EFFECTS OF TEACHER CHARACTERISTICS ON THE CLASSROOM CLIMATE OF PRESCHOOLS IN ONGATA RONGAI ZONE, KAJIADO NORTH DISTRICT, KENYA

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DECLARATION

This research project is my original work and has not been submitted for the award of degree in this or any other university.

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This research project has been submitted for examination with my approval as university supervisor.

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DEDICATION

I dedicate this research project to my mother, my late husband Francis, my children Mark, David, Caroline and Alex. I also dedicate this research to my brothers and sisters.

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ABSTRACT

A positive classroom climate fosters holistic growth in the children since they experience the classroom as not just an intellectual space, but also as a social, emotional, and physical environment. The purpose of this study was to examine the effects of teacher characteristics on the classroom climate of preschools in Ongata Rongai zone, Kajiado North District, Kenya. The study adopted a descriptive survey design to explore how teacher qualifications, experience, training and gender affect the preschool classroom climate. To achieve the above objectives, the study used a sample of fourteen preschools sampled from forty eight preschools in the zone. The sample sizes comprised of ten private preschools and four public preschools. The study also used a sample of forty two preschool teachers chosen randomly in each of the preschools. Self completion questionnaires were filled by forty two preschool teachers and fourteen headteachers. The researcher used two assessment tools to seek information on the effects of the teacher characteristics on classroom climate. The first was the Early Childhood Environment Rating Scale-Revised. A modified version of the Work Sampling System was the second assessment tool used in the study. It was used to evaluate the development of the children within the various classes where the teachers had been assessed. This was done in order to ascertain whether the classroom climate a particular teacher created affected the growth of the children in various domains. Qualitative and quantitative data was descriptively analyzed through descriptive statistics like frequencies, percentages incorporated in a Likert-type scale in the assessment tools to support different themes. These results show that a preschool teacher having a high school certificate created a better classroom climate than one with a primary certificate. The results reveal that training had greatly influence on the cognitive aspects of the classroom climate while it does not so much matter when it comes to the physical and social development of the children since the untrained teacher can even use natural maternal instincts in caring for the children as all the teachers used in the sample were female. Children taught by untrained teachers scored better in the physical development domain because their teachers compensated for their inadequate pedagogical skills in delivering class content by allowing the children to have more play time. The results indicated that more years of experience results in a better classroom climate. This was noted across all the various domains of the ECERS-R assessment. The study shows that neither female nor male teachers were better than the other rather it was a case of each bringing their unique capabilities for the benefit of the children. Based on the findings it was recommended that schools should be provided with teachers who are well trained and that more male preschool teachers should be hired to complement the skills of the female preschool teachers. Taking the limitations and delimitation of the study it was suggested similar studies should be conducted using multiple measures of climate and/or achievement in other parts of the country. This could involve using other preschool classroom climate assessment tools such as Classroom Assessment Scoring System (CLASS) or Child Observation Record (COR) to compare with the current results. It was also suggested that the effects of the preschool teachers' attitude and beliefs on the preschool classroom climate should be investigated.

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ABBREVIATIONS AND ACRONYMS

CBO	Community Based Organizations
DEO	District Education Officer
DICECE	District Centre for Early Childhood Education
ECD	Early Childhood Development
ECDE	Early Childhood Development and Education
ECE	Early Childhood Education
ECERS-R	Early Childhood Environment Rating Scale-Revised
GOK	Government of Kenya
KHA	Kindergarten Headmistress Association curriculum
KIE	Kenya Institute of Education
NACECE	National Centre for Early Childhood Education
NACOSTI	National Commission for Science, Technology and Innovation
NGO	Non-Governmental Organizations
UNESCO	United Nations Educational Scientific and Cultural Organization
WSS	Work Sampling System

CHAPTER ONE

INTRODUCTION

1.0 Overview

This section presents the background of the study, statement of the problem, purpose of the study, research objectives and research questions. Following this is the significance of the study, assumptions of the study, limitations and delimitation of the study. Finally, the chapter concludes by defining the operational terms and outlines the organization of the study.

1.1 Background to the Problem

Classroom climate is the intellectual, social, emotional, and physical environment in which children learn (Ambrose, Bridges & DiPietro, 2010). It is effected by the classroom teacher and depends on teacher characteristics such as the teacher academic and professional qualifications, teacher experience and gender. This study assessed classroom climate in two dimensions; the first observed the cognitive, physical and socio-emotional development of the children using the Work Sampling System assessment tool, the second evaluated the classroom environment across a number of domains using the Early Childhood Environment Rating Scale assessment tool. The classroom climate assessment scores were then correlated with the teacher characteristics. The teacher academic qualifications, training, experience and gender were the most relevant for this study as they formed a blanket criteria applicable to preschool teachers within the public and private domain. The characteristics also served as a comparative tool of assessing the teachers among themselves while correlating them with the classroom climates they create.

A positive classroom climate is characterized by children who support one another, share high amounts of potential influence with one another and the teacher, experience high levels of interaction, function by norms that are supportive of getting work done, recognize and respect individual differences and engage in group play (Bray & Kehle, 2011). The outcome of such a climate guarantees the accomplishment of common goals, fosters positive self-esteem and feeling of security, allows for shared influenced and high involvement in academic learning, and ensures high degree of healthy interactions with one another. On the other hand, a negative classroom climate is characterized by competition, alienation, and hostility that lead to anxiety, discomfort, and intellectual deprivation. Preschool teachers are constantly responding to the different social-emotional needs of the children which are reflected in their attitudes and behavior toward self and others (Schmuck & Schmuck, 2001). Additionally, the quality of social-emotional experiences in the classroom determines the breadth and depth of learning. Managing and constructively channeling these informal interactions and the subsequent attitudinal and behavioral vacillations constitute a teacher's primary task. These includes, but are not limited to, taking care of the physical movements, bodily gestures, seating arrangements, and patterns of verbal and non-verbal communication (McCartney & Phillips, 2011).

Vukelich and Christie (2009) assert that the distinctive marks of an effective preschool teacher, which differ depending on the teacher characteristics, are manifested through activities such as planning for the lesson, class control, seating arrangement, management of time, management of learning resources and management of pupil's records. Positive classroom climate is a mix of class management strategies and interesting teaching approaches that motivate children which enhance the achievement of teaching objectives in a preschool class. To

achieve class control the teacher has to maintain pupils' discipline by setting class rules (Evertson & Weinstein, 2006). A skilled preschool teacher who prepares well for lessons ends up with an effective class and positive results. Good seating arrangement for pupils in a preschool ensures that the classroom is an environment of fun instead of chaos. Effective preschool teachers organize learning materials well ahead of time and keep them within reach to the children as well as to themselves. For the preschool teacher to fully understand pupils well, it is necessary for proper classroom records to be maintained. Time management in a classroom ensures that maximum time is spent on instruction. Managing a classroom of young children is challenging although teachers get the job easier with experience. After spending many years working with children, the experience the teachers gain in managing a class is invaluable even though advanced age-wise (Pianta, Barnett & Justice, 2012).

Duncan (2008) asserts that preschool teacher education is related to the quality of preschool education and the development of children in preschool classrooms. Both general education and specific preparation in early childhood education have been found to predict teaching quality. Better-educated teachers have more positive, sensitive and responsive interactions with children, provide richer language and cognitive experiences, and are less authoritarian, punitive and detached. The result is better social, emotional, linguistic, and cognitive development for the child. The results of the Effective Provision of Pre-school Education (EPPE) study from England have also shown that key explanatory factors for high-quality ECE were related to staff with higher qualifications, staff with leadership skills and long-serving staff; trained staff working alongside and supporting less qualified staff; staff with a good understanding of child development and learning. Higher proportions of staff with low-level qualifications were related with less favourable child outcomes in the socio-emotional

domain (Sylva, Blatchford, Melhuish, Sammons, Taggart, Evans, Dobson, Jeavons, Lewis and Sadler, 1999).

The general conclusion that higher education of ECE staff leads to higher pedagogical quality and, therefore, to better child outcomes is not supported by all studies. Miho, Ineke, and Kelly (2012) emphasise that teacher quality is a very complex issue. There is no simple relationship between the level of education of staff and classroom quality or learning outcomes. They studied the relationship between child outcomes and staff qualifications and found no, or contradictory, associations between the two. They argue that increasing staff education will not suffice for improving classroom quality or maximising children's academic gains. Instead, raising the effectiveness of early childhood education will likely require a broad range of professional development activities and support for staff's interactions with children. An area that can improve pedagogical practices of ECE staff includes supporting staff's competence to communicate and interact with children in a shared and sustainable manner. Sylva et al. (1999) also point out that it is not necessary that all staff have high general levels of education. Highly qualified staff can have a positive influence on those who work with them and who do not have the same high qualifications. The EPPE study finds that the observed behaviour of lower-qualified staff turned out to be positively influenced by working alongside highly trained staff.

Miho et al. (2012) assert that not only the level of education but also the content of the preschool teacher's educational or training curriculum is important for the level of quality in ECE. Specialised education is associated with better child outcomes and improved staff competences to provide suitable pedagogical learning opportunities. Specialisation can refer to any education or training focusing on early childhood education, child development or similar, above and beyond general educational attainments. Initial education and training in areas such as

early child development and early education increase the likelihood that practitioners are effective in promoting the educational, socio-emotional and healthy development of children. The practitioners' ability to create rich, stimulating environments in ECE is jeopardised when staff have inadequate, insufficient or incorrect content and pedagogical knowledge. Jambor and van Gils (2007) assert that when preschool teachers are trained on matters related to early development and care, staff can better develop a child's perspective; are better able to integrate playing and learning into practice; have increased ability to solve problems and develop targeted lesson plans; and have an improved vocabulary, which stimulates early literacy development. Additionally, staff with higher education and specialised training engage in more positive teacher-child interactions including praising, comforting, questioning and being responsive to children.

Saracho and Spodek (2005) assert that ongoing education and training are important for preschool teachers. In order for staff to maintain their professional quality, they need to engage in ongoing professional development. A well-trained practitioner does not only have a good initial level of education but makes sure that the effects of initial education do not fade out. Ongoing professional development has the potential to fill in the knowledge and skills that staff may be lacking or require updating due to changes in particular knowledge fields. This is especially crucial in ECE where new programmes are being developed continuously. The body of research on what works is growing, the discussions on quality in ECE are ongoing, and the focus has changed to a developmental perspective. In-service (ongoing) education and training can be conducted "on the job" or can be provided by an external source, such as training institutes or colleges. It can be provided through for instance staff meetings, workshops,

conferences, subject training, field-based consultation training, supervised practices and mentoring (Sharma, 2010).

Neuman and Dickinson (2011) assert that the key to effective professional development is identifying the right training strategies to help preschool teachers stay updated on scientifically based methods and curriculum subject knowledge so as to be able to apply this knowledge in their work. It also pointed out that it should continue over a longer period of time: preschool teachers should have long-term or regular opportunities for training. Only when learning experiences are targeted to the needs of staff and are true learning experiences with development opportunities can professional development have favourable outcomes. An effective way of improving knowledge and skills is found to be subject training (Miho et al., 2012). Field-based consultation can also be very effective, as it provides preschool teachers with the possibility to receive feedback on their practices. Furthermore, practitioners who do not have a degree, but who attend ECE-relevant professional workshops are found to provide higher quality care than colleagues who do not attend.

In Kenya, the District Centre for Early Childhood Education (DICECE) offers a two year in-service training course for the Preschool teachers (UNESCO, 2005). These courses equip teachers with skills required for managing classes in preschools. The DICECE teacher training programmes are developed at the National Centre for Early Childhood Education (NACECE) based at the Kenya Institute of Education (KIE) in Nairobi (KIE, 2002). For Islamic preschools, there are integrated courses to enable the teachers teach the schools they call Madrassas. Justice and Vukelich (2008) assert that a good foundation during the formative period of the child results in increased achievement in primary education. A preschool foundation can only be built through proper classroom management that fosters positive

classroom climate through the teacher that improves learning of the children. Kenya's teacher training programmes must be of the highest quality to compete favourably with international standards. Kenya has not yet been able to train all its preschool teachers. Statistics from the Economic Survey (2009) shows that there were 78,230 preschool teachers in 2008 and over 25% were untrained. With the increasing enrolment in the recent years, this is an indication that even today there is still a big number of untrained preschool teachers in Kenya (UNESCO, 2010).

Successful implementation of the curriculum should to take into consideration the important role of the teachers/caregivers. They act as facilitators who engage children in multiple experiences to foster their all-round development. According to Saracho and Spodek (2005), teachers observe children to identify their needs and capabilities and move with the pace of the child's development. This involves early identification and intervention for children with special needs. Preschool teachers also plan developmentally appropriate, holistic and challenging activities. They focus not only on planning and conducting activities but also on continuous processes for interaction and relating learning to the child's environment. The teachers also create nurturing and positive relationships with children and among children. They organize supportive learning environment by taking care of aspects such as the arrangement of the physical environment and equipment; the scheduling of activities and events and groupings.

The effectiveness of the teacher on the class climate can be ascertained by assessing the children in the class. Assessment is a process of gathering evidence about children, their development and personal learning styles (Brassard & Boehm, 2008). Each day early childhood educators make decisions about what to teach, how to modify lesson plans, and how best to build on children's strengths and respond to their needs as they arise in the classroom. Quality

assessment provides important information on which to base such decisions, including information that assists with planning instruction for individuals and groups, and preparation of a stimulating and effective learning environment. Quality assessment supports effective growth for individual children, communication with parents, and identification of children who may need special services. Information about assessment and how it can be helpful is essential for early childhood educators. There are various formal and informal types of assessments, guiding principles for selecting the right instrument to meet program needs, suggestions about how to involve and communicate with parents, and samples of informal tools that can easily be implemented in the preschool classroom (Venn & Jahn, 2004).

This study researched on the effects of teacher characteristics on the preschool classroom climate that fosters holistic growth in the children. Benson and Haith (2010) assert that due to the complexity of cultivating an effective classroom climate, it may be beyond the developmental scope of the newly graduated teacher. Furthermore, McLaughlin (2012) asserts that professional development for new teachers should include intense mentoring and teaching partnerships that reduce isolation and form productive and meaningful relationships with others in the school community. While there may be differing views on just how profoundly teacher characteristics influence class climate there is consensus that teacher characteristics play a pivotal role in directing the class climate according to their expertise which subsequently affects the qualitative aspects of the children's growth (Vukelich & Christie, 2009). Ongata Rongai zone has experienced huge population growth in the recent years which has further resulted in the number of preschool children increasing. This has caused the establishment of many private preschools to complement the public preschools. Private schools, driven by profit motive, hire preschool

teachers that are within their budget yet this may sacrifice the quality of preschool care the children are exposed to. Similarly, public preschool have been forced to increase their intake thus increasing the teacher-to-child ratio which affects the classroom climate in the wake of Free Primary Education. This is also coupled with the fact that many parents, being required to pay for preschool in public schools, as it is excluded for the free primary education programme prefer to let their children stay at home and join primary school direct (UNESCO, 2005). A study investigating how teacher characteristics affect classroom climate in the preschools of Ongata Rongai zone had yet to be done and such made the zone a suitable place for this project. It is on the basis of the prevailing circumstances that the study endeavored to investigate the effects of teacher characteristics on the classroom climate of preschools.

1.2 Statement of the Problem

A positive classroom climate not only increases children's readiness for primary school, but also causes positive long-term improvements in participants' school performance and social outcomes. This results in increased rates of high school graduation, motivation for learning and lower rates of behavioural problems (Deiner, 2011). Preschools have the greatest impact on children living in poverty and those who do not speak English at home. School climate that is conducive for children acts like preventative medicine: the initial investment more than pays for itself both financially and socially. The benefits realized in a having preschools environments that facilitate holistic growth in the children underscores the need to determine how the preschool teacher characteristics affect the classroom climate.

