dependent variable: Preschool pupils' academic performance

Table 4.10 reveals the relative contribution of the four independent variables to the dependent variable, expressed as beta weights. Assuming the error term ε to be zero and

substituting the unstandardized coefficients β values, the estimated multiple regression equation becomes: $Y = 0.383 + 0.482 X_1 + 0.583 X_2 + 0.308 X_3 + 0.528 X_4$.

The β values indicate the individual contribution of each predictor to the model if the effects of all other predictors are held constant. Thus, when the preschool teachers' professional development increases positively by one unit, pupils' academic performance would increase by 0.482 units ($\beta = 0.482$) while holding the other factors constant. Similarly, when the supervision of preschool teachers increases by one unit, pupils' academic performance would increase by 0.583 units ($\beta = 0.583$) while holding the other factors constant and so on.

For direct comparison and better insight into the importance of predictors, the standardized β values that do not depend on the units of measurement of variables were used. The standardized beta values that give the number of standard deviation that pupils' academic performance would change as a result of one standard deviation change in the predictor. Table 4.10 shows that supervision of preschool teachers' had the most significant relative contribution to the prediction of pupils' academic performance ($\beta = 0.561, p < 0.05$), followed by the head teachers' mobilization of funds ($\beta = 0.502, p < 0.05$), preschool teachers' professional development ($\beta = 0.474$), while parents' support of pupils learning had the least and insignificant influence ($\beta = 0.272, p = 0.175$).

The four null hypotheses of the study, were tested by considering the t statistic (Table 4.10) that tests whether a β value is significantly different from zero ($H_0: \beta = 0$). The hypotheses were tested at 95% confidence level.

HO₁: Preschool teachers' professional development has no statistically significant influence on the preschool learners' academic performance in public primary ECDE centres in Nyamache Sub County

In reference to Table 4.10, the unstandardized beta value for preschool teachers professional development was found to be significantly greater than zero ($\beta = 0.482$, $t(49) = 3.183$, $p < 0.05$). Subsequently, the first null hypothesis was rejected. It was, therefore, deduced that preschool teachers' professional development had a statistically significant influence on pupils' academic performance in public ECDE centres in Nyamache Sub County. This meant that ECDE centres in which teachers attended in service courses, and got access to emerging vital information were better placed to enhance their pupils' academic performance.

HO₂: Supervision of preschool teachers has no statistically significant influence on the preschool learners' academic performance in public ECDE centres in Nyamache Sub County

Table 4.10 shows that the unstandardized beta value for preschool teachers professional development was significantly greater than zero ($\beta = 0.583$, $t(49) = 4.436$, $p < 0.05$). Subsequently, the second null hypothesis was rejected. It was, therefore, deduced that supervision of preschool teachers' had a statistically significant influence on pupils' academic performance in public ECDE centres in Nyamache Sub County. This implied that learners in ECDE centres where preschool teachers are closely supervised, excelled in their academic performance.

HO₃: Parents support/involvement has no statistically significant influence on the preschool learners' academic performance in public ECDE centres in Nyamache Sub County

Referring to Table 4.10, the unstandardized beta value for parents' support of preschool children's learning is not significantly greater than zero ($\beta = 0.308$, $t = 2.910$, $p > 0.175$). Thus, since the value of $p = 0.175$ was greater than 0.05, the null hypothesis **HO₃** was retained. It was, therefore, deduced that parents' support of children learning had no statistically significant influence on pupils' academic performance in public ECDE centres in Nyamache Sub County. This meant that although parents' support of their children enable them to perform better, the influence was statistically insignificant.

HO₄: Head teachers' mobilization of funds has no statistically significant influence on the preschool learners' academic performance in public ECDE centres in Nyamache Sub County

In reference to Table 4.10, the unstandardized beta value for parents' support of preschool children's learning was not significantly greater than zero ($\beta = 0.528$, $t = 4.272$, $p < 0.05$). The fourth null hypothesis was hence rejected. It was, therefore, deduced that head teachers' mobilization of school funds, had a statistically significant influence on pupils' academic performance in public ECDE centres in Nyamache Sub County. This implied that learners in ECDE centres where head teachers were proactive in mobilization of funds, did better in academic performance than their counter parts in schools where head teachers do not bother in soliciting funds for ECDE development. In a well-funded ECDE centre, learners are likely to access variety of text books, creative materials and a variety laden creative corner. In addition, teachers get access to variety of teaching aids and in some schools, teaching and learning is ICT integrated.

CHAPTER FIVE

DISCUSSION, SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the discussion of the results as per research objectives, summary of the findings and conclusions derived from the findings and discussion, recommendations as per the objectives and suggestions of areas of further study. The purpose of the study was to examine the factors influencing preschool learners' academic performance in public ECDE centres in Nyamache Sub County, Kisii County, Kenya. The study objectives were: to establish the influence of preschool teachers' professional development on preschool learners academic performance, to examine the influence of supervision of preschool teacher on preschool learners academic performance, to assess the influence of parental support on preschool learners academic performance, and to determine the influence of head teachers mobilization of funds on preschool learners academic performance in public ECDE centres in Nyamache Sub County, Kisii County. Data was collected through the preschool teachers' questionnaire, head teachers' interview schedule, CSOs interview schedule and preschool learners test.

5.2 Discussion of the Findings

This section discusses the results and analysis of data (in chapter four) as per the four objectives.

5.2.1 Influence of preschool teachers' professional development on pupils' academic performance

The first objective of the study was to establish the influence of preschool teachers' professional development on preschool learners' academic performance in public ECDE

centre in Nyamache Sub County, Kisii County. In reference to section 4.4, 64% preschool teachers disagreed that they visit other schools for bench marking. The finding was similar to Mureithi (2018) whose study found that most of preschool teachers in Nyeri Central Sub County hardly visited other schools for bench marking. Wanzare (2013) qualifies bench marking as one of the best and efficient ways of capacity building of teachers. In support of bench marking practice, most of the interviewed CSOs indicated that they always encourage preschool teachers to visit better performing schools and exchange notes with those teachers. One of the CSOs commented in regard to bench marking:

Preschool teachers are trained in different colleges and under different curricular such as Montessori and Kenya Head teachers Association, and as such, bench marking should enable teachers to learn from each other and transmit the new knowledge to their learners. For my case, each time I visit a school regardless of its status, I always learn a new thing... (CSO 1).

In regard to attendance of refresher courses, over 50% of teachers indicated that they hardly attended refresher courses in ECDE. This implied that most of the teachers were either not keen in acquiring more knowledge and keeping abreast with emerging innovations or they lacked support from the school management for attending refresher courses. The finding was contrary to the practice in USA where according to Hamre et al., (2017), preschool teachers are expected to accomplish certain number of hours in professional development each year. For instance, on the higher side states such as New York, Massachusetts, Texas and California, require more than 100 hours per year while on the lower side states such as Nebraska, Minnesota, Georgia and Oregon require 15 or less hours of professional development (Barnett et al., 2016).

More than half of the teachers (58%) agreed that they access materials on changes in curriculum. This meant that most of the teachers keep abreast on the changes in ECDE sub sector. The finding concurs with Melly (2017) and Mureithi (2018) that the MOE in

conjunction with development partners ensures teachers are informed of the changes in curriculum and syllabus. However, Kamau (2015) noted that most teachers' lack appropriate training on the implementation of the changes done in the curriculum. The statement that 'I do access online ECDE resource materials through internet' was refuted by 68% of teachers while 28% affirmed. This meant that some teachers were not used to use of modern technology as a media to source their teaching content but rather relied on the printed text books. Contrary to this finding, Kamaruddin et al., (2017) found that 60 % of teachers in private preschools in the district of Mualim in the state of Perak Malaysia often used ICT to prepare lesson and reports, 67.2% often used internet to search teaching material, while 68.9% often used it to communicate with students and parents. By searching for supplementary teaching materials through the internet, preschool teachers do self-professional development.

All the interviewed CSOs indicted preschool teachers to some extent in that they failed to attend some seminars and workshops even after being granted permission by their head teachers. On the other hand some head teachers expressed their discontent in regard to the content delivered in these seminars and workshops. A head teacher recommended:

The conveners and presenters of materials in ECDE seminars and workshops should do proper research in order to present quality and relevant information in order to sustain the interest of the teachers...presenters should be qualified and experienced people. (Head teacher 15).

In concurrence with the head teachers' view, Markussen-Brown et al., (2017) posit that for a meaningful professional development, it is imperative to have the right content to focus on to match the intended objective with the intensity and duration of the professional development offering. Research has generally suggested that more intensity and a greater

duration of professional development lead to more substantive changes in teachers' practice (Desimone & Garet, 2015).

