ASSESSMENT OF PARENTS' LEVEL OF SATISFACTION WITH THE QUALITY OF PRE-SCHOOL EDUCATION IN LANG'ATA DISTRICT, NAIROBI COUNTY, KENYA

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A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF EDUCATION (EARLY CHILDHOOD STUDIES) IN THE SCHOOL OF EDUCATION OF KENYATTA UNIVERSITY

MAY, 2012
DECLARATION

This is my original work and has not been presented for a degree in any other University.

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DEDICATION

This thesis is dedicated to my husband Adriano Momanyi and our Children Martha, Anthony, Edna and Christopher.
ACKNOWLEDGEMENT

I would like to express my sincere gratitude to those who directly and indirectly helped me in making this study a success.

Special thanks go to my University Supervisors Dr. Rachel W. Kamau-Kangethe, Dr. Barbara Koech and Dr. John A. Orodho for their constructive assistance, guidance and criticism throughout the study.

I am greatly indebted to Dr. Nyakwara Begi for his consistent encouragement to work harder and complete my studies on time.

My deep appreciation goes to those Head teachers/managers and parents who participated in this study by kindly responding to the questionnaire and for being so co-operative.

My husband Adriano Momanyi and our children Martha, Anthony, Edna and Christopher who were very patient and supportive to me during this study, to them this research owes the greatest debt.

Friendly, my appreciation goes to Okari O. G. for typing this work.
ABSTRACT

Despite a vast literature in customer satisfaction, little has been said on the satisfaction of pre-school institutions’ customers i.e. the parents. This study was aimed at assessing parents’ levels of satisfaction with the quality of ECDE in Lang'ata District (Nairobi County) as influenced by a set of six independent variables: (1) type of school management/sponsorship; (2) type of curriculum offered; (3) availability of adequate physical facilities and (4) teaching-learning materials; (5) availability of qualified teachers; and, (6) teacher-child ratio. It also attempted to discover which of these factors contributed most to the parents’ satisfaction level. The study adopted the ex post facto research design. The population of the study was 3545 parents and 160 Head teachers (HTs)/managers i.e. 1820 parents from private and 1725 from public ones while the HTs/Managers were 91 from private and 69 from public ones making a total of 3705 subjects for the study. Stratified random sampling technique was used to select the sample as the population was heterogeneous, being drawn from various categories of pre-schools. The sample size consisted of 355(10% of the population) of parents and 40(25% of the HTs/Managers population) thereby yielding a sampling of 395(10.7%) respondents. Data was collected using questionnaires for parents, semi-structured interview guides for HTs/Managers, document analysis checklists and observation schedules. The data gathering instruments were piloted to determine their validity and reliability before the main field exercise. Both qualitative and quantitative data were analysed as per study objectives. Qualitative data e.g. transcribed interview notes were quantified where possible, along with quantitative data from the structured (closed-ended) questionnaire items. The qualitative data from interview guides were transcribed and analysed thematically according to the set objectives. The quantitative data were analyzed using descriptive statistics such as percentages, mean, median and mode. Inferential statistics used were the Chi-Square ($\chi^2$), $F$ test and Beta to test the various hypotheses at $p < .05$. The findings were then presented in form of cross tabulations and graphs. The major findings were that in overall, most parents were highly satisfied with ECDE; parents in private pre-schools were more satisfied vis-à-vis those in public ones; significant differences existed in parental satisfaction in relation to all variables of quality ECDE; the variables of quality ECDE had varying significant influences on the parental satisfaction with the type of management being the most significant factor; there were significant differences in satisfaction between the low and high income parents in all the variables except curriculum, with the low- vis-à-vis high-income parents being more satisfied. The study recommendations include ECDE centres to recruit qualified teachers, provide enough staff, management should select the right strategies in determining investment levels while prioritising important dimensions that influence the service quality expectations of parents and allocating the limited available resources appropriately to improve service quality on each dimension to the required level and prevent service problems. Besides the aforementioned implications for ECDE providers, suggestions for further areas of research are advanced which include assessing the factors contributing to disparities in satisfaction with the quality of ECDE among the low income and high income groups as well as exploring for other variables affecting the quality of ECDE and their effects on the parental satisfaction.
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>CBE</td>
<td>Curriculum Based Enrolment</td>
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<td>CICECE</td>
<td>City Centre for Early Childhood Education</td>
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<td>CIMCI</td>
<td>Community Integrated Management of Childhood Education</td>
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<td>DICECE</td>
<td>District Centers for Early Childhood Education</td>
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<td>ECCD</td>
<td>Early Childhood Care and Development</td>
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<td>ECCDE</td>
<td>Early Childhood Care, Development and Education</td>
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<td>ECDE</td>
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<td>ECEC</td>
<td>Early Childhood Education and Care</td>
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<td>EFA</td>
<td>Education for All</td>
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<td>EYC</td>
<td>Elimu Yote Coalition</td>
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<td>GER</td>
<td>Gross Enrollment Rate</td>
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<td>GoK</td>
<td>Government of Kenya</td>
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<td>HTs</td>
<td>Head teachers</td>
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<td>KHA</td>
<td>Kenya Headmistresses Association</td>
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<td>KIE</td>
<td>Kenya Institute of Education</td>
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<td>MoE</td>
<td>Ministry of Education</td>
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<td>MoEST</td>
<td>Ministry of Education Science and technology</td>
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<td>NACECE</td>
<td>National Centre for Early Childhood Education</td>
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<td>NCC</td>
<td>Nairobi City Commission</td>
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<td>NER</td>
<td>Net Enrollment Rate</td>
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<td>NFE</td>
<td>Non-Formal Education</td>
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<td>NGOs</td>
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<td>PPE</td>
<td>Pre-Primary Education</td>
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<td>T/L</td>
<td>Teaching-learning materials</td>
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<td>UNICEF</td>
<td>United Nations International Children Educational Fund</td>
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CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

There is no single reference term for pre-schools. The MoEST/GoK (2004) clarifies that early childhood development and education (ECDE) is synonymous to pre-school education, early childhood education and care (ECEC) or pre-primary education (PPE) which is offered to children of 4-5 years before proceeding to primary education. Pre-schools are variously referred to as nursery schools, day-care centres and kindergartens, depending on the locality.

In tracing the development of ECDE, Bwajuma (2000) points out that pre-schools started in Europe in the late 19th century and later spread to other parts of the world such as America due to the influence from the pro-child rights activists and psychologists. They were started as adjuncts to education for the well-off but they quickly became institutions for the poor under voluntary bodies such as religious organizations. This was meant to enhance accessibility to and retention of children in such pre-schools but not the quality of education and care. However, the level of parental satisfaction about quality was not a major issue at that time.

Since then great strides have been made across the world with varying levels of success. For example, Haddad (2002) observes, in Portugal, despite important advances or policies for ECEC still being distinct, this does not help to strengthen the ECEC system. A wide gap remains between care and education with implications to the level of parental satisfaction about the ECDE services. As for China, Haddad (2002:6) further points out, even if it has accomplished a great deal in this area with the development of a highly
complex and diverse ECEC system. There is a drastic fluctuation in the number of ECEC facilities over the last 40 years and nurseries were set up to meet the specific needs of many parents whose levels of satisfaction about the ECDE services are unknown, especially those who lived far from the workplace.