A search on how to improve children's performance through child centered efforts continues in a contextual realization that the linguistic, cognitive and social skills that children

develop in early childhood are the foundations for lifelong learning (UNESCO, 2012). For example the study by Wanjohi (2010) found out that Community Support Grants facilitated the infrastructural development of ECDE centres in Kiambu district thus increasing the enrolment and retention of preschool children. A further study done by Githinji (2008) found out that the education level, pre-school training and professional qualifications of preschool teachers played a significant role in shaping preschool teachers perception of the impact of early childhood play activities on the development of social, emotional, cognitive and motor physical skills in the children. A further study done by UNESCO (2005) in Thika, Nakuru and Machakos found out that lack of funding in public preschools in the wake of the free primary education programme led to the loss of teachers. This resulted in primary school teachers with no experience in handling children thus reducing the quality of preschool education. Ongata Rongai town has experienced phenomenal growth in the recent years which has spiked the demand for preschool education. However there is an urgent need for a study ascertaining the quality of preschool classroom climates in order to evaluate the whether the resources allocated to preschool education produce corresponding developmental gains in the children. This study therefore aimed at bridging that gap by bringing to light the effects of preschool teacher characteristics on the preschool classroom climate children in Ongata Rongai zone learn in.

1.3 Purpose of the Study

The purpose of this study was to establish the effects of the teacher characteristics on classroom climate in preschools of Rongai zone Kajiado North District.

1.4 Research Objectives

i. To investigate the relationship between a preschool teacher's academic qualifications and classroom climate.

ii. To examine the extent to which a preschool teacher's training affects classroom climate.

iii. To determine the relationship between a preschool teacher's experience and classroom climate.

iv. To establish the effects of a preschool teachers' gender on classroom climate.

1.5 Research Questions

- What are the effects of a preschool teacher academic qualification on the classroom climate?
- How does the training of a preschool teacher affect classroom climate?
- In what ways does a preschool teacher's experience affect classroom climate?
- How does the gender of a preschool teacher affect the classroom climate?

1.6 Significance of the Study

The research study sought to highlight the influence of the teacher characteristics on classroom climate in preschools of Rongai zone. It also spelt out the importance of the teacher's role in ECD centres. The knowledge obtained may shed some light to ECD officers on the importance of monitoring assessment and evaluation of the ECD curriculum. The preschool teachers may use the information at hand for future planning. The research findings sought to sensitize the Government, NGO's, CBO's and specifically on implementing the ECD policy framework. The study findings were also useful to the teacher trainees, preschool management

committees and parents. The teacher trainees were guided by the study findings to choose the most efficient teacher training programmes. The study findings would also guide the preschool management committees to employ preschool teachers who have the right mix of different teacher characteristics.

1.7 Limitations of the Study

The study used samples collected from a sample population of preschool teachers and headteachers but not all the headteachers and teachers of the centres in the zone. The information was collected the way it was at a particular time. It could be possible that the information was different at other times. The research relied on the information given by the headteachers and the preschool teachers and their own opinions. This generated diverse responses from the same question. The researcher was unable to control the attitudes of the respondents and this may have affected the findings.

Another limitation of the study arose from the fear of teachers which might have affected filling of the questionnaires. The teachers might have feared that the information they gave in the questionnaire about their characteristics and how they managed the classroom climate could threaten the job security. The researcher had to assure the respondents that the information would be treated with confidentiality and would be used for the research purposes only. Since most of the teachers encountered would be females, it is feared that the teachers could have been reluctant to disclose exact ages as many women are. Again, the researcher had to convince the teachers that the information would be treated confidentially. The teachers might also have been tempted to exaggerate their own achievements by overstating actions. The

researcher requested them to be as objective as possible while answering the questions to assure the integrity of the research project

1.8 Delimitation of the Study

The study relied on a few samples of preschools and preschool teachers drawn from the whole geographical area of Ongata Rongai zone that has 48 preschools and 175 preschool teachers. The study therefore excluded a huge proportion of the preschools which may have had a lot of impact of the findings of the study. The study was restricted to the preschools that were easily accessible. This might have hindered the researcher from achieving the correct findings for the whole zone. The setting of the study was urban therefore the findings would not be relevant to rural ECD centres and as such limited the generalizability of the conclusions.

1.9 Basic Assumptions

1. The researcher assumed that the teachers, headteachers and education officers would co-operate in providing the relevant data.
2. The study assumed that the teachers had knowledge of the preschool guidelines for Early Childhood Development in Kenya.
3. The study assumed that the teachers in Rongai zone preschools had a positive attitude of maintaining the classroom climate.
4. The study assumed that the motivation in creating positive classroom climate for all the teachers was influenced by similar variables.

1.10 Definition of Key Terms

Classroom climate: The physical and emotional atmosphere or feelings in a classroom or the intellectual, social, emotional and physical environments in which our children learn.

Early Childhood Education: refers to the formal education given to preschool children. The children are generally between three and six years.

Instructional resources: materials or teaching aids which support the learner in understanding of concepts or ideas presented in a learning environment.

Teacher Characteristics: refers to a teacher qualities that may affect the performance of the teacher. Teacher characteristics include qualification, experience, age and gender.

Untrained teacher: refers to a teacher who has not undertaken any of the teacher training programmes. The teacher has no certificate, diploma or university degree.

Teaching experience: number of years a preschool teacher has taught in preschool.

1.11 Organization of the Study

This study is organized in five chapters, chapter one being the introduction. The introduction addresses the background to the problem, statement of the problem, purpose of the study, research objectives and research questions. The introduction delves into the significance of the study, limitations and delimitations of the study. It further addresses the basic assumptions of the study, definitions of the key terms and the organization of the study. Chapter two of the study reviews the related literature. In the review, the issues of the teacher characteristics and classroom climate are addressed. The teacher characteristics addressed included qualifications, training, experience and gender. The conceptual framework and the theoretical framework are

also addressed in this chapter. Chapter three of the study addresses the methodology of the study. The issues discussed here are the research design, the study population, sampling and sampling techniques, validity and reliability of instruments and data collection. Finally in this chapter, issues of data collection procedures and data analysis are discussed. Chapter four of the study gives the findings of the research. These findings were arrived at by collection and analysis of data. This chapter also discusses the findings of the study. Then chapter five gives the summary, conclusion and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The literature has been reviewed in the following areas namely: instructional methods, teachers' characteristics, teachers' academic qualifications, teachers training and teachers' experience. However literature reviewed from primary and secondary sources was mainly from research findings on the instructional methods used in selected primary schools and teachers characteristics in preschools in Kenya. There is a significant relationship between pupils' performance and teacher age, teaching experience, academic qualification and teacher commitment to school work. Children experience the classroom as not just an intellectual space, but also as a social, emotional, and physical environment (Gordon & Browne, 2012).

Teachers' attentiveness to the intellectual, social, emotional, and physical environments creates a classroom climate conducive to children engagement with the content and skills of the discipline (Ashman & Gillies, 2013). In terms of intellectual environment, teachers provide content in an organized and engaging manner and give children motivating and challenging practice so that they are able to do authentic tasks in the discipline. From the emotional aspect of classroom climate, teachers create an encouraging atmosphere where children feel safe taking risks, receive support when events intrude on learning, and believe they can succeed if they put forth effort. And teachers foster approachable and supportive social interactions with children and among children so that learning is a collaborative and not competitive endeavor. With respect to the physical environment, teachers reduce and remove disruptions and barriers to

learning so that all children can equally access course material. Preschool teachers employ different methods in maintaining classroom climate. The teacher's choice of instructional resources and maintenance of the classroom climate depends on the training background of the teacher. Saracho and Spodek (2005) emphasize that the preschool learning climate should be warm and learners to interact freely. All the learning activities in the preschool curriculum should be centered on play.

2.1 Preschool Teachers' Academic Qualifications and Classroom Climate.

Barnett (2004) asserts that children's learning and development, which thrives in a positive classroom climate, depends on the educational qualifications of their teachers. This is based on research studies done in the US where preschool teachers with a college education have been shown to be more effective. Teacher education was found to be related to the quality of preschool education and the development of children in preschool classrooms. Both general education and specific preparation in early childhood education predict teaching quality. Better-educated teachers have more positive, sensitive and responsive interactions with children, provide richer language and cognitive experiences, and are less authoritarian, punitive and detached. The result is better social, emotional, linguistic, and cognitive development for the child. Higher education was associated with better teaching and better language acquisition. Also, children whose teachers had four-year degrees engaged in more creative activities.

A study done in Scotland by the government that involved 336 preschools in order to ascertain the effects of teacher qualifications on the preschool children found out that when a teacher has a background in early years methodology this contributes to making a positive difference to children's learning whereas the impact on the quality of children's experiences was

less where staff had no higher level qualifications. It also showed that the best experiences for children were found where there was a range of staff with complementary skills and relevant higher level qualifications (Scotland, 2012). It should be recognized, however, that teacher qualifications alone cannot guarantee effective teaching. Poor pay, poor work conditions, classes that are too large, inadequate leadership, and a lack of instructional focus are all problems that can block good teachers and good teaching, whatever the formal qualifications required. However, many studies with a variety of strengths and weaknesses lead to the conclusion that professionally prepared teachers are generally necessary for highly effective preschool education (Barnett, 2004).

In Kenya, low academic levels hinder teachers from understanding and grasping content taught in the training courses they attend. Mambo (1986) and Kabiru (1993) in their research findings on the effects of teachers academic qualifications on the children's achievements noted that low preschool teachers academic grades, were attributed to people's negative attitude towards preschool education so it was deemed not a competitive profession. This further affects the effectiveness of the teacher in creating a positive classroom climate since he/she does not have the necessary skills to deal with the children. Preschool teachers should have high academic credentials in order to equip children with the best skills since preschool education is the foundation of learning. Every person should aspire to get good scores in education to solve the rising problems of illiteracy in Kenya (Gumo, 2003). Kabiru (1993) in a similar study found out that competence of the teacher is based on his/her academic background and that academic background and later training affect children's learning in class. This means that higher academic achievements on the part of the teacher is also an advantage to the ministry of education since such teachers have adequate knowledge base that can be utilized in designing preschool

curriculum that fosters conducive classroom climates. Gumo (2003) regards teacher's academic qualification as playing a very vital role on the children's achievements.

2.2 Preschool Teachers' Training and Classroom Climate.

How the teachers are trained will also affect the type of classroom climates they create. An instance of this is seen in preschools in Japan where the curriculum is less structured and teacher-focused than in many countries. Preschool teachers are trained to create a classroom climate many external observers have found them chaotic by the standards of many other countries. The training of preschool teachers reflects a belief that children should develop their own ability to interact with each other and learn consequences of behavior without excessive adult intervention. Wray (2008) asserts that the curriculum in Japanese preschools had traditionally had a fairly academic focus, with children expected to learn basic math and reading skills. This has recently been revised, however, to emphasize less academic areas, including health, human relationships, the environment, language, and expression.

Preschool teachers in Italy are trained using innovative techniques such as the Montessori method or Regio Emilia approach which were developed within the country. Preschool teachers trained in the Montessori philosophy create a classroom climate that is characterized by an emphasis on child independence, freedom within limits, and respect for a child's natural psychological development and is transacted through specialised sensorial material (Schmidt & Schmidt, 2009). The classroom climate within this approach is built on the belief that children are highly capable learners who need minimal teacher input to learn from their environments. Classrooms have children of mixed ages; the arrangement of learning materials encourages child autonomy in choosing learning tasks and experiential learning. Preschool teachers trained in the

Regio Emilia approach create a classroom environment that engages them continually process of learning about young children through careful observation of the children. The teachers then reflect together on what they have learned and use this as a basis for future activities intended to expand on initiatives of the children themselves. In this way, the Reggio Emilia approach bases its success not on formal curricula, but on an approach to educating children that gives the children themselves a significant role in determining classroom activities (Sacks & Ruzzi, 2005).

Preschool teachers are also trained on the importance of seating arrangements which will influence the classroom climate they create. In the United Kingdom, preschool teachers use seating arrangement as a tool to regulate classroom climate; a carefully planned seating arrangement acts effectively in preventing behaviour problems before they occur. Assigned seats help teachers assert authority by enabling the teacher to separate rowdy children or pair up children who could help one another in group assignments. Seating in straight rows is used by some of the teachers where children sit in rows facing the front and is suitable the days when the children have to take a test or when the teacher needs to minimize interaction between the children (Swanson, 1978). Some teachers arrange desks in clusters or groups. This type of seating encourages collaboration. However, if not attentively monitored by the classroom teacher, it can lead to excessive talking and lack of attention to instruction from the children. Teachers use half-moon or U-shaped arrangements that work well for classroom discussions thus facilitating greater child to child interactions.

Kabiru (1993) and Mambo (1986) suggested that training helps in performance. It helps teachers to understand what to teach. Training is therefore important to equip trainee teachers with relevant skills and knowledge in order to create effective classroom climate. The training should include highly organized bodies of knowledge which include paedocentric approaches

that are highly suitable for stimulating learning approaches. Gumo (2003) added that a teachers training forms the greatest and most enduring force of his/her personality and character which further determines how he/she handles the children in the class. It is therefore important for every teacher to be conscious of his/ her responsibility in the class and the whole school program, if the training received is going to be effective in enhancing children's performance in learning activities. In addition, Sifuna (1977) viewed college training programmes as avenues to equip the teacher with the necessary knowledge, skills and attitudes in handling individual problems among children in order to impart them with appropriate knowledge and skills. He advocated for a good training programme that will help the teacher in successful teaching where he/she will employ group activities during learning to enhance a healthy classroom climate and also cater for individual needs, interests and abilities of each learner.

2.3 Preschool Teachers' Experience and Classroom Climate.

The experience of the teacher which is correlated with his/her age also affects the type of classroom climate he/she creates. A phenomenographical study done in Sweden that involved 20 preschool teachers found out that the age of preschool teachers determined the kind of classroom climate they would create for the children to engage in play. Older preschool teachers had the idealized view that saw the play of children based on their own play from childhood. They related play to "the child as nature"(Sandberg & Samuelsson, 2003). In this view, play is perceived as an expression of children's inherent need to express themselves through play-something that is natural and needing an outlet (Brown & Taylor, 2008). The preschool teachers tended to concentrate on circumstances that pointed out that play is not the same today, and they used their own childhoods as a norm for what should be seen as natural. They claimed that one

way to develop children's play is to limit the children's use of toys in preschool. Implicitly, they expressed that children's play used to be better in those days when children did not have as many toys as they do today, because they believed toys prevented children's natural fantasy. Young preschool teachers held the pragmatic view who believed that children's play today is no different from the kind of play that they engaged in when they were children. They regarded children's play as an expression of culture, something that is constituted and created within the culture and therefore appears differently in different periods of time and in different societies. Preschool teachers who held this view recognized themselves in the children's games (Sandberg & Samuelsson, 2003). They reflected upon themselves and exhibited a better understanding and awareness of the impact that play has on children's development. Furthermore, they were open to new perspectives. The teachers create a classroom climate that holds children as co-creators of culture and knowledge, and themselves as co-constructors of culture and knowledge.

Experienced teachers do not deal with problems; they prevent them from occurring. In Kenya, preschool teachers use class management skills to instill discipline in pupils which creates a conducive classroom climate. These skills are sharpened by experience on the job over the years and an experienced teacher is more likely to be better organized than an inexperienced one since “practice makes perfect”. However, the teachers need to set up some simple principles which they can employ to maintain effective discipline in classrooms. A skilled teacher who employs proper management techniques in a preschool classroom ends up with an effective classroom climate that brings positive child developmental results. Experience depends on what one had acquired earlier, and how one applies it to new learning. Studies conducted by Bandura (1977) and Gumo (2003) on the above explanation suggested that a teacher with many years of teaching experience has learnt more on the job and is able to make

comparisons, inter-relationships which enhance refinement on what they already know. This would make a more experienced teacher better to choose a variety of teaching approaches and the learners feel that the classroom climate is friendly and suitable for all. Anderson (1994) advocates for teachers experience in terms of length of service and interaction between children and the community as a base for responsibility in ensuring children progress and success in school. Experienced teachers value parents visits to schools, since it is an opportunity for them to share experiences on how individual children progress in their class activities. The parents discuss success and challenges faced and collectively seek to provide remedy since the teaching profession goes beyond the classroom walls and the school. Sifuna (1997) in support of Anderson (1994) emphasized that an experienced teacher should ensure that children with professional parents, those from broken homes and those with learning difficulties should be taken care of equally and without any discrimination. Experienced teachers are also concerned with factors out of school, since they affect children's personal, social and educational welfare at school.

As a teacher characteristic, experience is very important in management of time. For a teacher who has been on the job for years, time keeping will naturally be embedded in the mind even when the teacher has no time keeping instruments to employ. Thus an older teacher is likely to "time" events better because one will have been through these activities for many years. Age therefore may be one teacher characteristic that plays a positive role in time management. Proper time management in a preschool classroom leads to effective learning in class. Venn and Jahn, (2004) point out that time management techniques and strategies have implications for running a classroom. Time management techniques have great implications for learning in preschools and if implemented well, can go a long way in creating a classroom climate that optimizes the time

spent on instruction. If not, time spent on instructions is minimized implying that learning will be minimal. Time management is the thread running through almost all aspects of teaching; organizing the day, organizing the classroom, deciding how long and how often to teach various subjects, recording pupils' progress or keeping time consuming behaviour problems to a minimum.