A large number of teachers (76%) indicated that they did not have videos on the latest methods of teaching creative activities in ECDE. This was an indicator that most teachers were not fond of ICT related teaching material. According to the interviewed CSOs, some schools had adequate ICT infrastructures and yet teachers had not embraced integration of ICT in teaching and learning. Failure to make use of ICT denies the learners a whole spectrum of vital materials and information which can only be accessed and used easily through the mass media (Kamaruddin et al., 2017). However, Masoumi (2015) cautions that, ICTs, on their own cannot enhance preschool educational practices and academic performance but rather, preschool teachers need guidance in order to learn how to use these technologies to change educational practices for the better. Thus, it is through a well-planned and sustainable professional development that preschool teachers can be equipped with adequate experiences in ICT application leading to better learners' outcomes.

Overall, the aggregate mean response on preschool teachers professional development was 3.0, indicating that preschool teacher's professional growth in public ECDE centres in Nyamache Sub County was moderate. However, preschool teachers' professional growth was found to have a significant influence on pupils' academic performance in public ECDE centres in Nyamache Sub County ($\beta = 0.482$, $t = 3.183$, $p < 0.05$). This meant that preschool teachers who were exposed to constant capacity building were in a better position to enhance preschool learners' academic performance. Cognate to the finding, Mureithi and Mwangi (2019) found that the head teachers' support of preschool teacher professional development had a strong positive and significant correlation on preschool pupils' academic performance ($r = 0.674$, $p < 0.001$). This implied that schools where head

teachers offered support to the preschool teachers in terms of advice, counseling, pedagogical skills and sponsoring them for in *service* training showed better learners performance. Kamau (2015) explicates that for a preschool to remain relevant and competent in guiding learner in the dynamic preschool sub sector, constant in service training is inevitable. In support of this sentiment, Githae et al., (2015) assert that preschool teachers require financing for capacity building through refresher courses that improve skills for curriculum implementation.

5.2.2 Influence of supervision of preschool teachers on pupils academic performance

The second objective of the study was to examine the influence of supervision of preschool teacher on preschool learners' academic performance in public ECDE centres in Nyamache Sub County, Kisii County. Referring to section 4.5, most of the preschool teachers (66 %) had no 'clock in and clock out' system in their ECDE centres (mean = 2.5, SD = 0.8). The finding concurs with Kamau (2015) whose study found that, while most head teachers closely monitor teachers under TSC management, the preschool teachers employed by the County government, enjoy some autonomy. Mureithi and mwangi (2019) noted that preschool teachers' loyalty is torn between the county and the TSC management and if the situation is not well managed, some teachers may fail to accomplish their set objectives. Lack of clock in and out system for preschool teachers was, however, contrary to Amina (2015) finding that most head teachers ensured that teachers were punctual to school using electronic cameras. The interviewed head teachers cited the difficulties encountered in monitoring some preschool teachers' school attendance since some of the ECDE centres were not within the main school compound.

Nevertheless, 80% of preschool teachers affirmed that they seek permission to be absent from school. The finding was similar to Melly (2017) finding that since most ECDE centers

had one or two teachers, they had to communicate to parents and head teachers of their absence. Thus, when the teacher was absent, the children had to remain at home. The statement that 'our teaching is closely monitored by the head teacher' elicited varied responses among the preschool teachers. While 46% of teachers agreed, 44% disagreed with the statement and 10 % were undecided. This meant that almost half of the teachers felt that they were not closely monitored. Wanzare (2013) aver that supervision entails finding out whether parts of a system are working according to plan. It is a service provided to teachers for the purpose of improving instruction with the pupils as the ultimate beneficiaries. Therefore, as Balanskat and Gerhard (2010) noted, supervision of teachers' performance is an essential component of the school management and ensures that there is an efficient performance of teachers.

More than 50% of teachers affirmed that their professional documents were normally checked, while 40 % disagreed. The findings were in line with those of Adeyemi (2010) who identified instructional supervision roles performed by head teachers as monitoring of teachers, attendance of lessons, preparation and use of schemes of work, lesson plan, checking and ensuring adequacy of teaching resources. Professional records were to ensure that the teacher had simplified content into manageable units and were conducting their work professionally for the purpose of improving proficiency. The findings were in agreement with those of Usman (2015) who acknowledged that regular instructional supervision comprised using robust supervision strategies such as checking of students note books, classroom visitations by school administrators, scrutiny of teacher's lesson plan/notes and inspection of teacher's performance and academic achievement of students for the purpose of improving teaching and learning process. In support of the sentiments, Fehintola (2014) explicates that, lesson preparation and notes preparation contribute to the

teachers' content knowledge and the prime predictors of students' academic achievement. However, the 40% of preschool teachers who indicated that they are hardly supervised should raise concern to curriculum support officers.

Teachers' laxity in preparation and use of professional documents was partly attributed to lack of effective internal and external supervision (Odube, 2016; Ololube & Major, 2014). Wanzare (2013) observes that head teachers being the immediate school supervisors carried out very limited instructional supervision and instead immerse themselves in physical development projects. Amina (2015) asserts that quality teaching and learning is a function of good preparation and use of professional documents leading to improved students' academic performance. In cognizance of this fact, MOE (2009) policy guidelines and Teachers Service Commission (2005) code of conduct reiterate that the basic and the most important task of a teacher is to participate in teaching-learning process in accordance to the long and short term objectives derived from the approved subject syllabus.

In reference to section 4.5, most of the teachers (60%) indicated that their head teachers hardly did class observation. Similarly most of preschool teachers (54%) indicated that their head teachers were not keen on use of teaching aids while 66% disagreed that the CSOs visit the school to ensure quality. This implied that the class teachers could deviate from the syllabus or cover very little than prescribed without any accountability. The same concern was raised by Usman (2015) who regarded the head teachers' behavior of sitting in the office as an attribute that greatly contribute to pupils' low performance. Failure to cover the subject syllabus denies students the capacity to respond to all set questions resulting to low academic performance. Etsy (2005) study in Ghana found that the teacher factors that significantly contributed to low academic achievement were incidences of lateness to school, incidences of absenteeism, and inability to complete the syllabi.

On average, the supervision of preschool teachers was rated as below average (mean = 2.8, SD = 0.8). Incidentally, supervision of preschool teachers' had the most significant relative contribution to the prediction of pupils' academic performance ($\beta = 0.561, p < 0.05$). This meant that pupils whose teachers underwent meaningful supervision had better academic performance. Cognate to the study finding, Aroni (2017) found that the head teachers' instructional supervision had statistically significant correlation to learners' academic performance.

5.2.3 Influence of parents' support of preschool pupils' learning on their academic performance

The study third objective was to assess the influence of parental support on preschool learners' academic performance in public ECDE centres in Nyamache Sub County, Kisii County. In reference to section 4.6, over 70% of preschool teachers affirmed that parents were receptive when contacted through the phone about their children. However, most of the parents' failed to assist and monitor their children's' home work. Nonetheless, 58% of teachers affirmed that most of the parents appear when invited for deliberations about their children. According to most head teachers, most parents were engaged in businesses that made them leave the house very early and return very late at night. Hence majority of parents were not able to attend to their children several needs including academic work. Cognate to the finding, Boen (2014) established that parents were receptive when teachers talked to them about homework and other issues in school but this did not translate to parents being keen in checking and assisting children in their homework. The finding was also similar to Osei-Akoto et al., (2012) who found that majority of the parents (83%) hardly assisted children in homework. The finding was not in congruence with Houtenville and Conway (2008) observation that children are more likely to be active and perform

better in school when their parents/guardians demonstrate interest in their school work, do assist them with homework, and are willing to ensure completion of school assignments.

The statement that ‘most of my class parents turn up in person when called for a meeting’ had a varied reaction from the preschool teachers in that while 40% agreed, 56 % disagreed (mean = 2.7, SD = 0.9). According to some of the interviewed head teachers and CSOs, parents in Nyamache Sub County were fond of sending relatives to represent them in school meetings and which made them get detached from their children academic achievement. One of the head teacher was quoted lamenting;

Some of the parents have become too busy...they hardly attend meetings in person...in some of the meeting I called recently, the audience was too young and most must have been house helps, elder sisters and brothers of our preschool pupils...in such a situation, I shelve most of the issues I had planned to share with the parents...it is really frustrating (Head teacher 3).

The finding was inconsistent with Chemagosi et al., (2016) finding that parents’ school meetings attendance, and attending organized school forums/conferences/visits were among the strategies that enhanced their involvement in their children learning. It is during such meetings that parents are educated on the research based strategies of interacting with both children and teachers for provision of quality early childhood education and better academic achievement. Such meetings are also used to formulate new policies geared to improve preschool learners’ welfare and security. Thus, when the meeting is composed of people who cannot partake in substantive discussions, it becomes a waste of valuable time.