As for Africa, Haddad (2002) continues, there is growing State participation in early childhood education in countries such as Senegal, Kenya and Uganda, largely reflecting the targets set out by the 1990 World Conference on Education for All (WCEFA). In Uganda, an ECEC policy began to emerge in 1993 but there was lack of government control over the quality of the curriculum, teaching methods, facilities, age of entry, quality of teachers and pre-school charges levied. A vigorous campaign to call the attention of stakeholders and communities as a whole to the issue is also under way. In spite of these many initiatives taken to expand early childhood services to improve their quality and train educators, still majority of children do not have access to quality education and care that befits their needs. This is likely to greatly influence the level of parental satisfaction with the quality of pre-school education offered.

On the local scene, the Kenyan government’s policy underlying pre-school education has its roots from within developments in the wider international context also. For instance, according to Elimu Yote Coalition (EYC, 2004:38), the 1948 Universal Declaration of Human Rights adopted the idea that “everyone has a right to education” while the 1990 World Conference on Education for All (WCEFA) held in Jomtien, Thailand, sparked off a new impetus in basic education especially with its so called vision and renewed commitment. Also the 1989 World Summit for Children held in Geneva (Switzerland), reaffirmed the need to raise the quality of education and to give every child basic quality
education. These resolutions in turn greatly influenced the level of parental satisfaction with the quality of pre-school education offered.

According to Gakuru (1992) the nursery schools which were started during the colonial period were organized along racial lines and primarily catered for the European community only, thus locking out children of other communities and therefore parents were not satisfied with the ECDE services. Moreover, during the war of independence in Kenya, nursery schools were established in Central Province to avert malnutrition and also to take care of the children as their parents were engaged in forced labour.

The expansion of the organized pre-school institution in the towns and rural areas continued even after independence being sponsored by the church, welfare organizations and the local communities and now individual entrepreneurs through self-help without government support. This situation continued without a clear government policy framework to govern not only the expansion of pre-schools but also the quality of programmes offered in such centres up to 1984 when the National Centre for Early Childhood Education (NACECE) was set up.

The NACECE was set up to guide as well as coordinate ECDE activities in Kenya. Later the District Centres for Early Childhood Education (DICECEs) were established to cover various districts in the country and the City Centre for Early Childhood Education (CICECE) to cover Nairobi County (where Lang’ata District is found) was created (Gachie, 2003). The government entered into active partnerships with other stakeholders in the provision of ECE and over time, the provision of pre-school education was integrated with other services and regulated and/or provided by various ministries other
than the Ministry of Education (MOE) which are the ministries of Social Services and Home Affairs, Health and Local Government (MoEST, 2003). Thus the ECDE programmes are offered by diverse groups or organisations with serious implications on the levels of satisfaction among key stakeholders more so parents as regards quality, provision of facilities, curricular and even management.

According to MoEST (2002) several factors influence the quality of education. These factors include: the type of curriculum used, availability of teaching/learning materials, availability of physical facilities, availability of qualified and adequate teachers and type of school management (ownership). A survey carried out by MoEST (2002) found out that most pre-schools in Kenya do not have adequate physical facilities and teaching and learning materials like classrooms, desks, chalkboards, while in others the learning environment may not be conducive due to lack of toilet facilities, clean drinking water and the facilities necessary for playing.

Service quality and customer satisfaction originated from the business world. The issues pertaining to service quality and their implications on customer satisfaction have been prominently featured in the marketing literature since the first recognition of distinctive dimensions of service quality around 25 years ago (Gronroos, 1990). The relationship between customer satisfaction and subsequent buyer behaviour is well documented in the buyer behaviour theory literature (Engel, Blackwell and Miniard 1995).

The underlying premise with reference to pre-school education service is that if the parents’ perceptions of the key service quality dimensions exceed expectations the
behavioural response of the satisfied parents so created will be to retain their children at
the same ECDE centres.

Gunaratne & Carswell (2002) note that a growing number of today’s companies offer
separate products and deliver different messages to individual customers. The discerning
customers have started looking for options more in tune with their basic needs,
requirements and self-esteem. In fact, they are prepared to pay a premium for a quality product.

The subject of quality, as perceived by customers, has been researched extensively.
Gronroos (1978, 1982) was one of the first researchers to recognise the need to develop
valid and distinct measures of service quality. More recently, Shemwell, Yavas, and
Bilgin (1998) developed and tested a causal model that portrayed exactly how service
quality and satisfaction levels are related to the relationship-oriented outcomes. These
included such measures as the minimisation of complaints to others (complaint
behaviour), emotional bonding (affective commitment) and an increased inclination to
continue the customer-service provider relationship.

Parasuraman, Zeithaml and Berry (1985) have suggested that it may be the perception of
service quality that leads to customer satisfaction. This means that if the customer
perceives the service to be of high quality, then the customer will be satisfied with it.
Conversely, some others believe that if the customer is satisfied with the service, they
perceive it to be of high quality. Bitner (1990) and Bolton and Drew (1991) agreed with
this view and said satisfaction is an antecedent of service quality.
Further still, according to GoK (1999), in Kenya for a long time there was no clear policy on key issues such as establishment of pre-schools and that the poor communities and marginalized areas/households were highly disadvantaged in terms of facilities. This would jeopardize further the provision of quality pre-school education. It is against this background that the researcher sought to assess the level of parents’ satisfaction with the quality of ECDE in Lang’ata District in Nairobi County.

1.2 Statement of the Problem

Due to a lot of resources invested in education by parents they ought to be satisfied with the quality of education provided to their children. Several variables would contribute to the parental satisfaction. MoEST (2002) identifies variables such as type of curriculum offered, availability of physical facilities besides teaching-learning materials, qualifications of teachers, teacher-child ratio and type of school management as influencing the quality of education. Given that childhood is a very important period in the growth and development of an individual, the quality of care or nurturing provided to the child during this period is of greatest importance. That is why parental concerns regarding quality of ECDE services provided by the ECDE centres were justified.

Despite vast literature, surveys and reports such as that of MoEST (2006) revealing that pre-schools in Kenya have diverse sponsorships, variety of programmes but with wanting resources. For instance, Wawire, V.K. (2006) did a study on the perceptions and factors that constituted quality and relevant ECE in Nairobi and Machakos Districts but did not establish their levels of satisfaction with that quality. Gunaratne & Carswell (2002) note that there are, however, disparate views about the impact of individual service encounter satisfaction and overall service satisfaction on perceived service
quality. Even if the two concepts (service quality and customer satisfaction) are clearly related, the explicit link between customer satisfaction and the performance of the specific service quality dimensions in pre-school education largely remains undocumented.

Whereas various researches and policy papers had documented the problems facing pre-school education, few studies known to the researcher had been done on the level of parental satisfaction with the quality of ECDE in such areas as Lang’ata District. This would prompt one to ask what would be the level of parents’ satisfaction with the quality of pre-school education in Lang’ata District. It was therefore imperative to establish the real levels of satisfaction of parents with the quality of ECDE since dissatisfaction may lead to serious repercussions such as frequent transfers of children from one ECDE centre to another, thereby affecting not only retention but also performance.