2.4 Preschool Teachers' Gender and Classroom climate

Early childhood education remains one of the most gender-skewed occupations in many Western countries. The rates range from 1% - 4% in most countries and 8% in countries such as Denmark and Spain (Tsigra, 2010). These percentages indicate that the relation between the above profession and gender is strongly structured. A study in Greece found out that the presence of preschool male teachers creates a classroom climate that contributes to the construction of children's gender in a direct, active and experiential way, through teaching practices that they use, or indirectly, by exposing children to different versions of masculinity. This is especially that case where the male preschool teacher covers an emotional void in children's lives as a result of the absence of fathers at home, either because of a divorce, separation, single-parenthood or because of long working hours. Male teacher as the 'absent father' could provide positive male figures, particularly for boys, as they induct boys to masculinity. The study also argued that the presence of a male teacher in the classroom and in the schoolyard contributes to an increase in discipline and to a decrease in the frequency of behavioural problems (Watson & Woods, 2011).

A study was done in England to evaluate the effects of the gender of the teacher on the development of children. The study involved 307 children where half of the children were taught by males and the other by females. The interviews conducted asked children to focus on their teachers and how they view and interact with them. They were also asked about personal role

models they'd like to emulate in order to see any patterns. The interview process yielded that only 11% of girls had male role models while only 8% of boys had female role models. Most girls related to strong female role models while boys did the same for strong male role models. The findings support the fact that gender, regardless of how one looks at it, does matter. Children are aware of who is at the head of the classroom. Children are learning through observing. Through males and females, individuals learn about gender-appropriate belief patterns, personal preferences, abilities, personality traits, and ego (Ewing, 2009).

The Economic Survey done in 2009 show that Kenya had 10089 male preschool teachers which constitutes about 15% of the entire teaching staff of preschools in 2008 (UNESCO, 2010). This shows that male preschool teachers are more common in Kenya than in many Western countries. It should be noted that the issue between having male or female preschool teachers is not about showing who are more effective rather it is about creating a conducive classroom climate suitable for the contemporary needs of the children thus with the increase in the number of single-parent homes where the father is absent one would expect that a greater number of male preschool teachers would to some degree fill the emotional void within the children. This does posit that male preschool teachers are the panacea for this need rather that they meet the unmet needs of the child to some extent. Men and women are different by nature but having male and female preschool teachers within a school creates a more conducive school and classroom climate rather than having women only.

Finally, there is support from several theorists that discuss the implications that come with the lack of male teachers at a young age. One theorist, Vygotsky discussed the important role that school interactions plays on a child's cognitive development. Vygotsky suggests school learning is largely informed by the interaction between the domains of the home and the school

(Bayley & Schecter, 2003). According to Vygotsky, school is where children "receive their primary conceptual and learning orientations. Finally, he asserts that regardless of cultural background, the most effective school learning occurs when learning assumptions in the home, or "spontaneous" conceptual domain, are meaningfully connected to the assumptions encountered in the school, the "schooled" conceptual domain". Children are learning and growing and the lack of male teachers, whether positive or negative, has an effect on what they are observing.

2.5 Theoretical framework

This work is based on the Constructivist theory as postulated by Piaget. This will be an attempt to establish the relationship between teacher's characteristics on effectiveness of maintaining the classroom climate. If a person engages in certain performance or does because one is motivated to do so performance is related to learning and motivation. In this study it is assumed that teachers will have attained a certain degree of learning in classroom climate through training, experience and academic qualifications. The theory also points out that performance of the preschoolers depends on motivation of well-maintained classroom climate should act as reinforcement for learners. Reinforcement is a form of motivation that includes learning resources which creates a lot of motivation (Isbell & Raines, 2012).

The key proponent of constructivist approach is Piaget which emphasizes that the child is not simply a passive organism that responds to any stimuli that occurs, but is an active organism. The activity of the child to learn more of the subject matter presented increases as he progresses through the different stages of cognitive development. Therefore when a teacher decides to use learning resources of teaching, he has to take into account the learner's stage of cognitive

development, if the learners are going to benefit from them. There is also the implication that some learning resources are better adapted than others in the presentation of subject content, to individuals of varying stages of cognitive development (Sigelman & Rider, 2010). The teacher also empowers the children to interact with the environment so that they construct knowledge and get meaning from it. Children have their own perspective of the world which they need to explore. To broaden this perspective they need to interact with other children in a friendly environment where they are provided with stimulating materials in order to explore, manipulate and construct knowledge. The teacher's role is researching on children's experiences and to provide opportunities to explore the environment, he/she should use concrete materials from the children's environment while teaching so that they interact with familiar experiences. Use of familiar multisensory materials helps children to build and refine ways of making sense of their experiences that help them to naturally unfold their potential. Piaget also adds that the teachers should also plan activities for learning that have problems for children to solve as this makes them responsible and better problem solvers (Venn & Jahn, 2004).

Constructive learning makes children active searchers of their knowledge, they take responsibility of their learning which aids in their scaffolding. In turn, this helps them to acquire higher level skills and enhances their social learning especially through interaction with each other. Intellectual development in Piaget's theory is further determined by two main interactive factors, which are maturation and experience. The application of Piaget's theory to education in Kenya's formal schooling is based on timing readiness, Curriculum content (what to teach) and teaching strategies (how to teach). The teaching strategies are more than what the Curriculum has in order to affect the intellectual development (Gallagher, 2002).

Piagetian concept of teaching strategies have more advantages over other strategies in the sense that the children are active, purposeful goal seeking and continuously interact with the environment. Here they have need for concrete manipulation of materials during the learning process. Piaget's view of spontaneous development impact on how the children learn about themselves and the environment as they use practical experiments. This kind of learning is the basis for development of intelligence and is opposed to the psychosocial development in which the child receives everything from outside. Therefore the Piagetian approach is based on self-discovery, peer interaction, experience, sharing and self-independence which are a departure from egocentrism to sociocentrism. In support of Piaget, Dewey affirms that to achieve the above, the teacher should provide the child with opportunities for exploration, knowledge construction, discovery and critical thinking. He summed up a classroom climate with the words that, a classroom climate should be experimented in order to help children discover information. The education given to the children should be functional and useful for future life. It should also be instrumental based on the child's experiences. Therefore teacher characteristics are key in facilitating how children construct knowledge for higher level achievements, independence and self-actualization (Fu & Stremmel, 1999).

2.6 Conceptual framework.

The conceptual framework is based on the relationship between the independent variables which are the teacher characteristics and the dependent variables which is the classroom climate. After the process of teacher and children interaction which is determined by teacher characteristics, classroom climate is achieved as the output. Preschool classroom climate has influence on the performance of preschoolers. In a well-managed classroom, the teacher

manages time well, professional records are kept and the pupils discipline is maintained. Lessons are prepared in advanced learning resources are well organized. Well organized sitting arrangement enables the teacher to access the learners for individual attention.

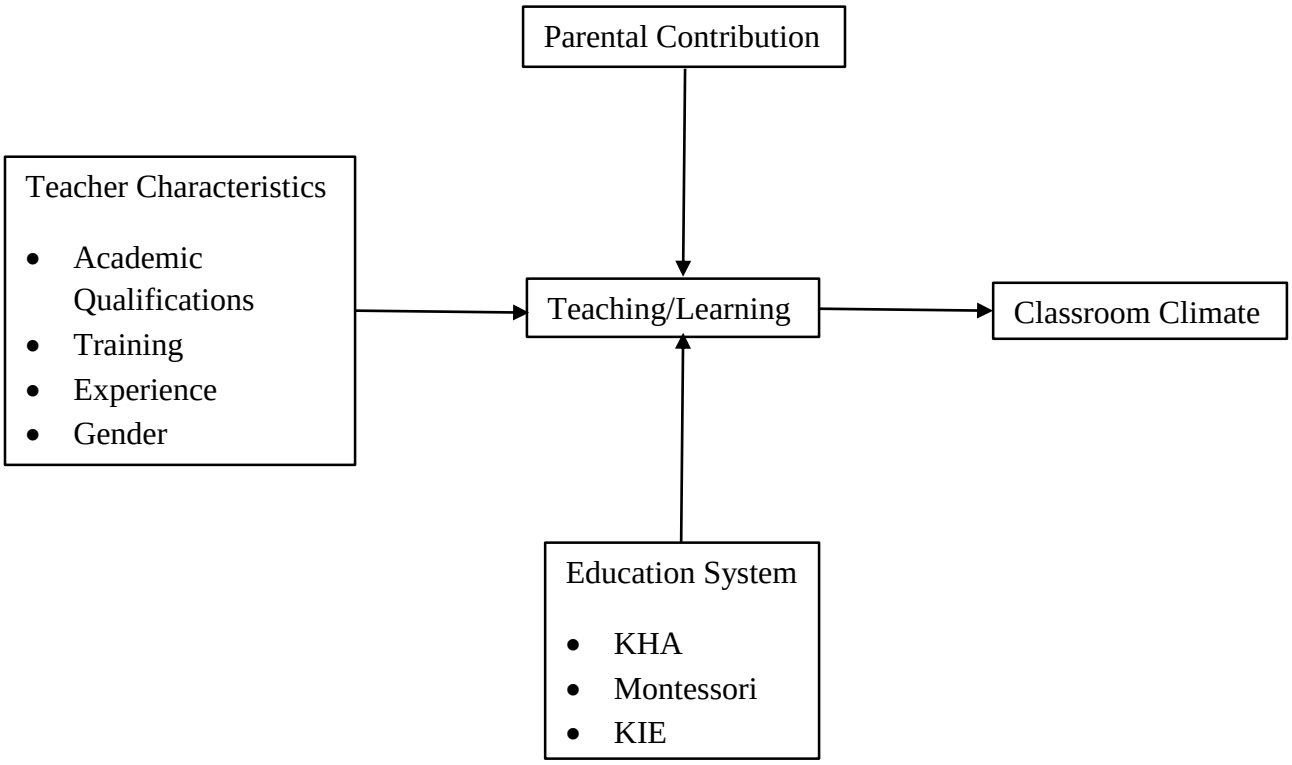


Figure 1: Conceptual Framework

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The issues discussed here are the research design, target population, sample size and sampling techniques, research instruments, validity and reliability of the study, data collection procedures, data analysis techniques and data presentation procedures.

3.1 Research design

Kothari (2004) defines research designs as the blueprint for the collection, measurements and analysis of data. This study used Descriptive Research Design. Descriptive Research design was used because it detailed how teacher characteristics influence the class climate. Descriptive design was suitable since it is used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification. It was also intended to produce statistical information about aspects of education that interest policy makers and educators. Data was collected by means of questionnaires, an observation schedule and an interview schedule for the headteacher. The design is useful when trying to describe the relationship between variables that cannot be manipulated (Ary, Jacobs & Razavieh, 2010). The variables in this study were on teachers' academic qualifications, training, experience and gender all of which cannot be manipulated. Based on this, the study sought to examine the effects of teacher characteristics on classroom climate.

3.2 Target Population

Population is defined as any group of people, observation or test in which the researcher happens to be interested. According to Kothari (2004) target population of a study is defined as all the members of real hypothetical set of people, even or objects to which the investigator wishes to generalize the results of the study. The study targeted 13 public preschools and 35 private preschools with an enrolment of 4003 children and 175 teachers in Ongata Rongai zone (Uwezo, 2012).

3.3 Sampling Techniques and Sample Size

Mugenda and Mugenda (1999) defines sample as a small group obtained from accessible population. Each member in a sample is referred to as a participant. Stratified random sampling was used to select preschools. This method involves a process of stratification of segregation of the population in homogenous groups (groups with the same characteristics). This is then followed by random selection of subjects from each stratum. The population is first divided into mutually exclusive groups that are relevant and appropriate and meaningful in the context of the study.

According to Mugenda and Mugenda (1999), 20% to 30% of the population is adequate, however, the larger the better. The research incorporated samples for the preschools, teachers and children used in the observational schedule. There are 48 preschool centers in Rongai zone, 13 are public and 35 private. The population was divided into strata, such as public and private preschools, from which 30% of each strata was obtained through random sampling using lottery method 4 public preschools and 10 private preschools giving a total of 14

preschools. The random sampling was done without replacement. It involved writing the names of teachers both in public and private preschools on pieces of paper put them in different containers. Use of this technique ensured that there was a chance of producing a sample that represented the population in every characteristic under study. It was also used to represent the entire population for the following reasons; it was representative, reliable and help to reduce sample error.

Use of stratified random sampling is advocated for by Mugenda and Mugenda (1999). They assert that the possibility of taking biased samples can be reduced in random sampling. Preschool teachers in each of the selected preschools were divided into two strata for male and female preschool teachers. Purposive sampling was used in each of the selected preschools to select 3 preschool teachers with preference being given to the male preschool teachers due to their scarcity. Three teachers per school resulted in 42 teachers being used in the study. The researcher then proceeded to carry out random sampling in the classes of the selected teachers to choose ten children who were assessed across various developmental domains. Thus a total of 420 preschool children were used in the study which represented 30% of the target population.

3.4 Research Instruments

The study adopted two data collection instruments/methods as follows:

- Observation schedule with Checklists
- Questionnaire

3.4.1 Observation Schedule

The researcher used two assessment tools to seek information on the effects of the teacher characteristics on classroom climate. The first was the Early Childhood Environment Rating Scale-Revised. The ECERS-R is a widely known tool used in child care research and quality enhancement as a measure of the global quality of a classroom (Harms, Clifford & Cryer, 1998). ECERS-R has 43 items which are divided into 7 subscales. These subscales are space and furnishing, personal care routines, language and reasoning, activities, social interactions, organisation and routines, adults working together. Each item is rated on a 7 point scale with 1 indicating inadequate quality, 3 indicating minimal quality, 5 indicating good quality and 7 indicating excellent quality. Within the items, written descriptions of criteria (called indicators) guide raters in selecting the appropriate numerical score. An overall quality composite is computed from these dimensions. The criterion for inclusion in this study was that the measure assesses teacher-student interactions in the classroom. The interactions subscale of the ECERS-R includes items that measure the level and quality of adult supervision of various activities, use of appropriate discipline, staff-child interactions, and interactions among children. For the purposes of this study, the adults working together subscale was left out as it did not directly affect the teacher-child interactions in the classroom.

A modified version of the Work Sampling System was the second assessment tool used in the study. It was used to evaluate the development of the children within the various classes where the teachers had been assessed. This was done in order to ascertain whether the classroom climate a particular teacher created affected the growth of the children in various domains. The Work Sampling System (WSS) is an authentic, performance-based assessment that provides teachers with a framework to strategically observe and document their childrens' skills,

knowledge, behaviors and approaches to learning. Children's development is considered across seven domains namely: Personal and Social, Language and Literacy, Mathematical Thinking, Scientific Thinking, Social Studies, The Arts and Physical Development and Health. For the purposes of this study, five domains were used thus leaving out scientific thinking and social studies which did not feature strongly in the curriculum of the schools visited. Each of the domains was rated in three categories; 'not yet', indicated that a child could not demonstrate the skill or knowledge represented by a performance indicator; 'in process', indicated that the skill or knowledge represented by a performance indicator was intermittent or emergent, and was not demonstrated consistently while 'proficient', indicated that the skill or knowledge represented by a performance indicator was demonstrated consistently, and was firmly within the child's repertoire (Brassard & Boehm, 2008). Overall means were calculated for individual domains, and for total score. This method was used to demonstrate the children's proficiency. Proficiency ratings were calculated by recording the means in the following manner; Proficient meant that the checklist had no "1: not yet", and more "3: proficient" than "2: in process"; In Process meant that the mean scores ranged from 2.0 – 2.5 and included means above 2.5 if there was a "1: not yet" in the checklist and lastly not yet meant that the mean score is below 2.0.

3.4.2 Questionnaire

Kothari (2004) is of the view that a questionnaire is widely used in research since it gives similar or standardized questions to the respondent. It helps to compare responses from different respondents on the same questions. The instrument guarantees anonymity to respondents hence encourages honest responses, which can lead to increased reliability of the instrument. There was two types of questionnaires used; one was for the headteachers while the other for the teachers.