One of the CSO commented in regard to meetings attendance:

Those of us who have been trained professionally, we know early childhood education is a very critical and valuable stage of a person cognitive development. As such, much efforts should expended at this stage and provide quality and meaningful experience to all children...but it is disheartening that seem ignorant of the importance of preschool education...they neither attend meetings to benefit from the capacity building lectures nor do they read the write-ups that we prepare. (CSO 2).

Such comments from CSO demonstrates the challenges, various ECE education stakeholders experience as they endeavour to have more parents involvement in their children education. Cognate to the study, Dube et al., (2015) and Muiru et al., (2014) found that most head teachers were complaining of parents' apathy which made them get minimal benefit from the organized capacity building seminars and workshops. Koch (2018) research study revealed that the Early Beginnings program utilizes several different methods of involving and educating parents including the use of workshops, home visits, conferences, and newsletters. Workshops were found to be the most valuable method of parent involvement used by the program to educate parents regarding early language and literacy skills. For the case of preschool parents in Nyamache Sub County, CSO and other stakeholders can start by home visits in order to increase the awareness of the importance to attend school meetings.

The statement that 'most of parents call to enquire their children's progress' was affirmed by 46% of teachers and refuted by almost the same number of teachers (44%). This implied that while half of the parents were supportive in monitoring their child academic performance and wellbeing in school, the other half were not bothered. Myers and Myers, (2015). The study used the randomized field experiment to establish the causal effect of teacher communication in which children were assigned to receive a daily phone call home and a text/written message during a mandatory summer school program. It was established that, the frequent teacher-parent communication increased parents' preschool engagement as measured by homework completion rates, class participation and on-task behavior. Thus, in consideration of such great benefits, half of the parents who fail to communicate in regard to their children were at a great disadvantage.

Overall, parents support and involvement in their children's learning was rated as moderate (mean = 3.2, SD = 0.9). Parents' support of children learning was however, found to have no significant influence on pupils' academic performance in public ECDE centres in Nyamache Sub County ($\beta = 0.308$, $t = 2.910$, $p > 0.05$). This meant that although parents' support of their children enable them to perform better, the influence was statistically insignificant.

5.2.4 Influence of head teachers' mobilization of funds on preschool learners academic performance

The fourth objective of the study was determine the influence of head teachers mobilization of funds on preschool learners academic performance in public ECDE centres in Nyamache Sub County, Kisii County. In reference to section 4.7, 46% of preschool teachers agreed that their head teachers were proactive in soliciting funds to run ECDE programmes, while 40 % disagreed (mean = 3.2, SD = 1.2). The relatively high standard deviation was a manifestation of the extent teachers were divided in their opinion in this issue. The finding concurs with Kelonye (2012), Murunga (2015) and Shinali et al., (2014) who found that most of the head teachers were yet to embrace the mainstreaming of ECDE centres into their primary schools. Besides, being under the county government, according to Murunga (2015), there is a tendency to consider ECDE centres as separate entity in which the head teacher is not wholly accountable before the TSC. It then follows that most head teachers focus on the challenges of FPE and the performance of class eight learners in KCPE.

The statement that 'through lobbying my head teacher is able to get funding from the National government' was affirmed by 34% of preschool teachers, 44% disagreed while 22% were undecided. The relatively high number of teachers who were undecided showed that some teachers had no clear information on their ECDE centre financial issues.

Similarly, over 60% of preschool teachers disagreed while only 20% agreed that their ECDE programmes occasionally benefited from NGOs grants. This meant that apart from some teachers' salaries that were catered by the County government, parents had to cater for all the other financial obligations.

The government through Sector Wide Approach to Programme Planning (SWAP) and development partners worked together to come up with the Kenya Education Sector Support Programme (KESSP). Early Childhood Development and Education programme, is among the twenty three investment programmes mentioned in KESSP and aimed at expanding access in order to enhance ECDE services that are of high quality for the vulnerable children aged 4 years to 5 years. The ECDE investment programme comprises of the provision of Community Support Grants (CSG) or ECD capitation grant to selected ECDE centres across the country. CSG is paid by the MOE directly to a special bank account established by each ECDE centre. But before funds are sent to the ECDE centre, the ECDE management committee must prepare an ECDE centre improvement plan which explains how the centre will use the CSG to increase the enrolment and improve the quality of education of children aged 4 to 5 years. The ECDE centre improvement Plan is formally presented and approved at a special meeting of parents and community members before a centre can receive CSG from the MOE. The ECDE management committee members are trained on how to develop a quality centre improvement plan and how to successfully manage their CSG (Republic of Kenya, 2007, MOE 2009). Thus, it was noteworthy that to get the community support grant depended on the head teacher's effort in drafting the plan in conjunction with school management committee. A proactive head teacher could also submit proposal to several donors and NGOs explicating the needs in his/her centre. This

explains why some ECDE centres have appropriate infrastructure and adequate teaching and learning resources.

Half of the preschool teachers disagreed that some of their ECDE programs were funded by the Constituency Development Fund (CDF) kitty. However, 36% of teachers indicated that they benefited from the CDF kitty. Preschool teachers overwhelmingly (70%) disagreed that the school management conducts fund raisings to support ECDE. This meant that most head teachers are not inclined to mobilize funds for their centres and solely rely on parents contribution in terms of fees. In reference to this situation, Wangila (2017) observes that apart from payment of ECDE teachers' trainers, Early Childhood Education receives very little funding in Kenya. Most of the ECDE centres have been run by parents for many years. The funds collected from parents is meant to cater for the teacher's salary, provide subsistence and provide the teaching facilities. Wangila (2011) further observes that due to prevalence of poverty in some areas and negativity of attitude towards the programme, many parents do not pay the stipulated fee and hence making it difficult for the learners to access quality education. Lack of quality education in public ECDE centres has led to proliferation of private sector. Kariuki (2014) revealed that due to lack of the stipulated fee some parents have opted to skip the ECDE education and wait until their children are ready age wise for primary school class one.

More than 70% of preschool teachers disagreed that the school has income generating project. This meant most of the ECDE centres relied on the fees from the parents. However, as high as 96% of the respondents indicated that they were funded by the county government. The funding was, however, termed as erratic and mainly for the payment of teachers' salaries. Studies by Murunga (2015), Kirathi (2014), Shinali, Githui and Thinguri

(2014) and Wangila (2017) indicate that ECDE in Kenya is still bedeviled by serious underfunding issues such as understaffing and high teacher turnover, lack of essential play materials and facilities, feeding programme, teaching resources and buildings. These issues impact negatively on the quality of ECDE and pupils academic performance. It therefore calls for appropriate head teacher managerial and funds mobilization strategies in order to solicit adequate resources for quality preschool education.

Overall, the head teachers mobilization of funds among public ECDE centres in Nyamache Sub County was rated as below average (mean =2.6, SD = 0.9). Nonetheless, head teachers' mobilization of school funds, had a significant influence on pupils' academic performance in public ECDE centres in Nyamache Sub County ($\beta = 0.528$, $t = 4.272$, $p < 0.05$). This implied that learners in ECDE centres where head teachers were proactive in mobilization of funds, did better in academic performance than their counter parts in schools where head teachers did not bother in soliciting funds for ECDE development.

5.3 Summary of the Findings

This section presents the summary of the study findings in accordance to the objectives of the study.

The study found that over 50% of preschool teachers in Nyamache Sub County were not accessing refresher courses and that they hardly visited other schools for bench marking. Further, 68% of preschool teachers indicated that they hardly access online ECDE resource materials through internet. This meant that most of the teachers were stuck to what they learnt in college and did not benefit from the innovative teaching and learning approaches, new teaching aids and other enriching global dynamics that herald the early childhood education sub sector. A large number of teachers (76%) indicated that they did not have

videos on the latest methods of teaching creative activities in ECDE. This was an indicator that most teachers were not fond of ICT related teaching material. According to the interviewed CSOs, some schools had adequate ICT infrastructures and yet teachers had not embraced integration of ICT in teaching and learning. Preschool teachers' professional growth was found to have a significant influence on pupils' academic performance in public ECDE centres in Nyamache Sub County ($\beta = 0.482, t = 3.183, p < 0.05$).

Over 65% of the preschool teachers indicated that they had no 'clock in and clock out' system in their ECDE centres (mean = 2.5, SD = 0.8). Lack of clock in and out system and taking into account that some ECDE centres were separate from the primary school, it proved difficult for the head teachers to monitor and supervise preschool teachers class attendance. Over 70% of preschool teachers indicated that they were made aware of changes made in the curriculum and thus it could be deduced that most of them taught the up-to-date and relevant content. Most of the teachers (60%) indicated that their head teachers hardly did class observation. Similarly most of preschool teachers (54%) indicated that their head teachers were not keen on use of teaching aids while 66% disagreed that the CSOs visit the school to ensure quality. This implied that the class teachers could deviate from the syllabus or cover very little than prescribed without any accountability. On average, the supervision of preschool teachers was rated as below average (mean = 2.8, SD = 0.8). Supervision of preschool teachers' had the most significant relative contribution to the prediction of pupils' academic performance ($\beta = 0.561, p < 0.05$).