1.3 Purpose of the Study

The study assessed the level of parents’ satisfaction with the quality of ECDE offered to their children as influenced by certain selected factors in both public and private pre-schools in Lang’ata District of Nairobi County, Kenya. The factors investigated were: type of curriculum offered; type of school management/sponsorship; availability of adequate physical facilities and teaching-learning materials; availability of qualified teachers; and, teacher-child ratio.

1.4 Objectives of the Study

The specific objectives guiding this study were:
a) To determine the levels of parents' satisfaction with the quality of pre-school education in Lang'ata District in relation to the following factors:

i) Type of curriculum offered;

ii) Type of school management/sponsorship;

iii) Availability of physical facilities;

iv) Availability of teaching-learning materials;

v) Availability of qualified teachers;

vi) Teacher-child ratio.

b) To determine which one(s) of the factors affecting the quality of pre-school education contribute most to the parents' level of satisfaction.

c) To compare the levels of satisfaction with the quality of pre-school education between low-income and high-income parents.

d) To seek for the views of respondents on how to improve the quality of pre-school education in Lang'ata Division.

1.5 Research Hypotheses

HO1: There is a difference in parents' satisfaction with the quality of ECDE between public and private pre-schools.

HO2: There is a difference in parents' satisfaction with the quality of ECDE between pre-schools with adequate physical facilities and those without the facilities.

HO3: There is a difference in parents' satisfaction with the quality of ECDE between pre-schools with adequate teaching-learning materials and those without.

HO4: There is a difference in parents' satisfaction with the quality of ECDE between pre-schools with qualified teachers and those without qualified teachers.
H05: There is a difference in parents’ satisfaction with the quality of ECDE between pre-schools with a low teacher-child ratio and those high ratios.

H06: There is a difference in the contribution of each factor to overall parental satisfaction with the quality of ECDE.

H07: There is a difference in parents’ satisfaction with the quality of ECDE between low-income and high-income parents.

1.6 Significance of the Study

The researcher hoped that the study outcomes may contribute significantly to the theory and practice of pre-school education management in Kenya. First, the findings revealed how the critical determinants of the quality of ECDE such as the teaching/learning materials, physical facilities and availability of qualified teachers impacted on the parents’ satisfaction with the quality of ECDE. This may help the management to strategise on how to improve their service delivery to meet customer needs. The MoE may also use the study findings in formulating or planning for ECDE policies to regulate the sub-sector.

Moreover, the study findings may be of great contribution towards the already existing knowledge on stakeholders’ satisfaction of the ECDE and therefore may become a useful reference material to various people and groups involved in the provision of ECDE such as teachers, managers, educational officers, NGOs, parents, among others. This would be a rallying call to them to provide a conducive teaching-learning school environment for the pre-school children. Finally, other researchers may find the study helpful while developing their studies in ECDE-related studies.
1.7 Scope and Delimitations of the Study

The study confined itself to assessing the level of parents’ satisfaction with the quality of ECDE in Lang’ata District’s public and private pre-schools which were operating formally, despite the fact that non-formal education (NFE) centres also playing a role in educating children. Although there were many varied factors/variables influencing the quality of ECDE in Kenya, the study confined itself to the influence of the type of school management/sponsorship; type of curriculum offered; availability of physical facilities and teaching-learning materials; availability of qualified teachers; and, teacher-child ratio on parents’ satisfaction with the quality of ECDE offered to their children in the area.

1.8 Limitations of the Study

This study was faced by limitations such as scarcity of up-to-date data on the true number of pre-schools, whether private or public, operating in Lang’ata District as well as the number of teachers they employed along with their qualifications. Also, some pre-schools were not easily accessible especially those operating informally deep in the slum areas. Hence, reaching those parents for a comprehensive study was impossible necessitating a sample to be drawn from the population of parents. Finally, it was very difficult for the researcher to verify the accuracy or authenticity of the responses given by HTS/managers as they may have regarded some matters as being sensitive.

1.9 Assumptions of the Study

The basic assumptions underlying this study were:

i. The impact of the selected factors of quality education on parental satisfaction with the quality of ECDE in Langata District is measurable.
ii. Parents gauged their perceptions of quality education against certain expectations such that perceptions below expectations prompted them to transfer their children.

iii. Pre-schools observed the benchmarks for quality education according to the provisions or guidelines of the MoE on ECDE.

1.10 Theoretical Framework

The ‘Zone of Tolerance’ theory on service delivery provides the basis for assessing the parents’ level of satisfaction with the quality of ECDE. In reference to the ‘Zone of Tolerance’ theory, Zeithaml, Berry and Parasuraman (1993) in Gunaratne & Carswell (2002) state that for customers to be satisfied with a service, two levels of expectations must be met:

i. The *desired service* level. This represents the ideal service delivery situation, i.e. what customers believe “can be” and “should be” provided;

ii. The “*adequate service*”. This is the minimum level of service customers will accept/perceive to be acceptable.

According to Zeithaml et al (1993), the ‘zone of tolerance’ is the range of levels of service expectations lying between the *desired service level* and the *adequate service level* and this is what a customer would consider satisfactory. Zeithaml et al (1993) observe that the ‘zone of tolerance’ can be measured using the “expectation-perception gap”. However, the ‘zone of tolerance’ (what a customer would considers or expects to be a satisfactory service) differs from one individual customer to another but within the “expectation-perception gap” i.e. a customer’s service expectations are not confined to a single point but range between the *desired service level* and the *adequate service level*. 
Similarly, pre-school education is a service whose consumers or stakeholders such as parents attach certain expectations in service delivery, implying that it also has a 'zone of tolerance'. Though currently provided in Kenya by both profit-making (private pre-schools) and non-profit-making (public pre-schools) organisations, parents expect the pre-schools to provide education within expected limits or simply the 'zone of tolerance'. Zeithaml et al (1993) defined service quality using the following five dimensions: tangibles, reliability, responsiveness, assurance and empathy. Pre-schools should use the "zone of tolerance" concept to plan service improvements based on the five dimensions.

The tangible dimensions of quality in a school include the type of school management/sponsorship; type of curriculum offered; availability of physical facilities and teaching-learning materials; availability of qualified teachers and the teacher-child ratio. Managers in the ECDE centres need to identify the explicit link between customer (parent) satisfaction and the performance of the specific aforementioned tangible dimensions of service quality. For instance, the Managers in the ECDE centres should assure parents that they will be reliable and responsive in providing quality pre-school education through properly approved curriculum, adequate physical facilities as well as teaching-learning materials, qualified teachers and the recommended teacher-child ratio.

Service organisations increasingly recognise that today’s customers, who insist on improvements in quality of services, have many alternatives and, therefore, may more readily change providers if not satisfied. This is also evident in the so common practice of "institution hopping" readily embraced by dissatisfied parents who move their children from one ECDE centre to another at the end of each term in search of education they perceive to be of good quality. To enhance customer (parent) satisfaction, ECDE
providers ideally should measure and improve the approaches to delivery of service through redesigning the provider/customer interaction processes and implementation of programmes of change. Additionally, it is mandatory they evaluate the currency of the content of their academic programmes (curriculum) and be in step with new developments in the field to sustain their quality.