Questionnaires for headteachers was divided into two sections; the first section regards specific information about the school while the second section has close-ended questions on managerial aspects of the school oriented towards the effectiveness of the teachers. The questionnaire for the teachers has three parts. Part I of each questionnaire gave demographic characteristics by collecting data on gender, age, teaching experience, employment status, educational level, professional qualification, type of institution and so on. Part II has structured questions while part III has open-ended questions.

3.5 Reliability

Reliability is a measure of the degree to which research instrument yields consistent results or data after repeated trials (Mugenda & Mugenda, 2003). In research, reliability decreases as random error increases and vice versa. Random error is the deviation from a true measurement brought about by factors that have not effectively been addressed in the research. This error may be due to unknown reasons. In this study the researcher is intending to minimize random error by avoiding ambiguous questions in questionnaire, while conducting the interview the researcher also avoided bias questions and observations.

Reliability of measurements concerns the degree to which a particular measuring procedure gives similar results over a number of repeated trials. It also refers to the consistency of an instrument to yield similar results at different times. The researcher used test re-tests method in order to establish the reliability of the instruments. Test re-test method is applied where a test is given to respondents then after some time given again, gives the same results.

Before using observational rating scales in research it was necessary to establish inter-observer agreement. Each centre was observed and rated over the course of a whole day. At the end of the day the two observers who had independently scored the ECERS-R compared their scores on the same observations. Hence reliability was established for two instruments in 14 preschool used in the study. The reliability for each pair of observers was computed on the basis of: a) where each observer scored exactly the same point on a scale (% exact agreement) b) a Kappa value was computed. Kappa is a statistic which measures the degree of agreement between two observers while allowing for the level of 'chance' agreement. The Kappa statistic is computed by the following formula:

$$\text{Kappa} = \frac{Ro - Rc}{1 - Rc}$$

Where Ro = proportion agreement observed

Rc = proportion agreement that would occur by chance

Kappas of 0.50 and higher are considered good. The reliability figures for study were Kappas 0.81 to 0.91. These figures were comparable with reliability figures in other studies using ECERS and indicate good quality observational data in this study. The reliability of the Work Sampling System was examined by Cronbach alphas and correlations. A subscale score was created for each of the five domains by summing the individual items of that domain. A total score for the developmental checklist was then computed by adding the five subscale scores. The Cronbach alphas indicating the degree of internal consistency ranged from .87 to .94 demonstrating the high internal reliability of the checklist.

3.6 Validity

Validity of the instruments represents the degree to which a test measures accuracy and relevance of inference made based on research results (Mugenda and Mugenda, 2003). In this study the researcher compared the data collected from the instruments used. Conclusion was based on whether the results from the tools used yielded similar results. To establish the content validity the researcher prepared all the three research instruments with the help of the supervisor. Pre-test was also done in order to assess the clarity of the instruments items so that they could be improved or discarded.

Construct validity for the ECERS-R and WSS assessment tools has been demonstrated in previous studies through its agreement with professional judgements and predictive validity through the results of child outcome measures applied to the 'graduates' of higher or lower quality provision. Discriminant validity has been based on the ability of the items to distinguish between classrooms of varying quality which were assessed by trainers/experts.

3.7 Data Collection Procedures

The researcher sought for a permit from the Ministry of Education. The researcher notified through writing to Rongai zonal education officers about the intended research. Secondly upon arrival at each randomly selected preschool the researcher reported to the headteachers. Thirdly the researcher reassured the participants that their confidentiality would be maintained. Observation of the activities in a classroom climate would be done in the relevant schools.

3.8 Data Analysis Techniques

The researcher went through the teachers' responses to the questionnaires to ascertain that all questions were completely answered. Data was analyzed in relation to the research objectives and questions. Analysis was also done on interview schedule in line with the research objectives and questions. Results from the observation schedule were analyzed using percentages, frequencies and conversational interviews. The researcher organized all the instruments to facilitate analysis in descriptive statistics, frequencies and percentages which was used to present data in tables. The data was presented using comparative bar graphs. Content analysis was used to elicit responses from teachers on all the independent variables under study.

3.9 Ethical Considerations

To take care of ethical considerations, the researcher ensured that complete confidentiality of the identities of the respondents collected. This was done by not revealing the identities of the respondents. Secondly, the researcher respected the respondents' decisions on what information to give. In this case, the researcher did not coerce the respondents to give certain information or doctor their feedback. Thirdly, the researcher avoided cases of plagiarism by ensuring that all data obtained from secondary sources was acknowledged herewith. Fourthly, the researcher ensured that respondents were free to participate in the study. Finally, the researcher was more than willing to share or give feedback of the research findings to the respondents.

CHAPTER FOUR

4.0 Data Analysis and Findings

This chapter presents the results of the analysis, interpretation and discussions of the findings. The presentation was done based on the research questions and the objectives of the study. The purpose of the study was to evaluate the effects of teacher characteristics on the preschool classroom climate. A combination of quantitative and qualitative techniques was used in the collection of data. The findings were descriptively presented arithmetically in various sections.

4.1 Questionnaire Return Rate

The questionnaires used in this study were administered to headteachers and preschool teachers. There was also an observation schedule which was in the form of two assessment tools that were used to observe the teacher-child interactions in class and the development of the children across various domains. Among the questionnaires administered none was left incomplete neither was there a research participant who declined to fill and complete the questionnaire administered. Hence the questionnaire return rate was 100%. The return rate is summarized by Table 1.

Table 1 Questionnaire return rate

Questionnaires	Number Administered	Number Returned	Return Rate
Headteachers	14	14	100%
Preschool Teachers	42	42	100%
Total	56	56	100%

4.2 Demographic Information

The demographic profile provides information about the population structure and helps create a mental picture of the subgroups that exists in the overall population. Researchers obtain demographic information from the study subject to understand simple characteristics and to determine if samples are a representative of the population of interest (Kirton, 2000). Although demographic variables cannot be manipulated, researchers can explain the difference between them and dependent variables. In this study, the researcher sought to determine respondent's characteristics by establishing their gender, professional qualification and work experience.

4.2.1 Respondents' Demographic Data

Demographic information was based on gender, academic qualification, training level and the length of stay of the respondents in the preschool. The demographic data of the respondents was analyzed by use of quantitative analysis while descriptive statistics were used to analyze data pertaining to the four objectives of the study. The data was presented using percentages, frequency distributions and mean scores. The information is presented and discussed as per the objectives of the study.

4.2.2 Academic Qualifications of the Respondents

To ensure that there is quality education in ECDE centres the government has established NACECE and DICECE for the purposes of in servicing teachers. According to the Service Standard Guidelines (Republic of Kenya, 2006), an ECDE teacher should possess at least a certificate in ECDE. This is offered by the government or any other institution authorized by the government. For one to be eligible to enroll for a certificate course in ECDE one must have a minimum qualification of a D plain in KCSE or Division 4 in KCE

(O'Level). This study therefore tried to find out the actual qualification of the teachers in the ECDE centres under study. The Table 2 shows the academic qualifications of the teachers in the centres under study.

Table 2 Academic qualifications of the preschool teachers

Qualification	Number of Teachers	Percentage (%)
KCPE	6	14
O-Level (KCSE, KCE)	36	86
A-Level	0	0
Others	0	0
Total	42	100

The Table 2 above shows that 36 (86%) the ECDE teachers in the centres under study had secondary school certificates showing that the majority of them had met the requirement of being ECDE teachers. The results are indicative of the fact that most of the teachers in the sample were trained (74%) since the high school certificate enabled them to further acquire a diploma or certificate in early childhood. All the teachers with the primary school certificate were found in the private preschool which constituted the major part (71%) of the sample. This could be due to the fact that little regulation of preschool education standards is enforced in the private institutions as opposed to the public institutions where preschool teachers not only have the secondary school certificate but also certificate or diploma in early childhood.

4.2.3 Training of the Preschool Teachers

This refers to the level of training the preschool teachers have had ranging from having a Certificate in Early Childhood Education to a Master's degree. Initial education and training in areas such as early child development and early education increase the likelihood that

practitioners are effective in promoting the educational, socio-emotional and healthy development of children. The practitioners' ability to create rich, stimulating environments in preschool education is jeopardised when staff have inadequate, insufficient or incorrect content and pedagogical knowledge. When trained on matters related to early development and care, staff can better develop a child's perspective and are better able to integrate playing and learning into practice (Samuelsson, 2009); have increased ability to solve problems and develop targeted lesson plans; and have an improved vocabulary, which stimulates early literacy development. Additionally, staff with higher education and specialised training engage in more positive teacher-child interactions including praising, comforting, questioning and being responsive to children The more advanced the training a preschool teacher has received the more exposure he/she had had to various teaching techniques as espoused in methods such as Montessori or the Regio Emilia approach. This would have an effect on the kind of classroom climate the preschool teachers would create for the children. The findings are summarized in Table 3.

Table 3 Training of the preschool teachers

Training	Number of Teachers	Percentage (%)
Untrained	15	36
Certificate	18	43
Diploma	9	21
Bachelor's Degree	0	0
Master's Degree	0	0
Total	42	100

The results show that 36% of the sampled teachers were untrained while 43% had Certificates and 21% had Diplomas. The findings point out that the classroom climate created by such a variety of teachers was not be uniform and thus influenced the growth of the children.

This could also be explained by the fact that private preschool formed a huge proportion of the sampled schools since they predominate the area under study. The profit motive which drives these private establishments makes owners resort to untrained teachers who are paid less than trained teachers thereby reducing the quality of preschool education.

4.2.4 Experience of Preschool Teachers

The experience that a preschool teacher has affects the kind of classroom climate he/she creates due to getting accustomed to handling children. The findings are shown in Table 4.

Table 4 Experience of the preschool teachers

Experience	Frequency	Percentage(%)
0 – 5 years	21	50
5 – 10 years	9	21
10 -15 years	8	19
Over 15 years	4	10
Total	42	100

According to the findings in shown in the table above, 21% of the respondents had served between 5 – 10 years while 19 % had served for 10 – 15 years. Those who had served for the shortest period comprised 50 % while those who had served for the longest period made up 10 % of the sampled teachers. This shows that preschool sector does not have a high rate of job retentivity thus most teachers opted to teach for a while as they sought better opportunities. This could be attributed to the low pay preschool teachers get both in the private schools included in the study and the public schools where the parents pay the teachers since the Free Primary Education does not cater for the preschool stage. The results confirm studies done by UNESCO in Machakos, Nakuru and Thika to evaluate the state of preschool education in the

wake of Free Primary Education which found that the pay of preschool teachers in public schools fluctuates each month depending on the level of contribution from parents rendering their jobs unstable (UNESCO, 2005).

4.2.5 Gender Representation

The study sought to establish how the sample population of teachers was distributed by gender. By comparing the males and females distribution of the sample population, it would be possible to establish whether gender difference exist in the composition of the sample population. The results of ECDE teachers are given in the Table 5.

Table 5 Gender representation of the preschool teachers

Gender	Frequency	Percentage (%)
Male	9	21%
Female	33	79%
Total	42	100%

According to the findings in the table above, majority of the ECDE teachers were female 33 (79%) while the rest 9 (21%) were male. This shows that there was gender disparity among the study subjects in favour of females in the ECDE field. According to Republic of Kenya (2006), attainment of equity and equality of all people, is a core development issue and a goal in its own right. The government of Kenya has developed a Gender and Education Policy Frame work, which provides a comprehensive frame work of the principles and strategies to be pursued in order to achieve gender equity and equality. It also acknowledges ongoing initiatives in bridging the gender gap in the Education sector and identifies special measures that the government and other education stakeholders should take to redress the identified

gender inequities and inequalities (Republic of Kenya, 2006). From the study it is evident that administration of preschools needs serious attention. This issue should be addressed with urgency by the stakeholders in the education sector and the government in order to try to achieve the national goal of equality.

4.2.6 Attendance of In-service Training

The question sought responses on whether headteachers organized in-service training for thee preschool teachers. It also sought the response of the preschool teachers on whether they attend any in-service training. The responses are as summarized in Table 6.

Table 6 Attendance of in-service training

Category	Respondents	Preschool Teachers		Headteachers	
		No.	%	No.	%
Private	30	6	20	2	20
Public	12	0	0	0	0
	42	6	14	2	14

Data from the table revealed that public preschools did not organize any in-service training for the preschool teachers while only 20% of the private preschools organized in-service training for their teachers. This is the case in public preschools since they are funded by parents who are reluctant to pay more for the training of teachers. Private preschools also do not see any great need for training the teachers while on the job for it would necessitate employing more teachers who would take up the positions of those undergoing training. Being a business run on the premise of minimizing costs in order to maximize profits, private preschool administrators shun away from in-service training seeing it as an extra cost with little monetary returns. This has affected the kind of classroom climate the preschool teachers create since ongoing professional development is needed for preschool teachers to maintain their professional quality.

Miho et al. (2012) assert that a well-trained preschool teacher does not only have a good initial level of education but makes sure that the effects of initial education do not fade out. Ongoing professional development has the potential to fill in the knowledge and skills that preschool teachers may be lacking or require updating due to changes in particular knowledge fields. This is especially crucial in ECE where new programmes are being developed continuously. The body of research on what works is growing, the discussions on quality in ECE are ongoing, and the focus has changed to a developmental perspective.

4.2.7 Availability of Instructional Resources

The question sought responses on whether preschool teachers had adequate instructional resources while teaching which facilitated the process of leaning for the children as well aided the process of content delivery. The responses are as summarized in Table 7.

Table 7 Availability of adequate instructional resources

Category	Respondents	Preschool Teachers	
		No.	%
Private	30	24	80
Public	12	4	33
	42	28	66

Data from the table reveals that private preschools were better equipped that public preschools. Majority (80%) of the private preschools provided adequate instructional resources the teachers while only 33% of the public preschools had adequate instructional resources. Private preschools devote more money on providing learning resources since they also charge more while public preschools are funded by parents of limited economic means. Indeed that they even pay for preschool is a sacrifice in itself for once their children progress to primary school they are not required to pay anything. The Headteachers further revealed that the government provides only

minimal funds thus imposing constraints on any acquisition of learning resources. This further affected the kind of classroom climate the teachers created in the classrooms for it is not enough to be a skillful teacher, having instructional resources facilitates the process of teaching thus creating a conducive learning and interactive environment.

4.2.8 Attendance of Seminars and Workshops

The question sought responses on whether headteachers had their preschool teachers attend any seminars and workshops organized by DICECE as part of the ongoing professional development programme. The responses are as summarized in Table 8.

Table 8 Attendance of seminars and workshops

Category	Respondents	Preschool Teachers	
		No.	%
Private	10	3	30
Public	4	1	25
	14	4	29

Data in the table above revealed that 30% of the preschool teachers from private preschools attended seminars and workshops while 25% of the teachers in public preschools attended the same. This shows that seminars and workshops are not taken with the seriousness they deserve. Indeed the data corroborates with a UNESCO study done in Machakos, Nakuru and Thika to ascertain the status preschool education which found that DICECE officers organise meetings, seminars and workshops for ECD teachers as part of ongoing professional development and support in an irregular fashion. In some areas no training appears to be available after the initial course, partly because the DICECE centres lack accommodation and boarding facilities and a clear management structure. In principle, teachers of both registered and unregistered ECD Centres, regardless of ownership, are invited. However, ECD teachers from private institutions

are normally not given leaves by their employers to attend the meetings and seminars organised by DICECEs (UNESCO, 2005).

4.3 Preschool Classroom Climate

Classroom climate is defined by overall positive and negative aspects of the social atmosphere, and frequently has been described in the context of teacher-child relationships (Hamre & Pianta, 2007). Positive classroom climates are characterized by caring, supportive teacher-child relationships. Supportive, warm relationships are indicated by physical proximity between teachers and children, shared activities, peer assistance, and social conversation. Positive affect, including smiling, laughing, and enthusiasm, is also important for positive climate. Positive classroom climate includes consistent demonstrations of respect between teachers and children, and positive communication (verbal and physical affection, positive expectations). In contrast, negative classroom climates are characterized by yelling, irritation, and punitive interactions between and among teachers and children. Negative climates include negative affect, evidenced by anger, negativity, and peer aggression. Punitive control (e.g., yelling, threats, physical control, harsh punishment), sarcasm, and disrespect are evident in negative classroom climates.