Most of parents were found to be receptive when contacted through the phone about their children. However, most of the parents' failed to assist and monitor their children's' home work. Over 55% of preschool teachers and some interviewed head teachers and CSOs indicated that some parents failed to attend meetings, they instead sent relatives to represent

them. Being absent in most of the capacity building meetings jeopardized the effort to get more meaningful involvement of parents in children learning. Half of the teachers indicated that parents hardly called to enquire about their children's progress. The section of parents who called and wrote messages to monitor and keep abreast of their children progress in school, were also found to be more involved in their children academic work such as completion of homework. Overall, parents support and involvement in their children's learning was rated as moderate (mean = 3.2, SD = 0.9). Parents' support of children learning was however, found to have no significant influence on pupils' academic performance in public ECDE centres in Nyamache Sub County ($\beta = 0.308$, $t = 2.910$, $p > 0.05$).

Most of the head teachers had laxity in mobilization of funds for running and development of ECDE centres in Nyamache Sub County. Their main focus was on the management of the primary school section and more so the KCPE performance. Thus, most of the centres lacked the essential teaching and learning resources. The County government catered for the salary of some teachers, and the bulk of the expenses were shouldered by parents. Lack of essential resources impacted negatively on the learners' academic performance. Overall, the head teachers mobilization of funds among public ECDE centres in Nyamache Sub County was rated as below average (mean = 2.6, SD = 0.9). Head teachers' mobilization of school funds, had a significant influence on pupils' academic performance in public ECDE centres in Nyamache Sub County ($\beta = 0.528$, $t = 4.272$, $p < 0.05$).

5.4 Conclusion

From the study findings and discussions the following conclusions were made:

Most of the preschool in public ECDE centres in Nyamache Sub County hardly attended seminars, workshops and other refresher courses. In addition, most of them never interacted

with resources from internet and failed to benefit from the innovative teaching and learning approaches, new teaching aids and other enriching materials and which could enhance pupils' academic performance.

Although most of preschool teachers sought permission to be away from school, their punctuality in class attendance, preparation and use of professional documents and teaching approaches were hardly monitored by both internal and external supervisors. Thus, there was a likelihood of some teachers performing below expectations and thereby affecting the learners' academic performance negatively.

Most of the parents of children in public ECDE centres in Nyamache Sub County, were receptive when called or invited over their children issues. However, they did little to assist or guide their children in academic work such as homework. They were also not keen in attending meetings in person but rather delegated the responsibility to people who could not contribute during substantive debates.

Most of the head teachers managing public preschools in Nyamache Sub County, are not proactive in mobilization of funds. Almost all the ECDE centres do not have income generating projects, hardly get any funding from the national government, County government, CDF and NGOs. Most of them rely on fees from parents. However, some proactive head teachers were had managed to mobilize funds and provided all the crucial essentials in a school. Such schools were found to post better academic performance, had better socially adjusted children.

5.5 Recommendations of the Study

The following recommendations were made based on the findings and conclusions made.

In order for all the preschool teachers to benefit from the much needed continuous professional development, the MOE should plan a yearly series of compulsory INSETS.

The head teachers in conjunction with the SMC and other stakeholders should explore on various innovative methods such charging them a certain fee in order to motivate them attend the various school meetings. Their attendance would ensure that they get educated on the importance of being closely involved in their children learning. In addition through such capacity building meetings, head teachers can invite various professionals such as psychologists to equip the parents with practical ways of nurturing their children cognitive development.

Head teachers should be more proactive and explore on various sources of funds in order to provide teaching and learning resources for quality preschool education. The SMC in conjunction with other development partners can deliberate on feasible money generating projects in order to enable ECDE centres attain some financial independence.

5.6 Suggestion for Further Research

The following areas have been suggested for further research:

- i. A similar study can be conducted in the entire county. The findings of such a study would create impetus to allocation of appropriate resources by the stake holders in a bid to enhance public ECDE quality and improve preschool learners' academic performance.
- ii. A similar but comparative study can be conducted involving both public and private ECDE centres. Such a study could shed more light on the factors influencing preschool children academic performance in Nyamache Sub County.
- iii. A study can be carried out on the feasible way to fund the public ECDE centres in Kenya. Such a study could be adopted by the county or the national government to the benefit of the parents who have been unable to raise the stipulated fees.

REFERENCES

- Adeyemi, B. (2010). Teacher related factors as correlates of pupils' achievement in Social studies in South West Nigeria. *Electronic Journal of Research in Educational Psychology*, 8(1), 313-332.
- Administration for Children and Families. (2014). *Head start program facts Fiscal Year 2013*. Washington, DC: U.S. Department of Health and Human Services.
- Ajayi, I. A., Haastrup, T. E., & Arogundade, B. B. (2009). Parents' involvement in school administration as a correlate of effectiveness of secondary schools in Nigeria. *International Journal of Educational Administration and Policy Studies*, 1(3), 041-046.
- Amina, J. A. (2015). An evaluation of head teachers' performance in supervision of instruction and involvement of staff in decision-making in the school. *International Journal of Research in Humanities and Social Studies*, 2(7), 129-142.
- Aroni, A. M. (2017). *Correlates of standard three pupils' proficiency in mathematics in public primary schools in Ongata Rongai Division, Kajiado North Sub-County, Kenya* (Unpublished M. Ed Thesis). Africa Nazarene University.
- Awuor, J. O., Wanjala, G., & Muriithi, M. (2016). Financial resource mobilization strategies and internal efficiency of public secondary schools in Rachuonyo South Sub County, Homabay County. *Kenya Journal of Educational Planning, Economics & Management*, 10(1), 45-53.
- Altrichter, H., Feldman, A., Posch, P., & Somekh, B. (2008). *Teachers investigate their work: An introduction to action research across the professions*. Routledge
- Babbie, E. (2014). *The basics of social research* (6thed.). Belmont, CA: Wadsworth, Cengage Learning
- Balanskat, A., & Gerhard, P. (2010). *Head teachers' professional profile and role across Europe*. UK. Thematic dossiers.
- Barnett, W. S., Friedman-Krauss, A. H., Gomez, R. E., Horowitz, M., Weisenfeld, G. G., Clarke Brown, K., & Squires, J. H. (2016). *The state of preschool 2015: State preschool yearbook*. New Brunswick, NJ: National Institute for Early Education Research.
- Bartle, P. (2011). *Theories of education leadership and management*. London: Paul Chapman.

- Bhattacharjee, P. (2012). *Social sciences research principles, methods and practices*. University of South Florida: Scholar Commons
- Boen, W. K. (2014). *Selected social factors influencing parental involvement in class seven pupils' homework in public day primary schools of Kaptumo Division, Nandi County, Kenya* (Unpublished M. Ed Thesis). Egerton University.
- Borg, W. R., & Gall, M. D. (2006). *Educational research: An introduction* (8th ed.). New York: Longman
- Burroly, B. (2011). *Preparing teachers for needs school*. England: Pearson longman.
- Caroline, S. (2006). *Diversity training for classroom teaching: A manual for students and educators*. New York: Springer.
- Celewa, M. U. (2011). *Teaching practice manual*. Iagos: National Open University Press.
- Chemagosi, M. J., Odongo, B. C., & Aloka, P. J. O. (2016). Parental strategies enhancing level of involvement among pre-school learners in Nandi Central Sub-County, Kenya. *International Journal of Education and Research*, 4(1), 123-136.
- Ciaraka, M. (2003). *Parental involvement in facilitating the learning process: A case study of standard eight pupils in selected schools of Egoji-Meru, Kenya* (Unpublished M. Ed Project). Kenyatta University.
- Creswell, J. W. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative research* (4th ed.), Upper Saddle River. NJ: Merrill
- Davies, D. (2013). *Benefits and barriers to parent involvement*. U.S.A: Oxford
- Dennis, L. (2011). *A brief counseling in school*. London: Sage Publication, Ltd.
- Desimone, L. M., & Garet, M. S. (2015). Best practices in teachers' professional development in the United States. *Psychology, Society and Education*, 7(3), 252–263.
- Duflo, E., Dupas, P., & Kremer, M. (2011). Peer effects, teacher incentives, and the impact of tracking: evidence from a randomized evaluation in Kenya. *American Economic Review*, 10(1), 1739–1774.
- Dube, P. S. (2015). *An exploratory study of parent involvement in early childhood development centres in Masiphumelele, Cape Town* (Published MSc.Social Development Dissertation). University of Cape Town.
- Dweck, C. (2010). *Mindsets and equitable education, principal leadership*. Boston: Pearson Longman Publishers.