1.11 Conceptual Framework

The conceptual framework underpinning this study was based on the ‘Zone of Tolerance’ theory proposed by Zeithaml et al (1993) as presented in figure 1.1.
Referring to figure 1.1, the factors determining the quality of ECDE constituted the independent variable whose components included the type of school management, availability of facilities, among others, could lead to either high quality or poor quality ECDE. The parents were to be satisfied if the quality of ECDE is high as per their expectations or will get dissatisfied if the quality is poor/below expectations. The satisfied parents would in turn take or retain their children in those centres they perceived as having quality education leading to increased enrollment and the opposite is true for dissatisfied parents as reflected by reduced participation and transferring of children from such centres-institutional hopping.

1.12 Operational Definition of Terms

Adequate: Refers availability of facilities in enough quantities to enable delivery of quality education.

Children: Persons aged 4-5 years eligible to start schooling.

Government: This is Government of Kenya and will be interchanged with State.

Influence: Means an effect of the variables determining quality education on parental satisfaction with the quality of ECDE.

Ministry: Will stand for the Ministry of Education.

Physical facilities: These are resources such classrooms for providing a conducive atmosphere for teaching-learning activities in ECDE centres.

Pre-schools: Pre-primary educational institutions for children aged 4-5 years.

Private management: Refers to the running of pre-schools by individual entities.

Public management: Refers to the running of pre-schools by the Government, churches, City Commission and communities.

Qualified teachers: Means teachers who have undergone formal training.
Quality: The worthiness attributed to education delivery.

Satisfaction: A perception among parents that their children are getting quality education of the required standards as stipulated by MOE.

Teacher-child ratio: This is the number of children a teacher can handle in a class.

Teaching-learning materials: These are resources used to enhance the actual teaching-learning activities in classrooms during a lesson.

Type of curriculum: Means contents of courses of study in pre-schools such as the NACECE, Montessori and GCE curricular.

Type of sponsorship: Refers to the nature of ownership and management of pre-schools.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The review of literature is a critique of parental satisfaction in relation to selected variables influencing the quality of ECDE. These factors were: the type of curriculum and school management, availability of physical facilities and teaching-learning materials, teachers’ qualifications and teacher-child ratio.

2.2 The Basis and Role of Pre-school Education

According to MoEST/GoK (2004) pre-school education can also be referred to as early childhood development and education (ECDE), early childhood education and care (ECEC) or pre-primary education (PPE). Pre-school education is provided in various institutions which can be known in various terms such as nursery schools, day-care centres, pre-primary schools and kindergartens depending on the locality. It is offered to children of 4-5 years before joining primary education.

Pre-school education has been stressed both internationally and locally as a key tool for the development of the child below 6 years. For instance, the National Education Policy of 2005, the 1989 World Summit for Children held in Geneva (Switzerland), the 1990 World Conference on Education for All (WCEFA) held in Jomtien, Thailand and the year 2000 Dakar (Senegal) Framework for Action on EFA, reaffirmed the need to raise the quality of pre-school education and to give every child basic quality education.

The MoEST/GoK (2004) further clarifies that the Ministry of Education (MoE) policy on ECDE sub-sector focuses on these children (of 4-5 years) with a view to providing
holistic integrated services that create a strong foundation for the child’s cognitive, psychological, moral, spiritual, emotional and psychomotor needs. This means that the curriculum should be designed in a way that such holistic development is achieved.

Unlike in the past, the present day world requires going to school so that the child may benefit in future. To this end, Gakuru (1992) remarks that there was no formal education (schooling) in the past except farming and herding, but these days progress means education. Therefore, the ECDE centres are not only a foundation for future success in schooling but also a stepping stone to better paying jobs and a better life. This is not possible if children cannot be given full, relevant and quality education. Hence, many stakeholders including churches, communities and local authorities have invested a lot of resources in the provision of pre-school education.

In line with heavy investment in pre-school education, Gachie (2003) reveals that the expansion of the organized pre-school institutions in the towns and rural areas in Kenya was sponsored by the church, welfare organizations and the local communities through self-help without government support. This situation continued without a clear government policy framework to govern the expansion of pre-schools as well as retention of children in such centres up to 1980 when the National Centre for Early Childhood Education (NACECE) was established to give guidance as well as coordinate ECDE activities in Kenya. Later, the District Centres for Early Childhood Education (DICECEs) and the City Centre for Early Childhood Education (CICECE) to cover various districts and Nairobi Province respectively were created.
The GoK (1999) observes that the priority is for the state to work with households and communities to build an infrastructure through which the basic growth needs of children—nutrition and health are met, and to improve the quality of life for children aged 0-6 years. This implies that co-ordination of the health (nutrition) and education services for early childhood is necessary. However, provision of ECDE is plagued by poor delivery, under-enrolment of the handicapped, and disparities between different geographical areas, male and female, and between affluent and poor households (GoK 1999).

GoK (1999) further indicates that only the state can put together all the components of education into a coherent yet flexible education system to accommodate all. There is however, the need to acknowledge, accommodate and support the role of other educational stakeholders. Their efforts should be supported within a diversified system, in which the Government plays its essential coordinating and standard-setting role such as inspecting the quality and relevance of the teaching/learning materials, equipments and physical facilities. Consequently, as the GoK (1999) report reveals, some stakeholders stressed that making ECCDE part of the formal primary schooling will be the only way of achieving a well co-coordinated, quality pre-primary education such that the Ministry becomes responsible for training and employing pre-primary teachers. By understanding the parents’ satisfaction with the quality of ECDE the government would be able to gauge the kind of educational services provided to facilitate further action where necessary.

2.3 Factors Influencing Parental Satisfaction with the Quality of Education

A survey carried out by MoEST (2002) on the quality education identified type of curriculum offered, teaching/learning materials, equipment, physical facilities, finance,
teaching force and institutional management as the variables determining the quality. However, Peng and Samah (2006) carried out a study on seven variables of quality education which are: The course content [curriculum]; services given by the lecturers and the faculty; course assessment; instruction medium; social activities; concern for students and facilities. But Basab, Ambar & Skoufias (2009) assert that there is a wide range of factors influencing satisfaction with services [e.g. education] among users and may vary by the type of service and economic status of regions.

2.3.1 Types of Curriculum Offered
According to NACECE there are various types of pre-school curriculum offered. But those offered in Kenya are NACECE/DICECE model, the Montessori, the Islamic integrated education programme (IIIEP) and the Kindergarten Headquarters Association.

(i) The NACECE / DICECE Curriculum
According to the Ministry of Education, this is the official ECDE curriculum. The model was developed and approved by the Kenya Institute of Education (KIE) where NACECE is a section which develops curricula for the ECDE level of Education.

According to the ECDE syllabus and handbook (2008), the NACECE/DICECE curriculum activity areas: language activities, outdoor activities, mathematics activities, creative activities, social activities, music and movement activities, science activities, religious education activities and life activities. The curriculum targets children 0–6 years of age and is designed to help children successfully go through the developmental milestones in all aspects of life.
(ii) The Montessori Curriculum

Clark (2012), in tracing the legacy of Maria Montessori (1870-1952) in education, notes that the Montessori curriculum is an integrated thematic approach that ties the separate disciplines together into studies of the physical universe, the world of nature and the human experience. In this way, one lesson leads to many others. Clark (2012) goes on to say that the Montessori classroom is divided into several logical areas by open shelves; for practical life exercises, for sensorial, language, mathematics, art, music, geography and science. The intention of the materials is to help children work and learn at their own pace and to help them grasp and understand what they are working on.