The classroom climate was evaluated using two assessment tools; the Early Childhood Environment Rating Scale-Revised (ECERS-R) and the Work Sampling System. The ECERS-R was used to evaluate the teacher-child interactions while the Wok Sampling System was used to ascertain the development of the children in the classroom climate. ECERS-R is a tool used in child care research and quality enhancement as a measure of the global quality of the classroom. ECERS-R has 43 items which are divided into 7 subscales. These subscales are space and furnishing, personal care routines, language and reasoning, activities, social interactions,

organisation and routines, adults working together. Each item is rated on a 7 point scale (1 = inadequate, 3 = minimal/adequate, 5 = good, 7 = excellent).

A score for each subscale was calculated for the ECERS-R using the following equation:

$$\text{Subscale score} = \frac{\text{Sum of scores for each (applicable) item in the subscale}}{\text{Number of items scored}}$$

Total ECERS-R scores were then calculated by summing the mean subscale scores (7 and 4 subscales respectively). Some items were not considered to be applicable for measuring the classroom quality as a dependent variable in relation to the teacher characteristics, most notably the 'nap/rest' item on the Personal care practices subscale and the last category of adults working together were not relevant to this particular study. Only relevant items which were rated were used in the calculation of subscale scores.

4.3.1 Preschool Teacher Academic Qualification and Classroom Climate

The researcher visited 14 preschool out of which 4 were public while 10 were private. Out of the schools visited the researcher made a sample of 42 teachers which works out to two teachers per school. Out of the 42 teachers in the sample, 6 (14%) had the KCPE certificate while the rest had the KCSE certificate. The researcher further made a visit to all the classrooms of the teachers in the sample to fill out the observation schedule that assessed the various dimensions of development of the children. In order to correlate the academic training with the development of the children which is directly dependent on the classroom climate the researcher has taken the scores of 36 classes of teachers with KCSE qualification compared with the scores of 6 of the classes with teachers with the KCPE certificate. The scores of these two categories were then averaged to give figure 4.1 in the next page.

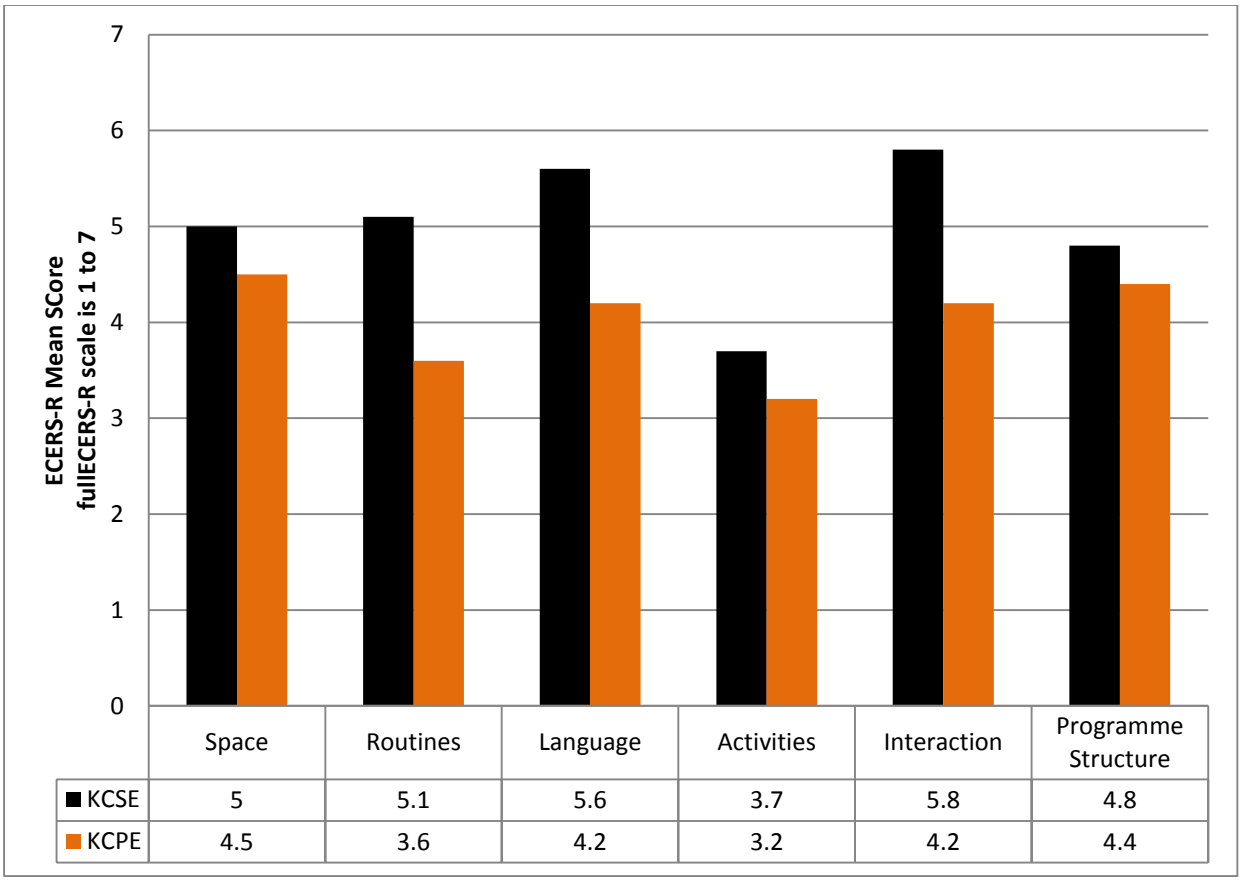
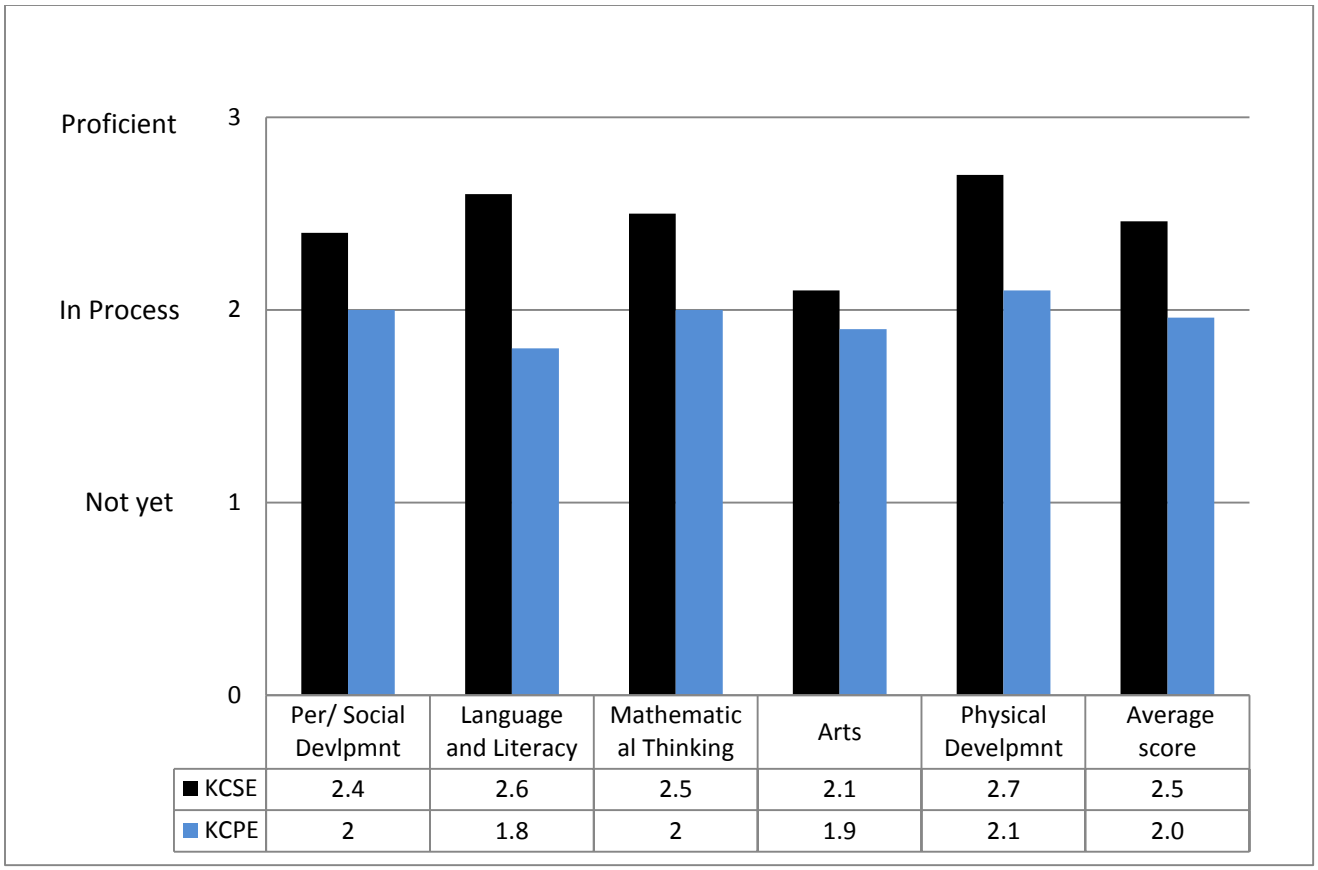


Figure 2 Comparison of ECERS-R mean scores with the preschool teacher academic qualifications

The figure shows that the preschool teachers with KCSE certificate consistently created a better classroom climate that their counterparts with KCPE certificate across the various domains evaluated by the ECERS-R assessment tool. Preschool teachers with KCSE qualification created a classroom climate that had a mean score of 5 in Space and furnishing, 5.8 in Social Interaction with the children and a mean score of 3.7 in the Preschool activities while those with the KCPE certificate created a classroom climate that had a mean of 4.5 in Space and furnishings, 4.2 in social interaction and 3.2 as the lowest score in the preschool activities domain.

The children sampled in each of the classes that had a teacher with the KCPE and KCSE certifications were assessed using the Work Sampling System.



	Per/ Social Devlpmnt	Language and Literacy	Mathematical Thinking	Arts	Physical Develpmnt	Average score
KCSE	2.4	2.6	2.5	2.1	2.7	2.5
KCPE	2	1.8	2	1.9	2.1	2.0

Figure 3 Comparison of the assessment scores of preschool children with the preschool teacher qualifications

The children in the classroom with the teachers with KCSE certificate faired better in all the dimensions assessed compared to their counterparts who were taught by teachers with KCPE qualifications. The former had an average score of 2.46, the personal and social development yielded a score of 2.4 while the latter had an average of 1.96 with the personal and social development yielding a score of 2 indicating that the skills were less emergent and were not demonstrated as consistently as those of the former. This trend realised in all the other four aspects evaluated. The study revealed that children who were taught by teachers with the high school certificate attained an overall score that was 17% better than that of the children taught by teachers with the primary certificate alone. These results show that a preschool teacher having a

high school certificate created a better classroom climate than one with a primary certificate. This could be due to the exposure high school graduates get once they enroll for more specialised courses that deal with early childhood education as opposed to primary school graduates who will teach as untrained teachers. The results show that not only the level of education but also the content of the staff's educational or training curriculum is important for the level of quality in preschool classrooms. A teacher with a high school certificate is eligible for specialised education which is associated with better child outcomes and improved staff competences to provide suitable pedagogical learning opportunities.

4.3.2 Preschool Teacher Training and Classroom Climate

The researcher found out that 15 (36%) of the preschool teachers in the sample were untrained while 18 (43%) had been trained to certificate level and 9 (21%) had been trained to diploma level. To find a correlation between the kind of classroom climate created by the untrained and trained teachers, the researcher took the scores of the children in the classrooms of the untrained teachers and made an average of them. Then the researcher took the scores of 15 of the trained teachers and averaged them then proceeded to average the scores of the other 27 trained teachers. Figure 4.3 shows a comparison of the ECERS-R scores of the trained teachers against those of the untrained teachers.

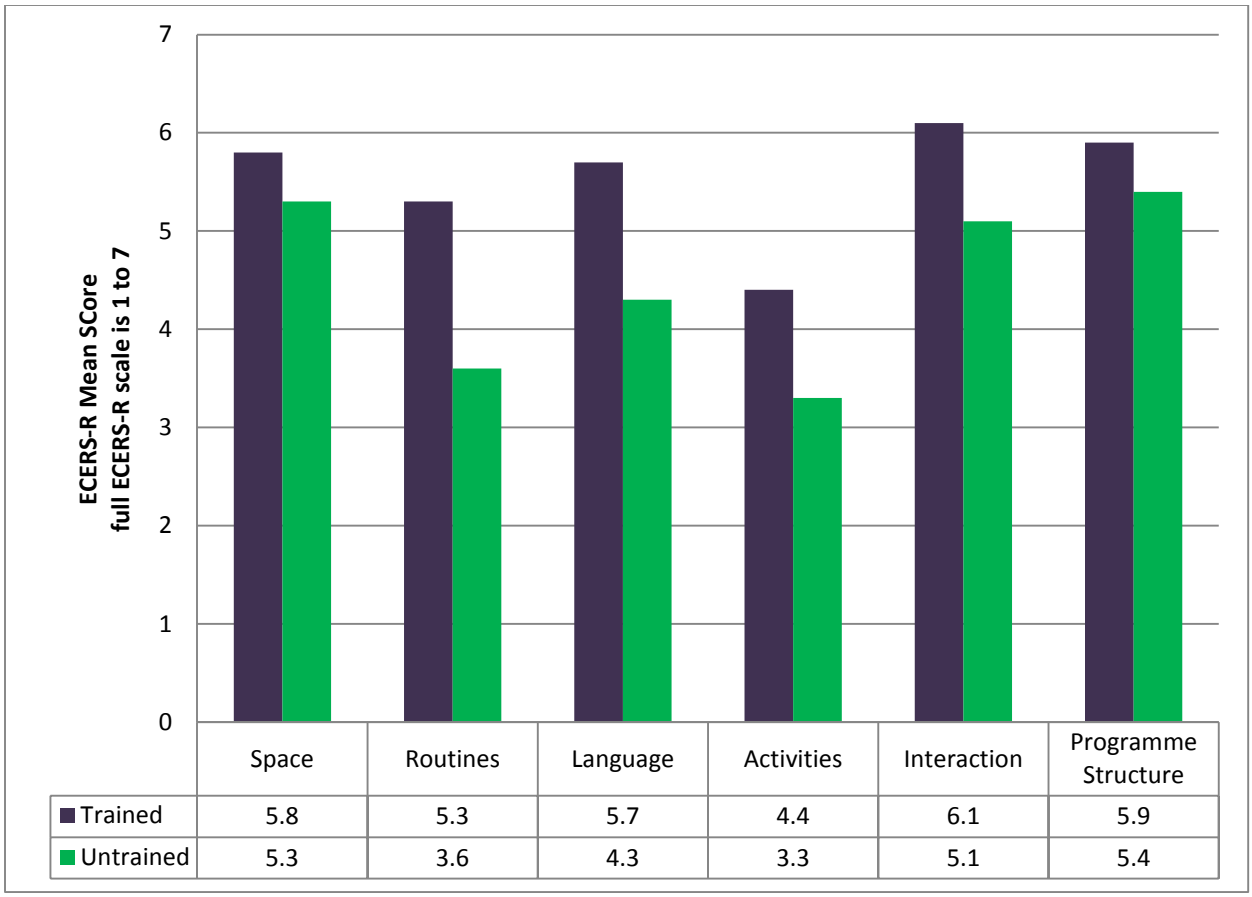
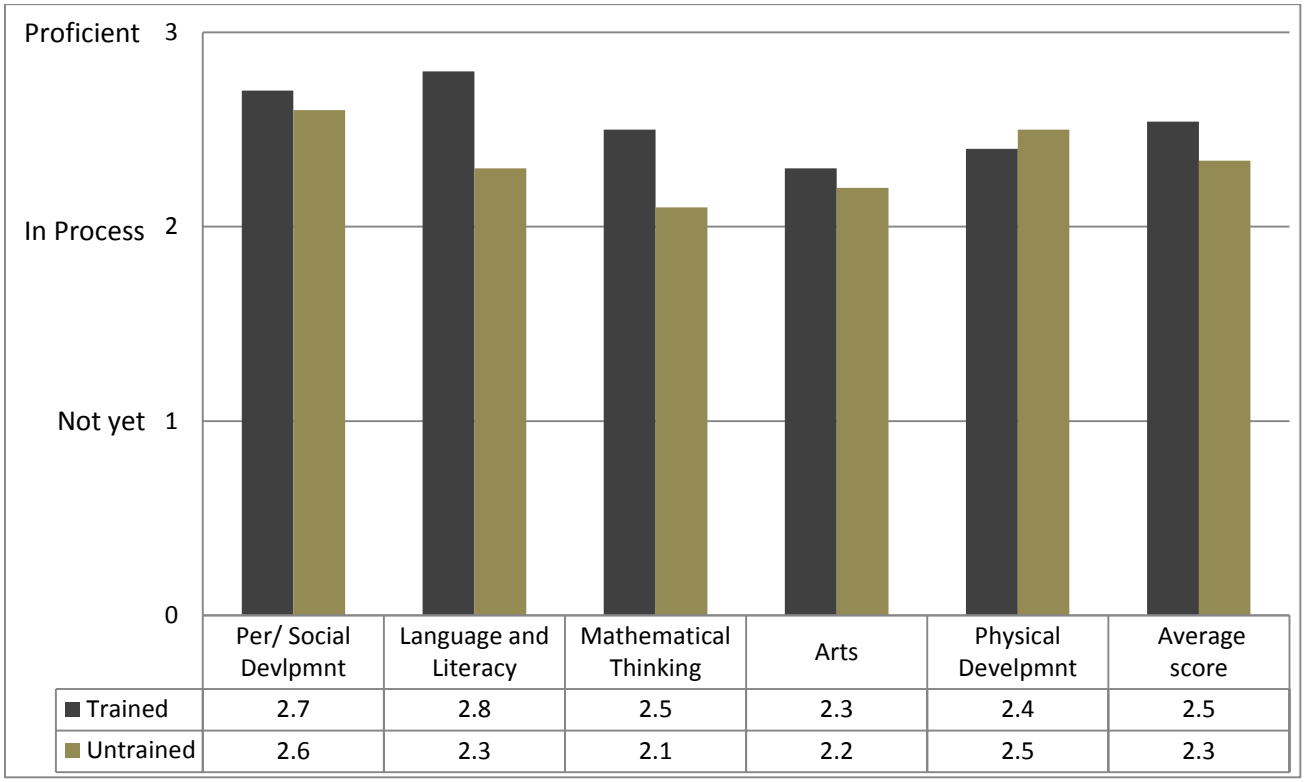