- Dyson, L. L. (2001). Home-school communication and expectations of recent Chinese immigrants. *Canadian Journal of Education/Revue canadienne de l'éducation*, 455-476.
- Ediger, M. D. (2013). *Administration of schools*. New Delhi: Discovery Publishing House.
- ElNokali, N. E., Bachman, H.J., Votruba-Drzal, E. (2010). Parent involvement and children's academic and social development in elementary school. *Child Development*, 81(3), 988–1005. doi:10.1111/j.1467-8624.2010.01447.x.
- Etsy, K. (2005). *Causes of low academic performance of primary school pupils in Theshamia Sub-Metro of Shama Ahanta East Metropolitan Assembly of Ghana*. Regional Conference of Education in West Africa, Dakar Senegal.
- Fehintola, J. O. (2014). Teachers' characteristics as correlates of students' academic performance among secondary school students in Saki-west Local Government Area of Oyo State, Nigeria. *Journal of Educational and Social Research*, 4(6), 459-468. Doi:10.5901/jesr.2014.v4n6p459
- Fischer, C. F. (2011). *Supervision of instruction*. Retrieved from <http://www.stanswartz.com/adm.txt/chap3.htm>
- Fraenkel, J., Wallen, N., & Hyun, H. H. (2012). *How to design and evaluate research in education (8th ed.)*. Boston: McGraw Hill.
- Fullan, M. (2013). *Implementation and evaluation of curriculum*: Open University press: USA
- Gachoya, W. A. (2005). *Impact of quality assurance on education quality in secondary schools in Nyeri District* (Unpublished M.ED Thesis). University of Nairobi.
- Gallagher, J. J., Clifford, R. M., & Maxwell, K. (2014). Getting from here to there: To an ideal early preschool system. *Early Childhood Research and Practice*, 6. Retrieved from <http://ecrp.uiuc.edu/v6nl/clifford.html>.
- Ganira, K. Odundo, P. A., & Muriithi, Z. W. (2016). Influence of Head Teacher Management of Preschool Programs and Learning Achievement in Mombasa County, Kenya. *Educational Journal*, 5(5), 81-91.
- Garcia, R. E. (2017). *Child elicitation of parental involvement in preschool* (Published MSc. Thesis). Ohio State University.
- Gardener, P., & Mahler, B. (2013). *Early childhood programmes. Human relationship and learning*. London: Harcourt Brace collage publishers.
- Gay, L. R., Mills, G. E., & Airasian, P. (2010). *Educational research: competencies for analysis and applications (10th ed.)*. New Jersey: Pearson Education.

- Githae G. M, Odundo P. A, Mwangi J. (2015). Influence of finance in mainstreaming support for orphans and vulnerable children in Nyeri Central District, Kenya. *International Journal of Elementary Education*, 4 (1), 76-80.
- Githuthwa, H. W. (2011). *An investigation into the problems faced in the development of Early Childhood Education in Kenya. A case of Lari, Kiambu County*. Unpublished MED Thesis. Kenyatta University. Kenya
- Gumo, P. (2013). *Pastoralism and poverty reduction in East Africa Early Childhood Development Christian Childrens Fund Nairobi, Kenya*. Kenyatta University. Retrieved from <http://www.kenyattauniversity.ac.ke>.
- Guolang, E. (2010). *Effects of parental involvement in education: A case study of Namibia* (Unpublished M. Ed Thesis). University of Iceland.
- Hamre, B. K., Partee, A., & Mulcahy, C. (2017). Enhancing the impact of professional development in the context of preschool expansion. *American Educational Research Association*, 3(4), 1-16. DOI: 10.1177/2332858417733686
- Hesse-Biber, S. N., & Leavy, P. (2010). *The practice of qualitative research*. Sage: Cambridge University press.
- Hountenville, A. J., & Conway, S. (2008). *Parental involvement strongly impact student achievement*. Science Daily.
- Jones, G. R. (2010). *Organizational theory, design, and change*. Upper Saddle River: Pearson Publications.
- Kaberere, V., Makewa, T., Muchee, T., & Role, E. (2013). Parental involvement in high and low performing schools in Gasabo District, Rwanda. *Education Research*, 7(7), 34-42.
- Kamau, H. W. (2014). *Parents' satisfaction with quality of services offered in early childhood development programmes in Mang'u division, Kiambu County, Kenya* (Unpublished M. Ed Thesis). Kenyatta University
- Kamau, J. G. (2015). *Managerial influences on classroom performance of pre-school children in Embu West, Embu County* (Unpublished M. Ed Thesis). University of Nairobi.
- Karanja, D. T., & Githinji, W. (2011). *Philiosophical, sociological and historical foundation of ECDE*. Nairobi: Longhorn Kenya Limited.
- Karanja, V. W. (2017). *Relationship between play implementation practices and ECDE learner performance in Kangari Zone, Kigumo Sub-County, Murang'a County in Kenya* (Unpublished M. Ed Thesis). Nairobi: Africa Nazarene University.

- Kariuki, D. H. (2014). Factors contributing to poor performance in KCPE in public primary schools in Mwimbi Division, Mara Disatrick. *International Journal of Humanities & Social Sciences*, 2(5), 1-7
- Kelonye, C. K. (2012). *Factors influencing parental involvement in the provision of early childhood education in Kenya (Unpublished MED Thesis)*. Masinde Muliro University of Science and Technology. Kenya
- Kibet, K. P. (2010). *Teacher-parent partnership for enhancing quality in pre-school education: A case study of Uasin Gishu district, Kenya (Unpublished PhD thesis)*. Nairobi: Kenyatta University
- Kirathi, M. (2014). An evaluation of the effectiveness of community support grants for Early Childhood Education to enhance educational access in Nyandarua District, Kenya. *IOSR Journal of Business and Management*, 16(7), 29-32. Retrieved from www.iosrjournals.org
- Kiragu, F. W. (2014). *Primary school head teachers' role in implementation of the Early childhood education curriculum in makuyu division, Murang' a county (Unpublished M. Ed Thesis)*. Kenyatta University
- Koch, L. A. (2018). *Parent involvement in early childhood education and its impact on the development of early language and literacy skills: An exploration of one head start program's parent involvement model (Published PhD in Education Dissertation)*. Drexel University.
- Kombo, D. K., & Tromp, D. L. A. (2006). *Thesis writing. An introduction*. Nairobi. Paulines publication.
- Kothari, C. R. (2014). *Research methodology: Methods and techniques (3rd ed.)*. New Delhi: Wiley Publications.
- Krainer, K. (2011). *Psychology development*. New York: Springer.
- Makau, A. N. (2016). *Determinants of pre-primary school teachers' use of teaching aids to enhance instruction in Isinya Sub-County, Kenya (Unpublished M.Ed Thesis)*. Kenyatta University.
- Markussen-Brown, J., Juhl, C. B., Piasta, S. B., Bleses, D., Hojen, A., & Justice, L. M. (2017). The effects of language and literacy-focused professional development on early educators and children: A best-evidence meta-analysis. *Early Childhood Research Quarterly*, 38, 97–115. doi:10.1016/j.ecresq.2016.07.002
- Martinez, S., Naudeau, S., & Pereira, V. (2012). *A Randomized impact evaluation of early childhood development in rural Mozambique*. World Bank. Mozambique

- Marylin, K. S., & Goes, J. (2013). *Dissertation and scholarly research; Recipes for success*. Seattle, WA: Dissertation Success LLC.
- Masoumi, D. (2015). Preschool teachers' use of ICTs: Towards a typology of practice. *Contemporary Issues in Early Childhood*, 16(1), 5–17.
DOI: 10.1177/1463949114566753
- Mbiti, D. M. (2007). *Foundations of school administration (Revised edition)*. Nairobi: Oxford University Press.
- McKenzie, J. (1999). Scaffolding for success. *From Now On: The Education Technology Journal*, 9(4). Retrieved from:
http://imet.csus.edu/imet7/sugiyama/282283/scaffolding_for_success.pdf
- Melly, I. K. (2017). *Influence of selected factors on the level of implementation of preschool creative activities curriculum in Njoro Sub-County, Nakuru County, Kenya* (Unpublished, M. Ed Thesis). Africa Nazarene University.
- Merriam, S. B. (2014). *Qualitative research: A guide to design and implementation*. New Jersey: John Wiley & Sons.
- MOE (2017). *Kisii County schools census report 2017*. MOE
- Muiru, A., Thinguri, R., Njagi, A., & Ngunu, S. (2014). Parental involvement and primary school academic performance in Teso North District. *International Journal of Science and Research (IJSR)*, 3(8), 895-902.
- Munyoka, V. (2012). *Teachers' training, terms of service and head teachers' awareness of ECE policy framework in Bungoma South District, Kenya. (Unpublished M.Ed Thesis)*. Moi University.
- Mureithi, Z. N. (2018). *Influence of selected factors on academic performance of preschool learners in Nyeri Central Sub-County, Nyeri County, Kenya* (Unpublished M. Ed Thesis). Africa Nazarene University.
- Mureithi, Z. N., & Mwangi, B. N. (2019). Influence of selected factors on academic performance of public preschool learners in Nyeri Central Sub-County, Nyeri County, Kenya. *IRJBP Journal of Education and Practices*, 2(1), 27-42. Available at <http://www.irjbp.com/index.php/Education>
- Murunga, J. (2015). Devolving early childhood development education in Kenya: policy challenges and opportunities. *International Journal of Education and Research*, 3(2), 611-620
- Mustard, J. F. (2013). *Early Child Development and experienced-based brain development: The Scientific underpinning of the importance of ECD in a childhood Global World*. Washington DC: Brookings Institutions.