(iii) The Islamic Integrated Education Programme (IIEP)

They were started in 1986 and offer abroad based early childhood development experiences to Muslim Children age 0-6 years. It operates on a blended curriculum of both religious and secular learning. The programme was developed to meet the needs of Muslim children who were not getting education like other children under ECD programmes (GoK and UNICEF, 1985).

(iv) The Kindergarten Head teacher’s Associations (KHA)

KHA was founded by a group of head teachers in Nairobi. It provides an alternative ECD curriculum whose ideas are used to enrich the official ECDE curriculum. The curriculum stresses on the importance of play and learning through play. English is the medium of Education according to this model and much emphasis is placed on widening the children’s understanding and use of the language. The curricula provided in pre-schools in Langata District and the levels of satisfaction of parents needed to be established.
2.3.2 Types of Pre-school Education Managements/Sponsorships

Gachie (2003) reveals that the expansion of the organized pre-school institutions in the towns and rural areas in Kenya were sponsored by the religious bodies, welfare organizations, parents and communities through self-help projects, local authorities, private sector and other partners like NGOs. It was the responsibility of each partner to provide the necessities for the smooth running of the centres. Some of these requirements include: - land, furniture, payment of teachers, provision of learning materials and training the teachers. This situation continued without a clear government policy framework to govern the expansion of pre-schools up to 1980 when the National Centre for Early Childhood Education (NACECE) was set up to give guidance as well as coordinate ECDE activities in Kenya. Later, the District Centres for Early Childhood Education (DICECEs) and the City Centre for Early Childhood Education (CICECE) to cover various districts in Nairobi County respectively were created.

Provision of ECDE is plagued by poor delivery of education, under-enrolment of the handicapped, and disparities between different geographical areas, male and female and between affluent and poor households (GoK 1999). Only the state can put together all the components of education into a coherent yet flexible education system to accommodate all. There is need to acknowledge, accommodate and support the role of other education providers such as NGOs, religious organizations, private schools developers and communities. Their efforts should be supported within a diversified system. In which the Government plays its essential coordinating and standard-setting role such as inspecting the quality and relevance of the teaching/learning materials, equipment, physical facilities and teachers' qualifications.
2.3.3 Availability of Physical Facilities and Teaching-Learning Materials

Findings by the GoK (1999) education commission of inquiry indicate that the ECDE facilities and equipment vary greatly in terms of quality and quantity. This is due to the level of community awareness of the needs of pre-school education, levels of resources of the community, the sponsors and promoters of the centres as well as the teachers' qualifications. The physical facilities range from permanent class-rooms to mud-walled grass-thatched or even under-tree arrangements in rural areas. The GoK (1999) observes that the priority is for the state to work with households and communities to build an infrastructure through which the basic growth needs of children – nutrition and health are met and to improve the quality of life for children aged 0–6 years. This implies that co-ordination of the health (nutrition) and education services for early childhood is necessary.

Moreover, many ECDE centers are characterized by inadequacies in basic facilities such as properly-ventilated classrooms, furniture unsuitable for children, lack of play-grounds, toilets and kitchens with safe drinking water. Where the pre-primary classes are adjoined to primary school, quite often the pre-primary facilities were poorer than those of the primary school (MoEST, 2002).

The World Bank (2004) report indicates that there is an improvement in learning achievements, as well as strengthening educational input. The provision of instructional materials and improvements in the learning environment, including classrooms and other school facilities all will contribute to the improvement of the quality of pre-school education. Although the current learning outcome in Kenya is relatively better than
some other Sub-Saharan Africa countries, still there is a huge gap compared with the international standards.

According to the GoK (1999), most pre-schools in Kenya are run informally by communities, primary schools, NGOs and religious organizations with serious implications to the quality of education facilities offered which will in turn affect access and retention of children in those pre-schools. This will have to affect the satisfaction of parents towards the provision of pre-school education. The GoK (1999) further reveals that the ECCDE facilities and equipment vary greatly in terms of quality and quantity. This variety is due to the level of community awareness of the needs of ECCDE, levels of resources of the community, the sponsors and promoters of the centres as well as the teachers' qualifications. Moreover, GoK (1999) observes, the physical facilities range from permanent class-rooms in private ECCDE centres in urban settings, to mud-walled grass-thatched or even under-tree arrangements in rural areas.

Gakuru (1992) explored the relationship between class and pre-school education in Kenya. He found out that enrollments in pre-schools is influenced by the socio-economic status of parents in a given area whereby the well-off parents are able to take their children to high cost private pre-schools which are also endowed with better facilities. Alternatively, the poor parents take their children to poorly equipped pre-schools in both private and public sectors without enough teachers.

2.3.4 Availability of Pre-school Teachers and their Qualifications

According to the GoK (1999), the pre-school education in Kenya operated without clear policy and was managed by teachers who are largely unqualified and grossly underpaid.
In addition, the poor parents manage to take their children to the poorly equipped pre-schools in both private and public sectors without enough teachers. Even the teachers in such schools are not qualified. This scenario has serious implications to the quality of education offered and therefore there was need to determine the level of parents’ satisfaction with quality of pre-school education.

The World Bank (2004) reiterates that improving school retention and completion also requires greater enhancement of education quality, including improvement in learning achievement as well as strengthening educational input. Although the current learning outcome in Kenya is relatively better than some other Sub-Saharan African countries, there is a huge gap compared with the international standards. However, improvement of teacher's competence in classroom teaching and improvements in the learning environment, among other things, all will contribute to the improvement of overall education quality. However, despite the general picture of Kenya being fairly better than some other Sub-Saharan African countries, the situation in Lang’ata District still remains unknown as far as the provision of pre-school education is concerned and the level of parents’ satisfaction with quality of pre-school education.

2.3.5 The Pre-school Education Teacher-Child Ratio

According to Card & Krueger (1996), teacher-child ratio refers to the number of teachers in a school with respect to the number of students who attend the institution. For example, a teacher-child/student teacher ratio of 1:10 indicates that there is one teacher for every 10 children/students. In the United States, some states have enacted legislation mandating a maximum teacher-child/student-teacher ratio for specific grade levels, particularly kindergarten. When such figures are stated for schools, they often represent
averages (means) and thus are vulnerable to skewing. For example, figures may be biased as follows: if one classroom has a 1:30 ratio and another has a 1:10 ratio, the school could thus claim to have a 1:20 ratio overall.

Card & Krueger (1996) also note that the teacher-child ratio also differs from one learning environment to another. For example, in the USA the law requires that there shall be a ratio of one teacher virtually observing and supervising no more than 12 children in attendance. Therefore, the number of children in attendance shall not exceed licensed capacity. Furthermore, whenever children are engaged in activities away from the center, no teacher shall be in charge of a group of more than 12 children.

Card & Krueger (1996) goes on to assert that the law further requires that sufficient staff should be made available to provide frequent personal contact with children; meaningful learning activities; supervision; and to offer immediate care as needed. The ratio of staff to children will vary depending on the age of the children, the type of program activity, the inclusion of children with special needs, the time of day, and other factors. Staffing patterns should provide for adult supervision of children at all times and the availability of an additional adult to assume responsibility if one adult takes a break or must respond to an emergency. Staff-child ratios are maintained in relation to size of group.