Figure 4 Comparison of ECERS-R mean scores with the preschool teacher training

The teachers who were trained had better assessment scores than those who were untrained as seen above. The highest score was realised in the social interaction domain that had 6.1 compared to 5.1 for the untrained teachers. The organisation of preschool activities yielded a score of 4.4 for the trained teachers and 3.3 for those who were untrained which is below average. The programme structure had both the trained and untrained teachers yield good scores with 5.9 and 5.4 respectively and this could be attributed to the fact that this could be regulated by the school administrators while the teachers had to only implement it. The children in the classes of the trained and untrained teachers evaluated above were further assessed using the

adopted version of the Work Sampling System. This involved evaluating across various dimensions. Their scores were further averaged and are represented in figure 4.4 below.



	Per/ Social Devlpmnt	Language and Literacy	Mathematical Thinking	Arts	Physical Develpmnt	Average score
Trained	2.7	2.8	2.5	2.3	2.4	2.5
Untrained	2.6	2.3	2.1	2.2	2.5	2.3

Figure 5 Comparison of the assessment scores of preschool children with the preschool teacher training

The trained teachers created a classroom climate that was better in some respects than the untrained teachers. The children benefited intellectually by having a trained teacher as seen in the better scores in Language and Literacy (2.8), Mathematical Thinking (2.5) and the Arts. The domain of physical domain had the children with the untrained teachers yielding a better score of 2.5 as compared to 2.4 for the trained teachers. This could be attributed to the untrained teachers emphasizing on play activities in the curriculum while undermining the cognitive development of the children. The trained teachers had a better overall score of 2.54 as compared to 2.34 for the untrained teachers. This difference of about 7% on a scale of 3 is small and could be

attributed to a number of reasons. First, the teacher preparation system may not have prepared teachers adequately to teach preschoolers. This may also be true in the field of early childhood. Furthermore, the Ministry of Education has increased the standards of effective educational practices in the preschools in the recent years. These higher standards were probably not incorporated into the teacher preparation programs when the majority of the teachers were in school in the years past. Likewise, today's more educated teachers may have completed their training at a time when math and reading skills were deemphasized for young children. Along these same lines, the basis for much learning in early childhood, including academic skills is dependent on trusting, respectful relationships between children and teachers. It may be that this aspect of early childhood development has been underemphasized in early childhood teacher preparation programs, possibly leaving teachers with content knowledge around academic instruction, but lacking the needed skills for forming individual relationships that can serve as the base for academic learning thus explaining the little difference found between the scores of the trained and untrained teachers.

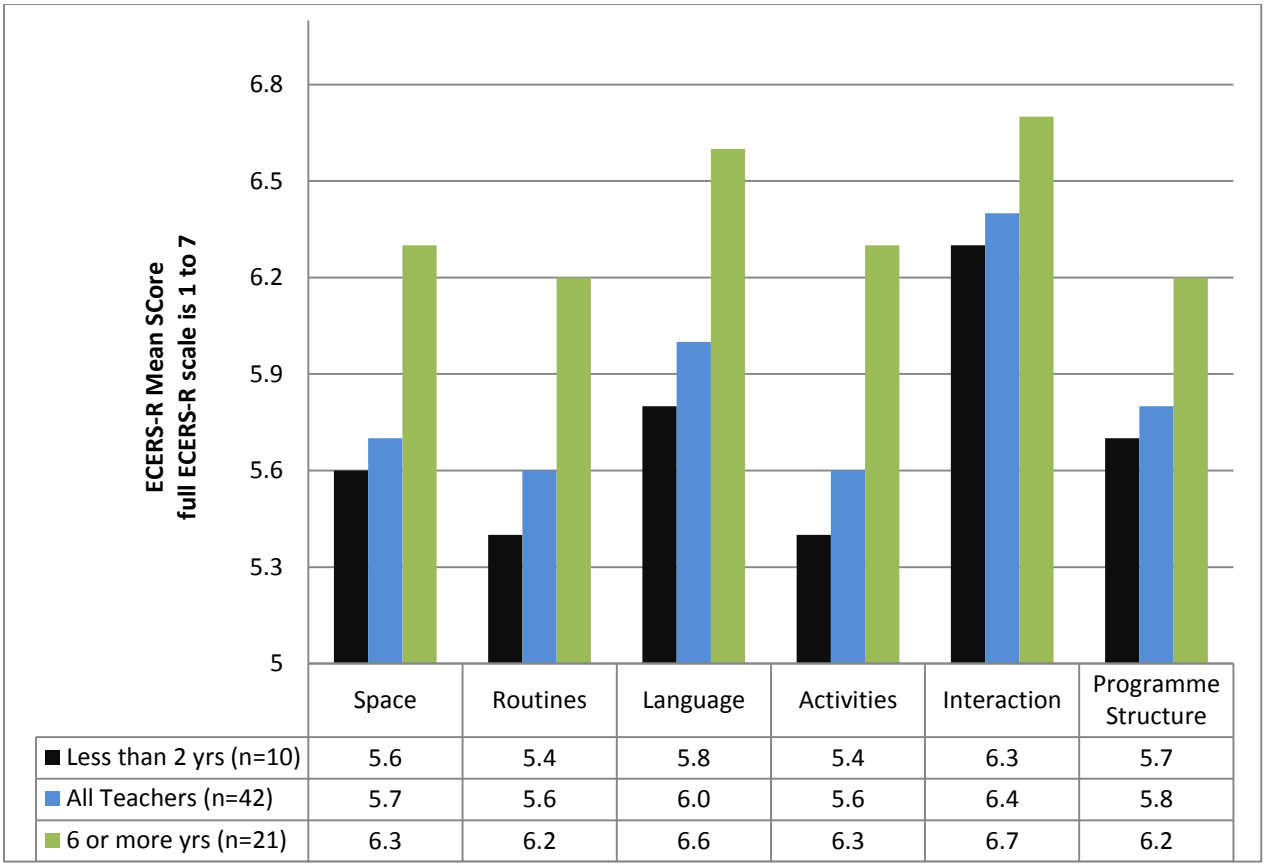
A second possible reason for the lack of associations is that teachers may not receive sufficient support to implement effectively what they have learned. Recent research suggests that entry-level teachers often feel overwhelmed and would appreciate monitoring or coaching during the transition from teacher preparation to actual. Furthermore, perhaps teachers feel pressure to abandon what they were taught in their teacher education programs and adhere to the school's standards and teaching strategies once they complete their education.

The third reason is that the results show the importance of ongoing education and training. In order for staff to maintain their professional quality, they need to engage in ongoing professional development. A well-trained practitioner does not only have a good initial level of

education but makes sure that the effects of initial education do not fade out. Ongoing professional development has the potential to fill in the knowledge and skills that staff may be lacking or require updating due to changes in particular knowledge fields. This is especially crucial in preschool education where new programmes are being developed continuously to meet the needs of the children. The findings thus validate the assertion that specialization of preschool teachers is important for children's outcomes, but only when knowledge of child development translates into developmentally appropriate teaching practices.

4.3.3 Preschool Teacher Experience and Classroom Climate

The researcher found that 43% of the sampled preschool teachers had served between 5 – 10 years while 29 % had served for 10 – 15 years. Those who had served for the shortest period (0-5 years) comprised 18% while those who had served for the longest period (over 15 years) made up 10 % of the sampled teachers. The researcher decided to make an analysis of the scores using a group of teachers who had two or less years of experience that was comprised of 10 teachers among the 21 in the 0 to 5 years bracket. The other category was an average of all the scores of the preschool teachers while the third category was comprised of those teachers with over 6 years teaching experience. The results of the ECERS-R means scores for the three categories are shown in the next page in figure 4.5.



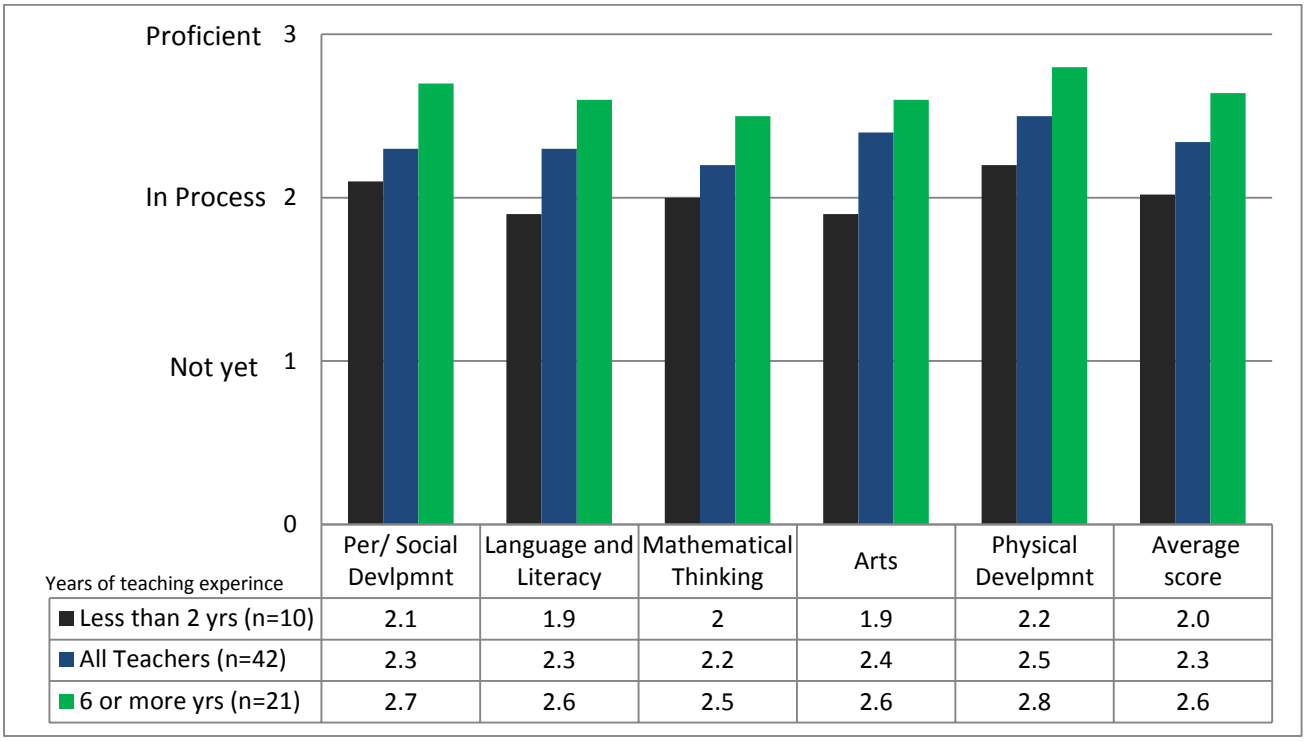
	Space	Routines	Language	Activities	Interaction	Programme Structure
Less than 2 yrs (n=10)	5.6	5.4	5.8	5.4	6.3	5.7
All Teachers (n=42)	5.7	5.6	6.0	5.6	6.4	5.8
6 or more yrs (n=21)	6.3	6.2	6.6	6.3	6.7	6.2

Figure 6 Comparison of ECERS-R mean scores with the preschool teacher experience

The assessment scores show that more years of experience results in a better classroom climate. This was noted across all the various domains of the assessment. Preschool activities and personal care routines had the lowest scores for the teachers will less than two years teaching experience while for the teachers with six or more experience it was the personal care routines and programme structure. Of importance is that the teachers will less than two years teaching experience scored less than the average score across all the assessed domains indicating that experience really does matter in creating a conducive classroom climate.

The children sampled in the study were assessed using the appropriated version of the Work Sampling System and their results categorized using the same groups as above. Thus one group was composed of children taught with teachers with less than two years teaching

experience, the second was composed of the all the averaged scores of the whole sample while the last was composed of children who were taught by teachers having six or more years of teaching experience. The results are shown in the figure below.



Years of teaching experince	Per/ Social Devlpmnt	Language and Literacy	Mathematical Thinking	Arts	Physical Develpmnt	Average score
Less than 2 yrs (n=10)	2.1	1.9	2	1.9	2.2	2.0
All Teachers (n=42)	2.3	2.3	2.2	2.4	2.5	2.3
6 or more yrs (n=21)	2.7	2.6	2.5	2.6	2.8	2.6

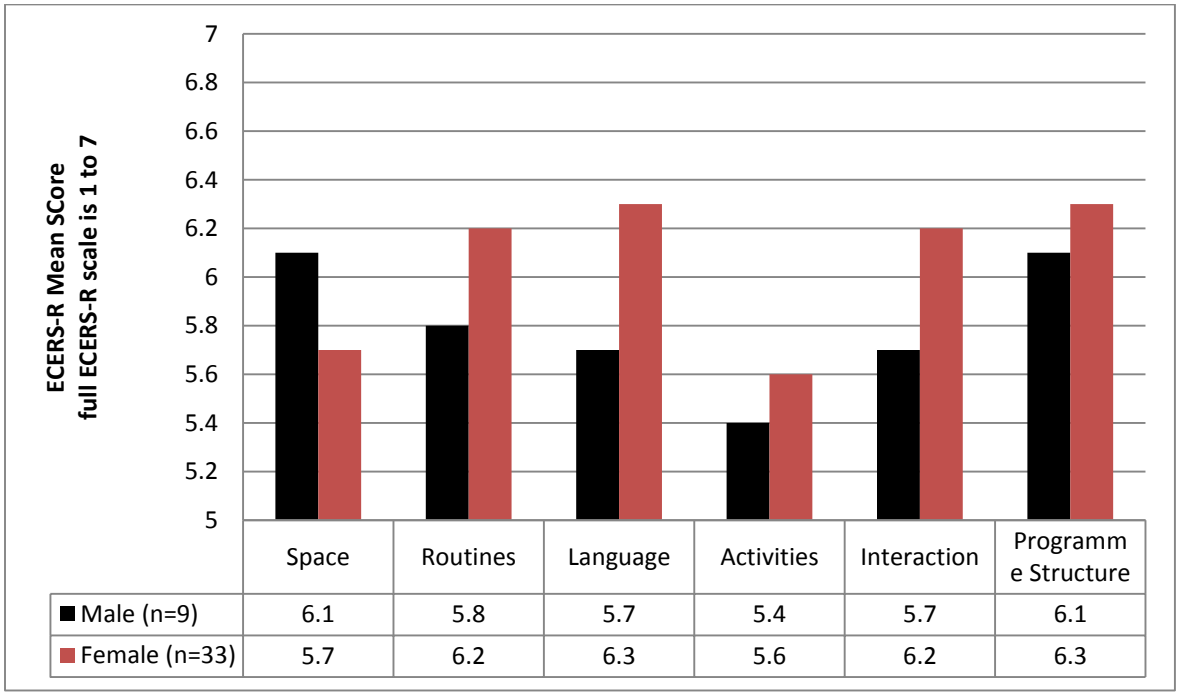
Figure 7 Comparison of the assessment scores of preschool children with the number of years of teacher experience

The results show that teachers with less than two years teaching experience created a classroom climate that yielded assessment scores that were 10% below average in the children while those who had six or more years teaching experience created a classroom climate that had the children score 10% above the average for all the sampled children. This shows that the numbers of years a preschool teacher has taught does influence the classroom climate he/she creates and subsequently the development of the children. There was a huge discrepancy in the cognitive skills assessment with a difference of 23% in Language and Literacy and the Arts

while mathematical thinking had a difference of 17% on a scale of three. This could point to difficulties in the method of teaching among the less experienced teachers as they had to get accustomed to handling the children. This assertion is further buttressed by the fact that the children had the highest scores in areas that did not involve direct teaching from the teachers as seen in the personal and social development with 2.1 and physical development with a score of 2.2.