- Myers, S., & Myers, C. (2015). Family structure and school-based parental involvement: A family resource perspective. *Journal of Family & Economic Issues*, 36(1), 114-131. doi:10.1007/s10834-014-9409-0
- Ngaruiya, S. (2008). *Pre-school education and school readiness: The Kenya Experience* Association for the Development of Education in Africa (ADEA).
- Ngware, M. W. (2007). *Financing secondary education in Kenya; Cost reduction and financing options*. Nairobi: KPPRA
- Ngware, W. M., Oketch, M., & Ezech, C. A. (2011). Quality of primary education input in urban schools: Evidence from Nairobi. *Education and Urban Society Journal*, 43(1) 91-116.
- Nkuba, M., & Kyaruzi, E. (2015). Is it not now? : School counselors' training in Tanzania secondary schools. *Journal of Education and Practice*, 6(19), 160-169. Retrieved from <http://www.iiste.org>
- Nyakwara, B. (2014). *Administration and management of ECDE programmes*. Nairobi: Longhorn Publishers.
- Nyarko, K. (2011). Parental involvement: The case of Ghana. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(5), 378.
- Nyakundi, J. S. (2014). *Relationship between teachers' motivation and their work performance in pre-primary schools in Kenyena District, Kisii County, Kenya* (Unpublished, M. Ed Thesis). Kenyatta University.
- O'Donnell, R. G. (2013). Intervention in the Early Years in Evaluation of the High/Scope Curriculum London. *National Children's Bureau*, 444-467.
- Odube, E. A. (2016). *Influence of head teachers' instructional supervision practices on pupils' performance at Kenya Certificate of Primary Education in Mwatate sub-County, Taita Taveta County* (Unpublished M. Ed Thesis). University of Nairobi.
- Ogutu, B. A. (2015). *Quality early childhood education: the case of internally displaced children in camps in Nyandarua County, Kenya* (Unpublished PhD in Education). Kenyatta University.
- Ololube, N. P., & Major, N. B. (2014). School inspection and educational supervision: Impact on teachers' productivity and effective teacher education programmes in Nigeria. *International Journal of Scientific Research in Education*, 7(1), 91-104. Retrieved from <http://www.ij sre.com>
- Opicha, L. M. (2016). *Influence of headteachers' instructional supervision practices on pupils' performance at Kenya certificate of primary education in Khwisero sub County, Kenya* (Unpublished M. Ed Thesis). University of Nairobi

- Orodho, J. A. (2012). *Techniques of writing research proposals and reports in education and social sciences*. Nairobi: Kanezja Publishers.
- Orodho, J. A. (2014). Financing basic education: What are equity and quality implications of Free Primary Education (FPE) and Free Secondary Education (FDSE) policies in Kenya? *International Journal of Development Research*, 4(3), 477-487. Retrieved from <http://www.journalijdr.com>
- Osei-Akoto, I., Chowa, G., & Ansong, D. (2012). Parental involvement and academic performance in Ghana. *Youth save Research Brief, CSD publication No.* 12-42.
- Osman, A., & Mukuna, T. E. (2013). Improving instructional leadership in schools through building principals' capacity. *Journal of Education and Practice*, 4(2), 41-47. Retrieved from www.iiste.org
- Owuor, D. A. (2010). *Factors Influencing Provision of Early Childhood Education in Madiang Division, Siaya County, Kenya* (Unpublished M. Ed Thesis). Kenyatta University
- Padgett, D. K. (2007). *The qualitative research experience* (5th ed.). Belmont, CA: Wadsworth/Thomson learning.
- Perry, W. G. (1999). *Forms of ethical and intellectual development in the college years*. San Francisco: Jossey-Bass Publishers.
- Quattlebaum, S. (2013). Why Professional development for teachers is critical. *Education Policy Brief*, 15(21), 76–97.
- Republic of Kenya (2005). *Sessional Paper No. 1 of 2005 on education training and research*. Nairobi: MOEST.
- Republic of Kenya. (2006). *National Early Childhood Development Policy Framework*. Nairobi: Government Printer.
- Republic of Kenya (2010). *The Constitution of Kenya, 2010*. Nairobi: The Attorney General
- Republic of Kenya/UNICEF (2012). *Education for All (EFA). End of Decade Assessment (2001-2010)*. Nairobi: Ministry Of Education and INICEF
- Republic of Kenya (2013). *The basic education act 2013*. Nairobi: Government Printer
- Sallis, E. (2002). *Total quality management in education* (3rd edition). Virginia: Stylus Publishing.
- Samuel, O. K. (2009). *Formative teaching: A Conversational Framework for evaluating the impact of Response Technology on student experience, engagement and*

- achievement*. Frontiers in Education Conference, 2009. FIE'09. 39th IEEE, 1-6
- Sergiovanni, T., & Starratt, R. (2007). *Supervision: A redefinition* 8th edition. New York: McGraw- Hill
- Shinali, M. C., Githui, M., & Thinguri, R. W. (2014). Assessment of the Impact of Early Childhood Development Capitation on ECDE Programme in Kenya: A Case of Narok South Sub County, Kenya. *Journal of Education and Practice*, 5(26), 72-80. Retrieved from www.iiste.org
- Shore, T. (2013). Early Childhood Development in London. *Oxford University*, V, (8) 229-235.
- Simon, M. K. (2011). *Dissertation and scholarly research: Recipes for success*. Seattle, W. A, Dissertation Success, LLC.
- Simon, M. K., & Goes, J. (2013). *Dissertation and scholarly research: recipes for success*. Seattle, WA: Dissertation Success LLC.
- Smith, E. J. (2006). The strength-based counseling model. *The Counseling Psychologist*, 34(1), 13-79.
- Spernes, K. (2011). *I buy paraffin so can read in the evening: A study from Kenya about parental involvement in school*. Ostfold University College. Norway
- Stephen, L. (2014). *Pastoralism and poverty reduction in East Africa Early childhood development christian children's fund*. Nairobi: ACTS Press.
- Teklemariam, A. A. (2009). *Human resource management for Educational Practitioners in Africa*. Nairobi: Kenya. CUEA Press.
- Toywa, R. W. (2011). *A Comparative study of the Effects of selected Teaching Methods on Performance in Early Childhood Education In Kenya*. Unpublished M.Phil Thesis. Moi University Kenya.
- Teachers service commission (2012). *Code of regulation for teachers Nairobi*. MOE
- Tucker-Drob, E. M., & Harden, K. P. (2012). Early childhood cognitive development and parental cognitive stimulation: Evidence for reciprocal gene-environment transactions. *Developmental Science*, 15, 250–259.
- UNESCO (2012). *Education for all global monitoring report; reaching the marginalized*. Paris: UNESCO.
- UNESCO. (2014). *Education For All Global Monitoring Report 2013/2014. Teaching and learning. Achieving quality for all*. Paris: UNESCO
- UNICEF (2012). *Inequalities in Early Childhood Development: What the data say- Evidence from the Multiple Indicator Cluster Surveys*. New York: UNICEF

- Usman, Y. D. (2015). The Impact of Instructional Supervision on Academic Performance of Secondary School Students in Nasarawa State, Nigeria. *Journal of Education and Practice*, 6(10), 160-167. Retrieved from www.iiste.org
- Voss, T., Kunter, M., & Baumert, J. (2011). Assessing teacher candidates' general pedagogical/ psychological knowledge: Test construction and validation. *Journal of Educational Psychology*, 103 (4), 952-969.
- Wangila, V. M. (2017). The Challenges Facing the Implementation of Early Childhood Development and Education Policy in Bungoma County, Kenya. *Journal of Education and Practice*, 8(15), 217-223. Retrieved from www.iiste.org
- Wanjohi, E. W. (2010). *An evaluation of the impact of community support grants on the development of Early Childhood Education in Kiambu District, Kenya*. (Unpublished M.ED Thesis). University of Nairobi.
- Wanzare, Z. O. (2012). Instructional supervision in public secondary schools' in Kenya. *Educational Management Administration & Leadership*, 40(2), 188-216.
- Wanzare, Z. O. (2014). Skills and attributes of instructional supervisors: Experience from Kenya. *Education Research and Reviews*, 8(24), 2270-2280. doi:10.5897/ERR12.057
- Watson, N. (2013). *Financial decision making in four New Zealand secondary schools* (Unpublished Doctoral dissertation). Unitec Institute of Technology).