Finally, Card & Krueger (1996) observes that the recommended teacher-child ratio for the 4-5 years old children ranges between 1:8 and 1:10 for group sizes of 16 to 20 individuals/learners. Since the teacher-child ratio affects the quality of ECDE, it will in turn influence the parental satisfaction with ECDE. The situation in Lang’ata District remains undocumented in this regard yet highlighting it may greatly contribute to better
delivery of educational services. It is to this end that the researcher sought to determine
the teacher-child ratio and how it affected the parents’ satisfaction with the quality of
pre-school education in Lang’ata District.

2.4 Parents’ Satisfaction with the Quality of Pre-school Education

Gakuru (1992) asserts that enrollments in pre-schools are influenced by the socio-
economic status of parents in a given area. On a study about the relationship between
socio-economic class and pre-school education in Kenya, he reveals that the well-off
parents are able to take their children to high cost private pre-schools which are also
endowed with better facilities while the poor parents manage to take their children to
poorly equipped pre-schools in both private and public sectors without enough teachers
leave alone facilities. However, he is silent on the levels of satisfaction of these parents
on the quality of pre-school education as influenced by those facilities. Hence, there was
need to determine the levels of satisfaction of parents on the education quality among the
poor and rich parents.

2.4.1 Measuring Parental Satisfaction with the Quality of Education

The issues pertaining to service quality and their implications on customer satisfaction
have been prominently featured in the marketing literature since the first recognition of
distinctive dimensions of service quality around 25 years ago (Gronroos, 1990). The
underlying premise with reference to pre-school education is that if parents’ (customers’)
perceptions of the key service quality dimensions exceed expectations, the behavioral
response of the satisfied parents will be to retain their children at the same centres.
Zeithaml et al (1993) have suggested that it may be the perception of service quality that leads to customer satisfaction. This means that if the customer perceives the service to be of high quality, then the customer will be satisfied with it. Bitner (1990) and Bolton and Drew (1991) agreed with this view by saying that satisfaction is an antecedent of service quality. Therefore, managers of pre-schools need to identify the explicit link between customer satisfaction and the performance of the specific service quality dimensions.

The decrease in customer loyalty has made management of service quality and customer satisfaction critically important factors for service organizations. To enhance customer (parent) satisfaction, pre-school education providers should cater for the factors which contribute to customer satisfaction (Brown and Swartz, 1989). Service quality is a relative concept and its measurement involves the discovery of effective ways to survey customers and determine their expectations and perceptions of the quality of individual dimensions and the overall service.

According to Dasgupta, Narayan & Skoufias (2009), to rate or measure the performance of services or satisfaction with a service, five rating options are used which are: Quite Satisfied, Satisfied, Quite Unsatisfied, Unsatisfied, and Not Applicable or Unknown. The mean will be used to analyse the data besides percentages. To capture the variation, the responses are classified into three distinct sub-groups: namely, 1) satisfied; 2) dissatisfied; and, 3) not applicable or unknown. The “satisfied” level represents all responses for satisfied and quite satisfied while the “dissatisfied” level represents all responses for quite unsatisfied and unsatisfied. The variation or proportion of the three distinct groups is then compared based on percentages.
On interpreting and evaluating the data on satisfaction a robust model is devised. Most analyses of satisfaction data begin by comparing objective indicators of quality of service delivery with satisfaction levels. Recognizing that objective quality is rarely a sufficient explanation of satisfaction, many of these models incorporate the role of expectations, pre-dispositions and perceived quality in determining satisfaction. The expectancy disconfirmation theory is the commonly-used model, where satisfaction is determined by the degree to which objective performance of service providers meets the expectations of consumers.

One is satisfied if positive disconfirmation occurs in which case performance surpasses expectations while negative disconfirmation leads to dissatisfaction (expectations surpassing performance). i.e.

a) Positive Disconfirmation if Actual quality > Expectation

b) Negative Disconfirmation if Actual quality < Expectation

Boulding, Kalra, Staelin & Zeithaml (1993) and Johnson & Johnson (1989) all concur that the performance model is a more dynamic variant of the disconfirmation model, where consumer expectations are constantly recalibrated based on recent experiences of service use. Satisfaction is thus a result of (i) actual service quality and (ii) expectations. Expectations are determined by factors such as a household’s characteristics, information available to the household and its experiences with past consumption of services.

Given the broad base of household specific determinants of expectations and the possibility of measurement error in expectations the latitude of acceptance or expectation ranges between the minimum and desired expected standard to be met in
service delivery (Zeithaml et al, 1993). Households are ‘quite satisfied’ when actual quality falls within this area, i.e. does not differ significantly from household’s expectation. Actual quality beyond the desired expected standard (the upper bound of expectation) yields positive disconfirmation or satisfaction to a household. This approach can be implemented if data on satisfaction and expectations can be successfully matched with data on actual service delivery. Models based on this approach tend to ignore the difficulty of measuring both objective quality and consumer expectations when it comes to basic services, and do not adequately account for the role of governance in determining satisfaction.

2.4.2 Satisfaction of Education Quality among Poor and Rich Parents

Gakuru (1992) explored the relationship between class and pre-school education in Kenya. He found out that enrollments in pre-schools is influenced by the socio-economic status of parents in a given area whereby the well-off parents are able to take their children to high cost private pre-schools which are also endowed with better facilities. Alternatively, the poor parents manage to take their children to poorly equipped pre-schools in both private and public sectors without enough teachers. Even the teachers in such schools are not qualified (GoK, 1999).

2.5 Summary and Knowledge Gaps Identification

The review of literature related to parents’ level of satisfaction with the quality of ECDE reveals that the quality of education is generally influenced by variables such as teaching/learning materials, physical facilities and qualifications of the teaching force. It is evident that the expansion and physical development of pre-schools is very crucial to provide the requisite facilities and conductive teaching-learning environment which will
in turn influence the parents’ level of satisfaction with pre-school education. The available literature analyses how the aforementioned factors influence the education consumers’ level of satisfaction, particularly at the tertiary level and not at the pre-school level, the foundation for the education of the child.

The studies were also done several years ago and therefore will most probably not reflect the current situation in a particular area. For instance, Gakuru (1992) found out that enrollments in pre-schools are influenced by the socio-economic status of parents in a given area whereby well-off parents are able to take their children to high cost private pre-schools endowed with better facilities while the poor parents manage to take their children to poorly equipped pre-schools in both private and public sectors without enough teachers. Hence, there was need to carry out a study to determine the current situation in a particular area, with specific reference to Lang’ata District.

Furthermore, despite a vast literature in customer satisfaction in service delivery, education inclusive, little had been said on the satisfaction of pre-school education institutions’ customers i.e. the parents, who were among the key stakeholders in the provision of ECDE whose inputs could only be ignored with dire consequences. To this end, this study sought to provide an insight into the parents’ satisfaction with the quality of ECDE in Lang’ata District, Nairobi County, Kenya.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This section presents the research methodology that includes the description of the research design, study location, target population, sampling techniques, instrumentation, pilot study, validity and reliability of data collection instruments, data collection procedures and the data analysis plan.