4.3.4 Preschool Teacher Gender and Classroom Climate

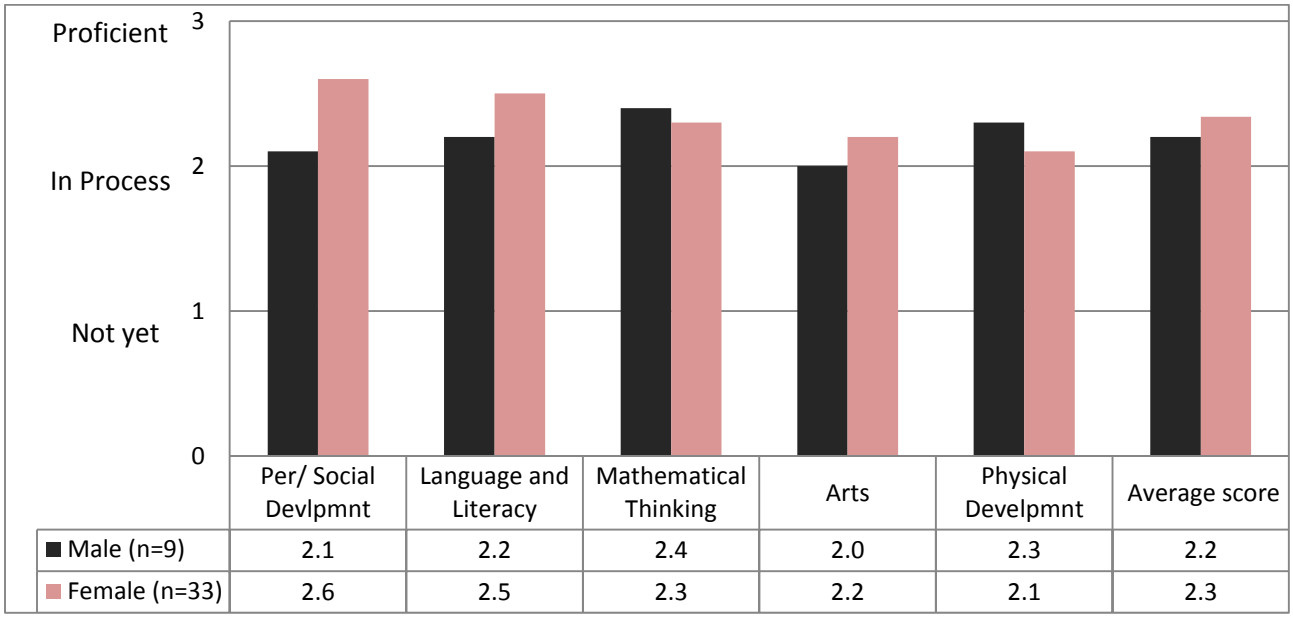
The researcher found out that 33 (79%) preschool teachers were female while the rest 9 (21%) were male. All the 28 preschool teachers had their classroom assessed using the appropriated version of the ECERS-R assessment tool. The scores for the male teachers were averaged as well as those of the female teachers. The scores are shown in the figure below.



	Space	Routines	Language	Activities	Interaction	Programme Structure
Male (n=9)	6.1	5.8	5.7	5.4	5.7	6.1
Female (n=33)	5.7	6.2	6.3	5.6	6.2	6.3

Figure 8 Comparison of ECERS-R mean scores with the preschool teacher gender

The results show that female preschool teachers produced a better classroom climate in most of the dimensions assessed than the male preschool teachers. In personal routines the female preschool teachers had an edge of 6% on a scale of 7 over the male preschool teachers, in the language assessment they had an edge of 9% while in the social interaction assessment the difference was 7%. The least difference was realised in the programme structure and preschool activities domain where it was 3%. This is not to say that female preschool teachers are better than male preschool teachers for the differences could be statistically attributed to the predominance of the female preschool teachers. Furthermore, male preschool teachers also had an edge over the female preschool teachers in the space and furnishings domain. The scores of the children being taught by the male teacher were also averaged as well as those of the female teachers. This assessment was done in order to ascertain whether the gender of the teacher does affect the classroom climate and consequently the development of the children in the class. The results are shown in the figure below.



	Per/ Social Devlpmnt	Language and Literacy	Mathematical Thinking	Arts	Physical Develpmnt	Average score
Male (n=9)	2.1	2.2	2.4	2.0	2.3	2.2
Female (n=33)	2.6	2.5	2.3	2.2	2.1	2.3

Figure 9 Comparison of the assessment scores of preschool children with the gender of the preschool teacher

The results show that the female preschool teachers created a classroom climate that had their children score better most of the assessed domains that the children taught by male preschool teachers. In the personal and social development domain the difference was the largest 17% on a scale of 3 while the language and literacy domain had a difference of 9%. Male preschool teachers had their children achieve higher scores in the mathematical thinking assessment with a difference of 3%; the trend was also the same in the physical development domain where a difference of 6% was realised. The results do not assert that female preschool teachers create better classroom climate for the results are also dependent on the predominance of for example girls in the sampled children and also the family background.

CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSION

5.0 Introduction

This chapter presents the summary of the study findings, conclusions, recommendations and suggestions for further research. They are based on the research objective which were:

i. To investigate the relationship between a preschool teacher's academic qualifications and classroom climate.
ii. To examine the extent to which a preschool teacher's training affects classroom climate.
iii. To determine the relationship between a preschool teacher's experience and classroom climate.
iv. To establish the effects of a preschool teachers' gender on classroom climate.

5.1 Summary of the Findings of the Study

The purpose of this study was to establish the effects of teacher characteristics on the classroom climate of preschools in Ongata Rongai zone. The first objective sought to investigate the relationship between a preschool teacher's academic qualifications and classroom climate. The study revealed that preschool teachers who had KCSE certificate created a better classroom climate than those who had KCPE certificate. This was done by using two assessment tools that are used in assessing classroom climate and the development of preschool children around the world. The first assessment tool used was the Early Childhood Environment Rating Scale-Revised (ECERS-R) which was adopted and modified for this study. Preschool teachers with the high school certificate had an edge over those with the primary school certificate in the assessed domains. There was a difference of 7% in the space and furnishings domain, 21% in the personal care routines domain, 22% in the social interaction domain and 7% in the preschool activities

domain. The second assessment tool used was the Work Sampling System that sought to evaluate the development of the children in the classrooms where their teachers had been assessed. In this manner a relationship could be established to ascertain whether the classroom climate created a particular teacher with unique characteristics influenced the growth and development of the children. The study revealed that children who were taught by teachers with the high school certificate attained an overall score that was 17% better than that of the children taught by teachers with the primary certificate alone. These results show that a preschool teacher having a high school certificate created a better classroom climate than one with a primary certificate. This could be due to the exposure high school graduates get once they enroll for more specialised courses that deal with early childhood education as opposed to primary school graduates who will teach as untrained teachers.

The second objective sought to examine the extent to which a preschool teacher's training affects classroom climate. The study found out that 10 (36%) of the preschool teachers were untrained while 12 (43%) had been trained to certificate level and 8 (21%) had been trained to diploma level. The results revealed that trained teachers created a better classroom climate in the assessed domains than those who had not been trained. The benefits of training were evident where there was a huge difference in the scores as realised in the personal care routines where the difference was 39% and in language domain where the difference was 20%. The study also revealed areas where training does not really have a huge effect on the quality of teaching; this was realised in space and furnishings and programme structure where the difference was 7%. This is because such domains are influenced by other factors such as the amount of resources provided by the school for the children and how the administration runs the school and where the teacher's training has a minimal role to play. The Work Sampling System was used to assess the

children taught by the untrained and trained teachers. The results reveal that trained teachers created a classroom climate that was better in some respects than the untrained teachers. This was especially evident in the language and literacy domain where the difference was 17% and mathematical thinking where the difference was 13%. Training did not greatly influence the personal and social development of the children as they achieved an edge of only 3% over the children who were taught by the untrained teachers; the same difference was also realised for the arts domain. Children taught by the untrained teachers had an edge of 3% over their counterparts who were taught by trained teachers. The results reveal that training had greatly influences the cognitive aspects of the classroom climate while it does not so much matter when it comes to the physical and social development of the children since the untrained teacher can even use natural maternal instincts in caring for the children since all the teachers used in the sample were female. Children taught by untrained teachers scored better in the physical development domain because their teachers compensated for their inadequate pedagogical skills in delivering class content by allowing the children to have more play time.

The third objective sought to determine the relationship between a preschool teacher's experience and classroom climate. The study revealed that 43% of the preschool teachers had served between 5 – 10 years while 29 % had served for 10 – 15 years. Those who had served for the shortest period (0-5 years) comprised 18% while those who had served for the longest period (over 15 years) made up 10 % of the sampled teachers. The researcher decided to make an analysis of the scores using a group of teachers who had two or less years of experience that was comprised of 10 teachers among the 18 in the 0 to 5 years bracket. The other category was an average of all the scores of the preschool teachers while the third category was comprised of those teachers with over 6 years teaching experience. The results indicated that more years of

experience results in a better classroom climate. This was noted across all the various domains of the ECERS-R assessment. Preschool activities and personal care routines had the lowest scores for the teachers will less than two years teaching experience while for the teachers with six or more experience it was the personal care routines and programme structure. Of importance is that the teachers will less than two years teaching experience scored less than the average score across all the assessed domains indicating that experience greatly influences the kind of classroom climate a preschool teacher creates. The Work Sampling System revealed that The results show that teachers with less than two years teaching experience created a classroom climate that yielded assessment scores that were 10% below average in the children while those who had six or more years teaching experience created a classroom climate that had the children score 10% above the average for all the sampled children. This shows that the numbers of years a preschool teacher has taught does influence the classroom climate he/she creates and subsequently the development of the children. There was a huge discrepancy in the cognitive skills assessment with a difference of 23% in Language and Literacy and the Arts while mathematical thinking had a difference of 17% on a scale of three. This could point to difficulties in the method of teaching among the less experienced teachers as they had to get accustomed to handling the children. This assertion is further buttressed by the fact that the children had the highest scores in areas that did not involve direct teaching from the teachers as seen in the personal and social development with a deviation of 6% from the average and physical development with a deviation of 10%.

The fourth objective sought to establish the effects of a preschool teachers' gender on classroom climate. The study found out that 22 (79%) preschool teachers were female while the rest 6 (21%) were male. The results for the ECERS-R assessment show that female preschool

teachers produced a better classroom climate in most of the dimensions assessed than the male preschool teachers. In personal routines the female preschool teachers had an edge of 6% on a scale of 7 over the male preschool teachers, in the language assessment they had an edge of 9% while in the social interaction assessment the difference was 7%. The least difference was realised in the programme structure and preschool activities domain where it was 3%. This is not to say that female preschool teachers are better than male preschool teachers for the differences could be statistically attributed to the predominance of the female preschool teachers. Furthermore, male preschool teachers also had an edge over the female preschool teachers in the space and furnishings domain and this could be due to the intrinsic spatial coordination skill men have over women. The assessment of the children using the Work Sampling System revealed the female preschool teachers created a classroom climate that had their children score better most of the assessed domains that the children taught by male preschool teachers. In the personal and social development domain the difference was the largest 17% on a scale of 3 while the language and literacy domain had a difference of 9%. Male preschool teachers had their children achieve higher scores in the mathematical thinking assessment with a difference of 3%; the trend was also the same in the physical development domain where a difference of 6% was realised. The study shows that neither female nor male teachers were better than the other rather it was a case of each bringing their unique capabilities for the benefit of the children. Moreover the discrepancies could be attributed to the predominance of girls in one class who felt close to the female teacher and boys in another class who felt close to the male teacher.

5.2 Conclusion

The study revealed that teacher characteristics have an effect on the preschool classroom climate. Although the study only involved 14 preschools, 42 preschool teachers and 420

preschool children of Ongata Rongai zone these results could be generalized and applied to other parts of the country. The study revealed that preschool teachers should thus have the high school certificate as opposed to the primary school certificate only. They should also be trained due to the added cognitive benefits that results from their exposure to diverse teaching techniques. Preschool headteachers also ought to encourage teacher retentivity for the more experience a preschool teacher has the better the classroom climate he/she creates for the benefit of the children. Preschool administrators should also strive to have gender balance when recruiting teachers for the children since each gender provides a unique contribution in creating a conducive classroom climate.

5.3 Recommendations of the Study

Based on the findings of this study, the researcher came up with a number of recommendations to promote a preschool classroom climate that is conducive which results in developmental benefits in the children.

i. The current study focused on the unique and additive contributions of teacher characteristics, on young children's preschool performance. Given the findings that teacher education and teacher training in child development/ECE both correlate with classroom climate quality and predict lower problem behaviors, and that teachers with more preparation in early childhood teach children who are more ready for school, the district education officers should not only support advanced education for preschool teachers, but also promote child-centered knowledge among preschool teachers.

ii. Preschool administrators in Rongai zone should arrange for regular workshops and refresher courses for preschool teachers to update themselves on the changing curriculum trends and relevant instructional techniques for preschool children. Specialization is

important for children's outcomes, but only when knowledge of child development translates into developmentally appropriate teaching practices. Therefore, leaders should implement professional development activities that meaningfully teach concepts of child development. These activities should include intensive mentoring and coaching components to ensure that the concepts translate into classroom practice, and ongoing evaluation activities to monitor the effectiveness of the professional development activities.

iii. The curriculum of training ECDE teachers should be updated to respond to the demands of the contemporary child in the society. This should include imparting computer skills in the preschool teachers that gives them the capability of using a wide array of teaching aids that includes computers and projectors. This results in improving the ability of the preschool teachers to create a multi-disciplinary learning environment.

iv. The study revealed that male and female preschool teachers create unique classroom climates that foster the development of children in distinct ways. Thus preschool administrators in Rongai zone should strive to eliminate the gender imbalance that currently plagues the preschool sector by encouraging the hiring of more male teachers that will complement their skills with those of the female teachers.

v. The study revealed that learning materials do influence the effectiveness of a preschool teacher for they facilitate the process of learning in a myriad of ways. Teaching aids help build the imaginative skills of the children while play materials facilitate the physical and social development of the children. The kind of classroom climate a teacher will create is influenced by the availability of learning materials. Thus preschool administrators both in private and public institutions should endeavor to provide adequate learning and play

materials to foster a conducive learning environment.

5.4 Suggestions for Further Research

Considering the limitations and delimitations of the study, further research can be carried out as delineated by the following suggestions

i. Similar studies should be conducted using multiple measures of climate and/or achievement in other parts of the country. This could involve using other preschool classroom climate assessment tools such as Classroom Assessment Scoring System (CLASS) or Child Observation Record (COR) to compare with the current results.
ii. An investigation into the effects of preschool teachers' characteristics on the performance of children in play.
iii. An investigation into the effects of the preschool teachers' attitude and beliefs on the preschool classroom climate.