APPENDIX I: LETTER OF TRANSMITTAL

Dear Respondent,

I am a post graduate student at Africa Nazarene University, pursuing a master's degree in education. I am currently carrying out a research titled: **FACTORS INFLUENCING PRESCHOOL LEARNERS ACADEMIC PERFORMANCE IN NYAMACHE SUB COUNTY, KISII COUNTY, KENYA**, as part of the course requirement. For this reason therefore, your school has been sampled for the study and you have been selected as a respondent.

Kindly respond to the questionnaire various items as candidly as possible. There is no right or wrong answer. Do not write your name anywhere in the questionnaire. The results of this study will be used for academic purposes only.

Yours Faithfully,

MARY MOSANSA

Cell Phone: +254723392995

Email:

APPENDIX II: PRESCHOOL TEACHER'S QUESTIONNAIRE

SECTION A: Demographic Information

Please tick (✓) where appropriate or fill in the required information on the space provided.

1. Gender: Male [] Female []

2. Age bracket:

Below 25years [] 25 – 30 years [] 31 – 40 years [] 41-50 []

Over 50 years []

3. Highest level of Professional Training in ECDE

Untrained [] Certificate [] Diploma [] Degree []

Post graduate []

4. How long have you been teaching in the current ECDE centre?

Less than one year [] 1-2 years [] 3-4 years []

Over 4 years []

SECTION B: Preschool Teacher Professional Development

5. Below are statements regarding preschool teachers' professional development. Please tick appropriately depending on your situation.

SA=Strongly Disagree (1) D= Disagree (2) N = Not sure (3) A= Agree (4) SA = Strongly Agree (5)

Statement	SA	A	N	D	SD
I visit other schools for bench marking					
I attend refresher courses in ECDE					
I normally access materials on changes in curriculum					
I normally attend seminars and workshops on ECDE					
I do access online ECDE resource materials through internet					
I am conversant with the current government policies on ECDE					
I have videos on the latest various methods of teaching creative activities in ECDE					
I have learnt how to improvise some of teaching and learning resorces using locally available materials					

6. Write any other information you have on your professional development and which can enhance preschool learners’ academic performance

SECTION C: Supervision of Preschool teachers

7. Please indicate your level of agreement or disagreement in regard to the following statements on preschool teachers’ supervision.

Statement	SA	A	N	D	SD
We use clock in and clock out system to monitor teacher school attendance in our centre					
We do seek permission to be absent from school					
Our teaching is monitored by the head teacher					
My professional documents are normally checked					
Our head teachers does class observation					
Our head teacher is keen on use of teaching aids					
The CSO visits the school to ensure quality					

8. Write any other information on supervision and monitoring of preschool teachers teaching activities in a bid to enhance preschool children academic work.

SECTION D: Parents' Support of Pupils' Learning

9. The following are statements in regard to your class parents' involvement in pupils' learning. Read each statement carefully and indicate the extent to which you agree to it.

Use the following key to make your choice.

Strongly Agree (SA); Agree (A); Neutral (N); Disagree (D); Strongly Disagree (SD)

Statement	SA	A	N	D	SD
Most of parents are receptive when I call them through phone about their children					
Most parent monitor their children's' home work					
Most parents appear when invited for deliberations about their children					
Most of my class parents turn up when called for a meeting					
Most of parents call to enquire their children's' progress					
Most parents are keen on their children's health such as immunization.					
Most parents provide their children with writing materials such as pens/pencils, rubber and sharpeners					
Most parents ensure their children's uniform is in good form					
Most parents are keen on paying the stipulated fees					

10. Write any other information on the parents' support of children's learning

SECTION E: Head teachers' Mobilization of Funds

Please indicate the extent to which your head teacher mobilizes funds to support ECDE programmes.

Statement	SA	A	N	D	SD
My head teacher is proactive in soliciting funds to run ECDE programmes					
Through lobbying my head teacher is able to get funding from National government					
Our ECE programme occasionally benefit from NGOs grants					
Some of our ECE programs are funded by CDF kitty					
The school management conducts fund raisings to support ECE					
The school has income generating project					
We are fully funded by county government					
Head teacher writes proposals to solicit money from donors					
Our head teacher is good in mobilizing funds fro parents					

8) Write any other information or views you have on strategies used by the head teacher to mobilize funds to assist ECDE programme.

Thank you for your support

APPENDIX III: INTERVIEW SCHEDULE FOR HEAD TEACHERS

1. Gender: Male [] Female []

2. Age bracket:

Below 25years [] 25 – 30 years [] 31 – 40 years [] 41-50 []

Over 50 years []

3. The level of creativity of preschool children, mannerisms, conduct, and academic progress is a reflection of the input of the teacher. How do you ensure that your preschool teachers translate educational theory to practice?

4. How do you ensure that your preschool teachers' benefit from best practices in other schools in order to enhance the learners academic performance?

5. In which areas do you supervise your preschool teacher to ensure quality teaching and learning?

6. How do you ensure that teachers are doing their duties as expected?

7. How do preschool children parents contribute to their children's academic performance?

8. To what extent does the county fund your preschool?

9. How do you mobilize funds from parents and other stakeholders?

10. In your opinion, is the funding of your ECDE centre a significant factor in learners' academic performance?

**APPENDIX IV: INTERVIEW SCHEDULE FOR CURRICULUM SUPPORT
OFFICERS (CSO)**

1. What is your mandate in regard to the quality of education offered in ECDE centers?
2. According to the Kenya Constitution 2010 and Education Act 2013, the ECDE was put under the various County Governments. What role does the county government play to enhance children academic performance?
3. One way of ensuring that preschool teachers are teaching the relevant recommended material for quality education is by sending teachers to refreshers courses, seminars and workshops. How would you describe the situation in your zone?
3. Most of the ECDE centres have become part of primary schools, how does the head teacher and who is a Teachers service Commission agent manage to supervise a county employed teacher effectively?
4. How would describe parents participation in their children learning?
5. ECDE education is yet to be offered as free education by the government, how do the head teachers manage with meager funds from the county. And what influence does it have on the children academic performance.

APPENDIX V: PRESCHOOL LEARNER'S TEST

NB. The test is meant for PP2 (Nursery pupils)

SCIENCE ACTIVITY

Name the weather symbols



.....



.....



.....



.....



.....

Read and colour home utensils



Spoon



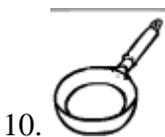
Cup



Knife



Plate



Pan

CREATIVE ACTIVITY

Complete the following patterns

**NUMBERWORK ACTIVITY**

Work out the following

1) $2 + 3 =$

5) $2 + 4 =$

9. $8 - 3 =$

2) $5 + 1 =$

6) $7 + 3 =$

10. $8 - 4 =$

3) $1 + 5 =$

7) $3 + 6 =$

11. $8 - 5 =$

4) $4 + 4 =$

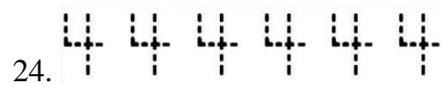
8) $6 + 4 =$

12. $8 - 6 =$

Count and write how many



Join the dots of numbers



LANGUAGE ACTIVITY

Read and colour the following



1. house



2. tree



3. cat



4. ball

- 
 5. mouse
- 
 6. hat
- 
 7. sun
- 
 8. apple

Fill the missing letters

-  _pple
 9.
-  _ish
 10.
-  _og
 11.
-  _all
 12.

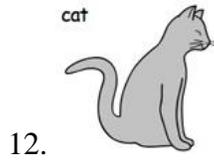
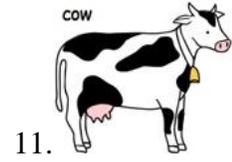
SOCIAL ENVIRONMENTAL ACTIVITY

Colour the following fruits

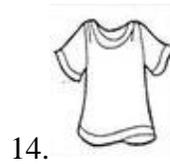
- 1. 
- 2. 
- 3. 
- 4. 
- 5. 