3.2 Research Design

This study adopted the causal-comparative (ex post facto) research design. According to Fraenkel & Wallen (1993) and Gay (1996) causal-comparative (ex post facto) research design entails the comparison, examination and drawing of conclusions about a certain phenomenon. Also, its techniques involve a statistical analysis or testing of the hypotheses set out at a given level of significance and that the variables, both dependent and independent, cannot be manipulated because they have already occurred. Orodho (2009) adds that since the variables have already occurred, the work of the researcher is to establish the relationship between parental satisfaction and the variables of quality pre-school education.

Applied to this study, the quality of ECDE (independent variable) influencing the level of parents’ satisfaction (dependent variable) in Lang’ata District, Nairobi County could not be manipulated. The design enabled the researcher to describe, compare and examine the differences in levels of satisfaction among parents of various pre-schools, incomes and in terms of various education quality variables such as type of management, availability of facilities and teacher-pupil ratio.
3.2.1 The Variables of Study

This study assessed the influence of selected factors determining the quality of ECDE on parental satisfaction. Hence, there were two variables, namely:-

a) The independent variable consisting of the determinants of the quality of ECDE whose components were:

   i. Type of curriculum offered;
   ii. Type of school management/sponsorship;
   iii. Availability of adequate physical facilities;
   iv. Availability of adequate teaching-learning materials;
   v. Availability of qualified teachers;
   vi. Teacher-child ratio.

b) The dependent variable consisting of the level of parents’ satisfaction with the quality of ECDE.

3.3 Study Location

The area of study was Lang’ata District one of the divisions in Nairobi County, the capital city of Kenya whose ECDE activities are supervised by the City Centre for Early Childhood Education (CICECE). The area is a multi-cultural setting with both affluent and poor parents with low incomes living in poor housing conditions in such areas as Kibera. These are some of the areas in the County facing overcrowding in social amenities such as schools, medical facilities and so on. On the other hand, the affluent estates boast with high cost ECDE centers well equipped with facilities.

Lang’a’ta District was chosen for study because of the diversity of ownership of the preschools in the area. The researcher works in the area and hence coordination of data
collection activities was relatively cheaper than in other places. Finally, the researcher chose the area because a study of a similar nature had never been conducted there.

3.4 Target Population

The study targeted parents and HTs/managers in 160 pre-schools, comprising of 91 private and 69 public, 11 church-sponsored, 15 run by City Commission and 11 community-sponsored centres. The study targeted 3545 parents and 160 HTs/managers in the pre-schools in Lang’ata District as shown in table 3.1.

<table>
<thead>
<tr>
<th>Pre-School Type</th>
<th>Pre-schools</th>
<th>Parents</th>
<th>HTs/Managers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Pre-Schools</td>
<td>91</td>
<td>1 820</td>
<td>91</td>
<td>1 911</td>
</tr>
<tr>
<td>Public Pre-Schools</td>
<td>69</td>
<td>1 725</td>
<td>69</td>
<td>1 794</td>
</tr>
<tr>
<td>TOTAL</td>
<td>160</td>
<td>3 545</td>
<td>160</td>
<td>3 705</td>
</tr>
</tbody>
</table>

Referring to Table 3.1, the population consisted of 1820 parents from private pre-schools and 1725 from public ones; while the HTs/managers were 91 from private pre-schools and 69 from public ones making a total of 3705 subjects.

3.5 Sampling Techniques and Sample Size

The sampling technique facilitated the determination of how many as well as the actual selection of subjects for study, thus enabled the researcher to draw the sampling frame.

3.5.1 Sampling Techniques

Stratified random sampling technique was used to select the required sample. Stratified random sampling technique is used since the pre-schools and the population of subjects
(parents and teachers) was heterogeneous. Finally, simple random sampling technique was used to select the actual subjects for study. Orodho (2004:143) points out that in stratified sampling the sample is selected in such a way that one is assured that certain sub-groups in the population will be represented in the sample in proportion to their numbers in the population itself to avoid bias in the sample drawn.

Thus, the subjects were categorized as per school types and then the sample size was randomly selected from each category i.e. stratum (Kothari, 2004:63). To obtain the specific pre-schools for study, a sampling frame was prepared based on the raffle method (lottery technique) of simple random sampling.

### 3.5.2 Sample Size

Studying an entire population is advisable. Hence, the larger the sample sizes the better. However, Gay (1992) recommends that in descriptive studies the minimum sample size should be 10% for a large sample and 20% for a small one. On this strength, the researcher targeted a sample size equivalent to 10% of the population of parents and all HTs/managers from 40 pre-schools as shown in table 3.2.

<table>
<thead>
<tr>
<th>Pre-School Type</th>
<th>Pre-schools</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Parents</td>
</tr>
<tr>
<td>Private Pre-Schools</td>
<td>22</td>
<td>182</td>
</tr>
<tr>
<td>Public Pre-Schools</td>
<td>18</td>
<td>173</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>40</strong></td>
<td><strong>355</strong></td>
</tr>
</tbody>
</table>

Table 3.2 indicates that 182 parents and 22 HTs/managers from private pre-schools as well as 173 parents and 18 HTs/managers from public pre-schools were randomly
selected. This gave rise to 40 HTs/managers and 355 parents thereby yielding a sampling matrix of 395 respondents.

3.6 Research Instruments

The researcher developed questionnaires for parents, semi-structured interview guides for HTs/managers, document analysis checklists and observation schedules. Mugenda and Mugenda (1999) recommend for triangulation in use of data collection instruments i.e. the use of multiple methods of data collection to study all aspects of a phenomenon in which case the merits of one instrument may offset the demerits of the other.

3.6.1 Parent’s Questionnaires

Questionnaires are relatively easy and cost-effective to construct and administer to large samples. They allow the respondent enough time to think about answers for questions which require a lot of reflection and can be made to have both closed and open-ended questions. Mugenda and Mugenda (1999) observe that closed-ended items are in an immediate usable form and therefore relatively easier to analyze while open-ended ones allows for a greater depth of response and therefore allows respondents to express their views “without putting words in their mouths” as closed-ended items do. The Parents’ Questionnaire (Appendix 2 refers) required parents to provide details about their personal data as well as their perceptions on levels of parents’ satisfaction with ECDE based on a five point likert scale rating.

3.6.2 Head Teachers/Managers’ Semi-structured Interview Guides
The semi-structured interview guide allows for a series of both closed-ended and open-ended questions to be asked. The closed-ended questions will enable the researcher to collect facts; while the open-ended questions will give the subjects room to freely express their views. Moreover, the semi-structured interview guide will allow the researcher to ask additional questions which may arise during the interview for further clarification of responses. The semi-structured interview guide (Appendix 3 refers) required the HTs/managers to provide general information about themselves and their schools while the rest of the items required them to rate the parents’ level of satisfaction with ECDE based on a five point Likert Scale.

3.6.3 Observation Schedule

The observation schedule (Appendix 4 refers) enabled the researcher to directly and personally observe the current state of physical facilities and teaching-learning materials in pre-schools thereby collecting data without relying on another person. Hence, it was a reliable source of data.

3.6.4 Document Analysis Checklist

The researcher analysed documents such as enrollment records, teachers’ qualifications and other relevant ones to corroborate responses given in the questionnaires as presented in Appendix 5. The document analysis checklist is the best tool of accessing valid information since it cannot create, waiver or withhold information.