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APPENDIX: 1

Questionnaire for Teachers

Dear Sir/Madam

I am a university of Nairobi student conducting research on the effects of teacher characteristics on classroom climate. It is expected that the findings from the study will improve the ECD sector. The following questionnaire has section A and B and is designed to gather information for this purpose. **Kindly do not write your name, indicate your answers and tick (√) where appropriate. Your response will be absolutely treated confidentially.**

Section A

Name of the teacher …….. Age of the teacher ……

Type of preschool……...

Academic Qualifications	Year Completed	
1. Primary School C.P.E/K.C.P.E	_____	_____
2. Secondary school K.J.S.E/K.C.E/K.C.S.E	_____	_____
3. High School	_____	_____
4. College	_____	_____
5. Other Specify	_____	_____

Highest Level of Training

1. Untrained ☐ , 2. Certificate ☐ 3. Diploma ☐ 4. Others/Specify ☐

_____

Work experience

1. 0 – 3 Yrs ☐ 2. 4- 6 Yrs ☐ 3. 7 – 9 Yrs ☐ 4. 10 – 12 Yrs ☐

5. Above 13 ☐

SECTION B

Teacher Preparation Documents (*Tick appropriately or write a comment.*)

Item to be observed	Available	Not Available	Other comments
Schemes of work			
Lesson plans			
Preschool curriculum guidelines			
Health record			
Record of work			
Assessment record			
Attendance Register			

SECTION C

1. How frequent do you attend in service training in ECD……..... What was the last seminar attended was based on? …….

   …….....**.....**

   …….

   ……

   ……

2. What challenges does the school face in the provision of instructional resources, materials and equipments?**.....**

   …….

3. Where do you store your learning resources?**.....**

   .....

4. Do you plan for learner activities?**.....**If yes give examples……

   ……

5. How best can you improve your instructional methods, resources or activities?

6. Do you plan for outdoor activities?**.....**

7. How often do you invite parents in school to assess their children's work?.....

APPENDIX 2: MODIFIED VERSION OF THE EARLY CHILDHOOD ENVIRONMENT RATING SCALE – REVISED (ECERS-R)

Scores range from 1-7

1 = Inadequate, 3 = Minimal, 5 = Good, 7 = Excellent

SUBJECT: Check Majority Math Art Science English Social Studies Other:_____	FORMAT: Circle the necessary Routine Whole group Individual Meals/snacks Small groups
Space and Furnishings 1. Indoor Space 2. Furniture for care, play, and learning 3. Furnishings for Relaxing 4. Room arrangement 5. Space for Privacy 6. Child-related display 7. Space for gross motor 8. Gross motor equipment	*Notes* 1 2 3 4 5 6 7
Personal Care routines 9. Greeting/departing 10. Meals/snacks 11. Nap/rest 12. Toileting/diapering 13. Health Practices 14. Safety Practices	*Notes* 1 2 3 4 5 6 7
Language – Reasoning 15. Books and Pictures 16. Encouraging children to communicate	*Notes* 1 2 3 4 5 6 7

17. Using Language to develop reasoning skills 18. Informal use of language	
Activities 19. Fine motor 20. Art 21. Music/movement 22. Blocks 23. Sand/Water 24. Dramatic play 25. Nature/Science 26. Math/number 27. Use of TV, video, and/or computers 28. Promoting acceptance of diversity	*Notes* 1 2 3 4 5 6 7
Interaction 29. Supervision of gross motor activities 30. General supervision of children 31. Discipline 32. Staff-child interactions 33. Interactions among children	*Notes* 1 2 3 4 5 6 7
Program Structure 34. Schedule 35. Free play 36. Group time 37. Provisions for children with disabilities	*Notes* 1 2 3 4 5 6 7
Overall average	

Sample guidelines for assigning scores using the ECERS-R assessment tool for Item 17 – Schedule

Inadequate		Minimal		Good		Excellent
1	2	3	4	5	6	7
Y 1.1 Schedule is either too rigid, leaving no time for individual interests, OR too flexible (chaotic), lacking a dependable sequence of daily events.[a] N	Y N Y N Y N Y N	3.1 Basic daily schedule exists that is familiar to children (Ex. routines and activities occur in relatively the same sequence most days). 3.2 Written schedule is posted in room and relates generally to what occurs.[b] 3.3 At least one indoor and one outdoor play period (weather permitting) occurs daily. 3.4 Both gross motor and less active play occur daily	Y N Y N Y N Y N	5.1 Schedule provides balance of structure and flexibility (Ex. regularly scheduled outdoor play period may be lengthened in good weather). 5.2 A variety of play activities occur each day, some teacher directed and some child initiated. 5.3 A substantial portion of the day is used for play activities. 5.4 No long period of waiting during transitions between daily events.	Y N Y N	7.1 Smooth transitions between daily events (Ex. materials ready for next activity before current activity ends; most transitions handled a few children at a time rather than whole group). 7.2 Variations made in schedule to meet individual needs (Ex. shorter story time for child with short attention span; child working on project allowed to continue past scheduled time; slow eater may finish at own pace).

Sample guidelines for assigning scores using the ECERS-R assessment tool for item 34 - Using language to develop reasoning skills

Inadequate		Minimal		Good		Excellent
1	2	3	4	5	6	7
Y 1.1 Staff do not talk with children about logical N relationships (Ex. ignore children's questions and curiosity about why things happen, do not call attention to sequence of daily events, differences and similarity in number, size, shape; cause and effect). Y 1.2 Concepts[C] are introduced N inappropriately (Ex. concepts too difficult for age and abilities of children; inappropriate teaching methods used such as worksheets without any concrete experiences; teacher gives answers without helping children to figure things out).	Y N Y N	3.1 Staff sometimes talk about logical relationships or concepts (Ex. explain that outside time comes after snacks, point out differences in sizes of blocks child used). 3.2 Some concepts are introduced appropriately for ages and abilities of children in group, using words and concrete experiences (Ex. guide children with questions and words to sort big and little blocks or to figure out the cause for ice melting).	Y N Y N	5.1 Staff talk about logical relationships while children play with materials that stimulate reasoning (Ex. sequence cards, same-different games, size and shape toys, sorting games, number and math games). 5.2 Children encouraged to talk through or explain their reasoning when solving problems (Ex. why they sorted objects into different groups; in what way are two pictures the same of different).	Y N Y N	7.1 Staff encourage children to reason throughout the day, using actual events and experiences as a basis for concept development (Ex. children learn sequence by talking about their experiences in the daily routine or recalling the sequence of a cooking project). 7.2 Concepts are introduced in response to children's interests or needs to solve problems (Ex. talk children through balancing a tall block building).

Sample guidelines for assigning scores using the ECERS-R assessment tool for Item 4 - Room arrangement for play

Inadequate		Minimal		Good		Excellent
1	2	3	4	5	6	7
Y 1.1 No interest centers[d] defined. N	Y N	3.1 At least two interest centers defined.	Y N	5.1 At least three interest centers defined and conveniently equipped (Ex. water provided near art area; shelving adequate for blocks and manipulatives).	Y N	7.1 At least five different interest centers provide a variety of learning experiences.
Y 1.2 Visual supervision of play area is difficult. N	Y N	3.2 Visual supervision of play area is not difficult.			Y N	7.2 Centers are organized for independent use by children (Ex. labelled open shelves; labelled containers for toys; open shelves are not over-crowded; play space near toy storage).
	Y N	3.3 Sufficient space for several activities to go on at once (Ex. floor space for blocks, table space for manipulatives, easel for art).	Y N	5.2 Quiet and active centers placed to not interfere with one another		
	Y N NA	3.4 Most spaces for play are accessible to children with disabilities enrolled in the group. NA permitted.	Y N	5.3 Space is arranged so most activities are not interrupted (Ex. shelves placed so children walk around, not through, activities)	Y N	7.3 Additional materials available to add to or change centers.

Sample guidelines for assigning scores using the ECERS-R assessment tool for Item 32 – Teacher-child interactions[e]

Inadequate		Minimal		Good		Excellent
1	2	3	4	5	6	7
Y 1.1 Teachers are not responsive to or not N involved with children (Ex. ignore children, staff seem distant or cold). Y 1.2 Interactions are N Unpleasant (Ex. voices sound strained and irritable). Y 1.3 Physical contact used principally for N control (Eg.. hurrying children along) or inappropriately (Ex. unwanted hugs or tickling).	Y N Y N	3.1 Teachers usually respond to children in a warm, supportive manner (Ex. staff and children seem relaxed, voices cheerful, frequent smiling). 3.2 Few, if any, unpleasant interactions.	Y N Y N Y N	5.1 Teachers show warmth through appropriate physical contact (Ex. pat child on the back, return child's hug). 5.2 Teachers show respect for children (Ex. listen attentively, make eye contact, treat children fairly, do not discriminate). 5.3 Teachers respond sympathetically to help children who are upset, hurt, or angry.	Y N Y N	7.1 Teachers seem to enjoy being with the children. 7.2 Teachers encourage the development of mutual respect between children and adults (Ex. staff wait until children finish asking questions before answering; encourage children in a polite way to listen when adults speak).

Notes for Clarification

[a] Daily events refers to time for indoor and outdoor play activities as well as routines such as meals/snacks, nap/rest, and greeting/departing.

[b] The written schedule need not be followed to the minute. The intent of this indicator is that the general sequence of events is being followed.

Ratings are to be assigned in the following way, taking into account exact indicators for each item

[c]Concepts, include same/different, matching, classifying, sequencing, one-to-one correspondence, spatial relationships, cause and effect.

[d] An interest center is an area where materials, organized by type, are stored so that they are accessible to children, and appropriately furnished play space is provided for children to participate in a particular kind of play. Examples of interest centers are art activities, blocks, dramatic play, reading, nature/science, and manipulatives/fine motor.

Question

(7.3) Are there any additional materials available that you add to the interest centers?

[e]While the indicators in this item generally hold true across a diversity of cultures and individuals, the ways in which they are expressed may differ. For example, direct eye contact in some cultures is a sign of respect; in others, a sign of disrespect. Similarly some individuals are more likely to smile and be demonstrative than others. However, the requirements of the indicators must be met, although there can be some variation in the way this is done.

- A score of 1 must be given if any indicator under 1 is scored “Yes”.
- A rating of 2 is given when all indicators under 1 are scored “No” and at least half of the indicators under 3 are scored “Yes”.
- A rating of 3 is given when all indicators under 1 are scored “No” and all indicators under 3 are scored “Yes”.
- A rating of 4 is given when all requirements for 3 are met and at least half of the indicators under 5 are scored “Yes”.
- A rating of 5 is given when all requirements for a 3 are met and all indicators under 5 are scored “Yes”.
- A rating of 6 is given when all requirements for 5 are met and at least half of the indicators under 7 are scored “Yes”.
- A rating of 7 is given when all requirements for a 5 are met and all indicators under 7 are scored “Yes”.

A score of NA (Not Applicable) may only be given for indicators or for entire items when permitted as shown on the score sheet.

Indicators which are scored NA are not counted when determining the rating for an item. Items scored NA are not counted when calculating subscale and total scale scores.

APPENDIX 3: Checklist of Developmental Indicators from the Work Sampling System

P = Proficient child – can reliably demonstrate the indicator; I = In Process – child demonstrates indicator intermittently; N = Needs Development – child does not demonstrate indicator

INDICATORS	RESULT (P/I/N)
PERSONAL AND SOCIAL DEVELOPMENT	
Shows initiative and self-direction	
Follows classroom rules and routines	
Uses classroom materials purposefully and respectfully	
Interacts easily with one or more children	
LANGUAGE AND LITERACY	
Gains meaning by listening	
Demonstrates beginning phonemic awareness	
Speaks clearly and conveys ideas effectively	
Shows some understanding of concepts about print	
Comprehends and responds to fiction and non-fiction text	
Uses letter-like shapes, symbols, letters, and words to convey meaning	
MATHEMATICAL THINKING	
Begins to use and explain strategies to solve mathematical problems	
Shows understanding of number and quantity	
Recognizes, duplicates, and extends patterns	
Recognizes and describes some attributes of shapes	
SCIENTIFIC THINKING	
Seeks information through observation, exploration, and descriptive investigations	
Uses simple tools and equipment to extend senses and gather data	
Observes and describes characteristics, basic needs, and life cycles of living things	
Identifies, describes, and compares properties of objects	
Identifies similarities and differences in people's characteristics, habits, and living patterns	

SOCIAL STUDIES	RESULT (P/I/N)
Describes some people's jobs and what is required to perform them	
Begins to be aware of technology and how it affects life	
Demonstrates awareness of the reasons for rules	
THE ARTS	
Participates in group music activities	
Participates in creative movement, dance, and drama	
Uses a variety of art materials to explore and express ideas and emotions	
Responds to artistic creations and events	
PHYSICAL DEVELOPMENT AND HEALTH	
Moves with balance and control	
Uses eye-hand coordination to perform tasks effectively	
Performs self-care tasks completely	
Show beginning understanding of and follows health and safety rules	

APPENDIX 4: QUESTIONNAIRE FOR HEADTEACHERS

I am a university of Nairobi student conducting research on the effects of teacher characteristics on classroom climate. It is expected that the findings from the study will improve the ECD sector. The following questionnaire is designed to gather information for this purpose. **Kindly do not write your name, indicate your answers and tick (√) where appropriate. Your response will be absolutely treated confidentially.**

Section A

1. What is the population of your school for the last three years?

Year	2011	2012	2013
Boys			
Girls			
Total			

2. Who provides instructional resources in your preschool?

   Sponsors ( ), Parents ( ), Ministry of Education ( ), Donors ( )

   Others Specify ……..

Section B

Please consider the statement written in relation to your school and then tick (v) to indicate to what extent you agree or disagree. Use the following key.

- SA-strongly agree
- A-agree
- NS- not secure
- D-disagree
- SD-strongly disagree

	Statement	SA	A	NS	D	SD
A	Teachers plan schemes of work					
B	Teachers plan lesson plans for learning activities daily					
C	Teachers use ECDE curriculum guidelines when making schemes					
D	Teachers use teaching/ learning resources					
E	Learning activities planned by teachers are centered on play					
F	Teachers attend seminars and workshops					
G	Teachers attend in-service courses					
H	Headteachers provide materials for making teaching/learning resources					
I	Quality assurance officers supervise frequently					
J	The school organizes educational trips for the children					

Thank you for your co-operation.

APPENDIX 5: Letter of Authorisation from the DEO

MINISTRY OF EDUCATION

Telephone: 020-3532912
FAX: 020 8056462
When replying please quote
Ref: KJD/N/RESEARCH/2013/07

DISTRICT EDUCATION OFFICER,
KAJIADO NORTH,
P.O. Box 88 – 00208,
NGONG HILLS
10/10/2013

TERESIA WANJIKU RUTHA
UNIVERSITY OF NAIROBI
P.O BOX 30197-00100
NAIROBI.

RE: AUTHORITY TO CARRY OUT RESEARCH:

Following your request to conduct a research in the District vide your letter Ref NACOSTI/RCD/14/013/1643 on **"Effects of Teacher characteristics on classroom climate in preschools in Ongata Rongai Kajiado North Sub-County"** for a period ending 31st December 2013.You are hereby granted permission to embark on the research. This office will expect to get an update and feedback of your findings.

We would like to wish you well and success

THE DISTRICT EDUCATION OFFICE
KAJIADO NORTH
10 OCT 2013
P.O. Box 88 - 00208 NGONG HILLS

PETER N.KAVURIA
DISTRICT EDUCATION OFFICER
KAJIADO NORTH SUB-COUNTY

APPENDIX 6: Letter of Authorisation from NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2241349, 20-267 3550,
0713 788 787, 0735 404 245
Fax: +254-20-2213215

Email: secretary@nacosti.go.ke
Website: www.nacosti.go.ke

9th Floor Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

When replying please quote

Our Ref: **NACOSTI/RCD/14/013/1643**

Date:

1st October, 2013

Teresia Wanjiku Rutha
University of Nairobi
P.O.Box 30197-00100
Nairobi.

RE: RESEARCH AUTHORIZATION

Following your application dated ***5th September, 2013*** for authority to carry out research on "***Effects of teacher characteristics on classroom climate in preschools in Ongata Rongai Kajiado North District,"*** I am pleased to inform you that you have been authorized to undertake research in **Kajiado County** for a period ending **31st December, 2013.**

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

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

DR. M. K. RUGUTT, PhD, HSC.
DEPUTY COMMISSION SECRETARY
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Copy to:

The County Commissioner
The County Director of Education
Kajiado County.