Read and colour the following domestic animals

- 
 6. hen
- 
 7. sheep
- 
 8. donkey



Colour the clothes we wear



**APPENDIX VI: LIST OF THE SAMPLED ECDE CENTRES IN NYAMACHE
SUB COUNTY**

S/NO.	ECDE Centre	S/NO.	ECDE Centre
1	Majimazuri	14	Riamang'erere
2	Nyoera	15	Enchoro
3	Getare	16	Nyakegara
4	Nyamware	17	Nyachenge
5	Getunwa	18	Ebiosi
6	Nyamache	19	Nyangoso
7	Mosasa	20	Nyamaruma
8	Ensoko	21	Bogesaka
9	Nyamisaro	22	Mogonga
10	Ekenyuru	23	Borangi SAD
11	Kiombwori	24	Riongoncho
12	Mosora SDA	25	Oganda
13	Rogongo	26	

APPENDIX VII: INTRODUCTORY LETTER FROM AFRICA NAZARENE UNIVERSITY



AFRICA NAZARENE
UNIVERSITY

July, 5th 2018

Re: To whom it may concern

Mary Mosansa (13M04CMED035) is a bonafide student at Africa Nazarene University. She has finished her course work and has defended her thesis proposal **Effectiveness of Government Funding in Addressing Challenges facing Early Childhood Development Education Teachers: A Survey Study of Nyamache Sub-County, Kenya.**

Any assistance accorded to her to facilitate data collection and finish her thesis is highly welcomed.

A handwritten signature in black ink, appearing to read 'Rodney Reed'.

Prof. Rodney Reed
DVC, Academic Affairs

APPENDIX VIII: RESEARCH AUTHORIZATION LETTER 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/18/08839/24385**

Date: **20th August, 2018**

Mary Mosansa
Africa Nazarene University
P.O. Box 53067-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“Effectiveness of government funding in addressing challenges facing early childhood development education teachers: A survey study in Nyamache Sub County Kenya”* I am pleased to inform you that you have been authorized to undertake research in **Kisii County** for the period ending **17th August, 2019.**

You are advised to report to **the County Commissioner and the County Director of Education, Kisii 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.


BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Kisii County.

The County Director of Education
Kisii County.

APPENDIX IX: RESEARCH PERMIT FROM NACOSTI

THIS IS TO CERTIFY THAT:
MS. MARY MOSANSA
of AFRICA NAZARENE UNIVERSITY,
5-40203 NYAMACHE, has been permitted
to conduct research in Kisii County

Permit No : NACOSTI/P/18/08839/24385
Date Of Issue : 20th August,2018
Fee Received :Ksh 1000

on the topic: EFFECTIVENESS OF
GOVERNMENT FUNDING IN ADDRESSING
CHALLENGES FACING EARLY CHILDHOOD
DEVELOPMENT EDUCATION TEACHERS:
A SURVEY STUDY IN NYAMACHE SUB-
COUNTY KENYA

for the period ending:
17th August,2019



[Signature]
Director General
National Commission for Science,
Technology & Innovation

Applicant's
Signature

CONDITIONS

1. The License is valid for the proposed research, research site specified period.
2. Both the Licence and any rights thereunder are non-transférable.
3. Upon request of the Commission, the Licensee shall submit a progress report.
4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
5. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.
6. This Licence does not give authority to transfer research materials.
7. The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.
8. The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.



REPUBLIC OF KENYA



National Commission for Science,
Technology and Innovation
RESEARCH CLEARANCE
PERMIT

Serial No.A 20277

CONDITIONS: see back page

APPENDIX X: RESEARCH PERMISSION FROM TSC COUNTY DIRECTOR**TEACHERS SERVICE COMMISSION**

Telephone: +254-0733-645452
 Email: cdirkisii@tsc.go.ke
 Website: www.tsc.go.ke



THE TSC OFFICE
 NYAMACHE SUB-COUNTY
 P.O. BOX 8-40203,
NYAMACHE
 18/07/2018

Ref: TSC/330291/17

MARY MOSANSA
 TSC 330291
 THRO'
 THE HEADTEACHER
 SUGUTA PRIMARY SCHOOL
 P.O BOX 158-40203
NYAMACHE.

RE: PERMISSION TO CARRY OUT DATA COLLECTION.**MARY MOSANSA TSC 330291.**

Reference is made to your letter dated 17th July 2018 requesting for permission to carry out data collection refers:

You are hereby granted permission w.e.f. 23rd July 2018 to 17th August 2018.

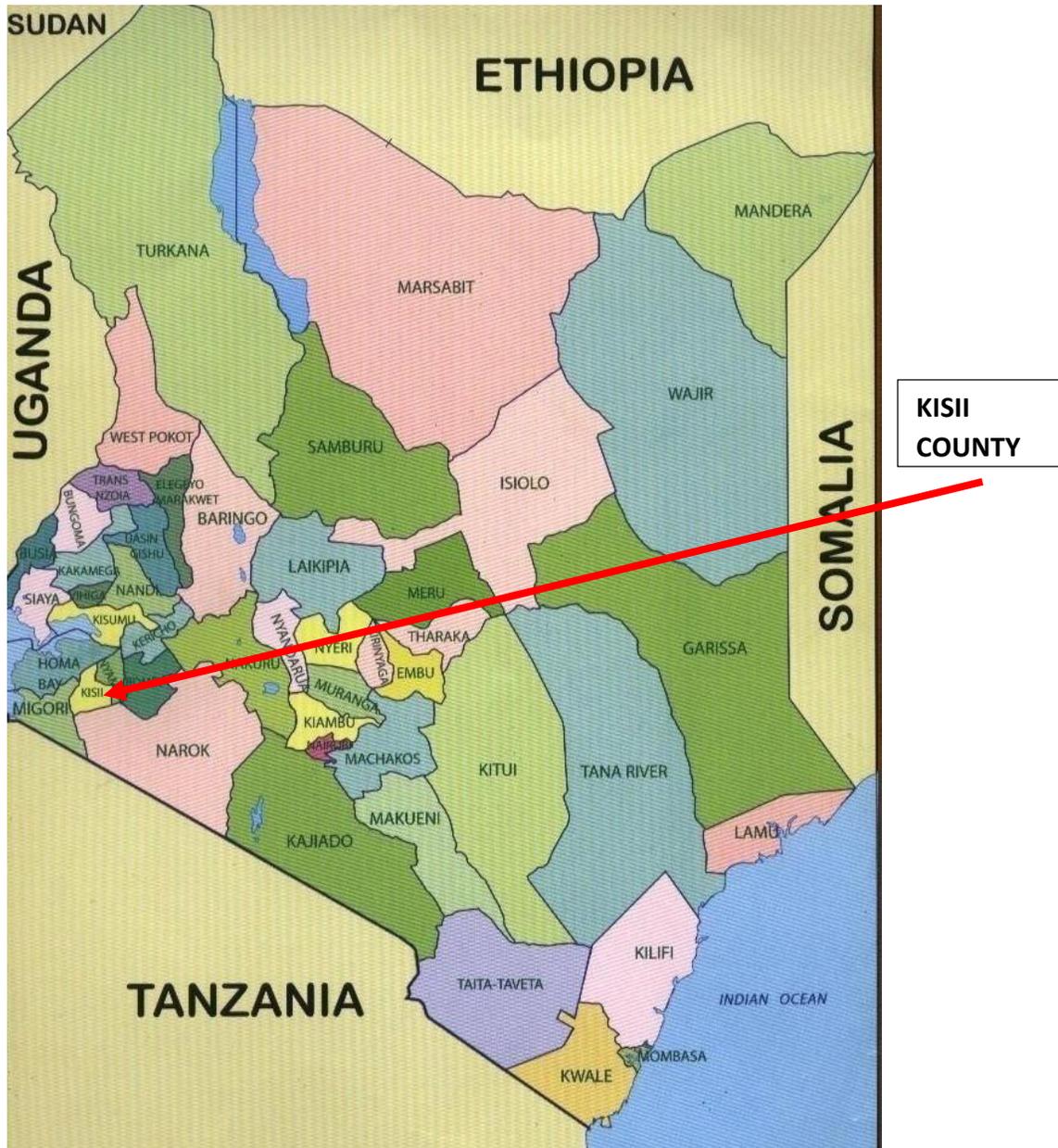
M.A. Abwalaba
 P.A. ABWALABA

FOR: TSC COUNTY DIRECTOR

KISII.

*For: Director Kisii (TM)
 Teachers Service Commission*

APPENDIX XI: MAP OF KENYA SHOWING KISII COUNTY



APPENDIX XII: MAP OF KISII COUNTY SHOWING NYAMACHE SUB COUNTY