3.7 Pilot Study
Before the actual study was done the researcher pre-tested the instruments in two randomly selected pre-schools which were finally excluded from the actual study. Pre-testing the instruments was meant to assess their validity and reliability so that items that failed to solicit for anticipated data were discarded or modified accordingly.

### 3.7.1 Validity of the Instruments

Orodho (2009) defines instrument validity as the extent an instrument measures what it purports to measure. Furthermore, Kathuri and Pals (1993: 16-17) assert that content validity cannot be represented numerically, but is determined subjectively by a thorough examination of the instrument by a panel of expert judges.

Hence, the researcher developed the instruments and then handed them over to the supervisors to assess whether they measured what they intended to measure as per the objectives of study. She then amended them accordingly, based on their recommendations. The researcher resubmitted the corrected version of the instruments to the supervisors for final review. Finally, Kathuri and Pals (1993) add that:

> Many times a field test can also be conducted with a population [subjects] similar to the proposed population to help with content validity (p.16-17).

On this strength, piloting was eventually done to identify items that were likely to elicit irrelevant or even no responses. The instrument was revised accordingly. Mugenda and Mugenda, (1999) assert that a valid instrument is reliable. Hence, the procedure also enhanced reliability of the instruments.

### 3.7.2 Reliability of Instruments


Kothari (2004) defines reliability as a measure of the degree to which an instrument yields consistent results or data after repeated trials. Reliability of the instruments as determined by using the internal consistent method of Cronbach’s Alpha Coefficient (\(\alpha\)), calculated as follows:

\[
\alpha = \frac{n^*(\bar{r})}{\{1 + (n-1)*\bar{r}\}}
\]

(Smith, 2003:127).

Where (\(\bar{r}\)) would be calculated from averaging \(\frac{(n!)}{(n-2)!} \text{correlation coefficients.} \)

Smith (2003) recommends the use of Cronbach’s Alpha Coefficient (\(\alpha\)) in determining reliability when the researcher uses self-developed instruments tailored to certain subjects and also when the questionnaires have both closed-ended as well as open-ended items. Smith (2003) declares that an alpha (\(\alpha\)) of 0.8 is normally deemed to be satisfactory. The instruments’ scores produced a correlation coefficient index which was 0.85, and hence considered them reliable enough to collect the anticipated data.

3.8. Data Collection Procedure

The researcher collected primary data from the field and secondary data as follows.

3.8.1 Access Procedures and Logistics (Ethical Considerations)

Once the proposal was approved for field data collection, the researcher applied for the Research Permit from the National Council for Science and Technology, a Department in the Ministry for Higher Education. She then finally developed the work plan and the research budget, pre-tested the instruments, developed the sampling frame to identify the subjects for study and prepared enough copies of the instruments, ready for distribution.
She made a courtesy call at the Area Education Office in charge of Lang’ata District before actual data collection and visited the subjects in various pre-schools to create a rapport with them. However, she requested HTs/managers to facilitate contact with the parents to be involved in the study. She explained the purpose of the study and their expected roles. To encourage them further to participate, she assured them that the data given would be kept confidential and would be strictly used for the purpose of the study.

3.8.2 Distribution and Collection of Instruments

During the first visit, the researcher issued out the instruments (questionnaires to parents and interview schedules to head teachers) and fixed the date with HTS/managers when to conduct the interview. She encouraged parents to fill the questionnaires so that she took them instruments immediately otherwise. Meanwhile, the researcher was also filling the observation schedules when visiting the centres. The researcher administered the instruments with the help of research assistants who were trained prior to data collection.

3.8.3. Secondary Data

The researcher collected relevant printed/written materials (records) related to teachers, curriculum, children’s enrollment as well as other relevant documents and then recorded the details in the document analysis checklist.

3.9 Data Analysis Plan and Presentation

Data analysis and presentation was done as follows:

3.9.1. Pre-data Analysis Processes
The return and response rates of questionnaires were determined; data from interview guides and open-ended questionnaire items was transcribed (i.e. qualitative data). Finally, the data was coded whereby categories of responses were identified, classified and then tabulated as per objectives of study.

3.9.2 Data Analysis Methods and Statistics

Both qualitative and quantitative data were collected. Qualitative data was quantified where possible, along with quantitative data from the structured (closed-ended) questionnaire items. Otherwise, the data was thematically analysed i.e. critically analyzed as per objectives of study in themes. The percentage, mean, median and mode (descriptive statistics) as well as Chi-Square ($\chi^2$), F test and Beta based on regression analysis was used to analyse quantitative data, being facilitated by the use of SPSS (Statistical Package for Social Sciences) computer package. The hypotheses were tested at $p < .05$ (level of significance) as presented in Table 3.3. The findings were presented in form of cross tabulations, frequency tables and bar graphs.
Table 3.3: Summary of Data Analysis Statistics for Testing Hypotheses

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>Statistical Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO1: There is a difference in parents’ satisfaction with the quality of ECDE between public and private pre-schools.</td>
<td>Type of School Management</td>
<td>Parents’ level of satisfaction</td>
<td>Chi-Square ($\chi^2$)</td>
</tr>
<tr>
<td>HO2: There is a difference in parents’ satisfaction with the quality of ECDE between pre-schools with adequate physical facilities and those without the facilities.</td>
<td>Adequacy of physical facilities.</td>
<td>Parents’ level of satisfaction</td>
<td>Chi-Square ($\chi^2$)</td>
</tr>
<tr>
<td>HO3: There is a difference in parent’s satisfaction with the quality of ECDE between pre-schools with adequate teaching-learning materials and those without.</td>
<td>Adequacy of teaching-learning materials</td>
<td>Parents’ level of satisfaction</td>
<td>Chi-Square ($\chi^2$)</td>
</tr>
<tr>
<td>HO4: There is a difference in parents’ satisfaction with the quality of ECDE between pre-schools with qualified teachers and those without qualified teachers.</td>
<td>Teachers’ qualifications</td>
<td>Parents’ level of satisfaction</td>
<td>Chi-Square ($\chi^2$)</td>
</tr>
<tr>
<td>HO5: There is a difference in parents’ satisfaction with the quality of ECDE between pre-schools with a low teacher-child ratio and those high ratios.</td>
<td>The teacher-child ratios.</td>
<td>Parents’ level of satisfaction</td>
<td>Chi-Square ($\chi^2$)</td>
</tr>
<tr>
<td>HO6: There is a difference in the contribution of each factor to overall parental satisfaction with the quality of ECDE.</td>
<td>Factors influencing quality of ECDE</td>
<td>Parents’ level of satisfaction</td>
<td>Beta (Regression analysis)</td>
</tr>
<tr>
<td>HO7: There is a difference in parents’ satisfaction with the quality of ECDE between low-income and high-income parents.</td>
<td>Parents’ levels of income.</td>
<td>Parents’ level of satisfaction</td>
<td>$F$ test</td>
</tr>
</tbody>
</table>
CHAPTER FOUR
DATA ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS

4.1 Introduction

In this chapter, the findings on the level of parents’ satisfaction with the quality of ECDE as influenced by certain selected variables in both public and private pre-schools in Lang’ata District of Nairobi County, Kenya are presented, interpreted and then discussed as guided by the specific study objectives. These objectives were:

a) To determine the levels of parents’ satisfaction with the quality of pre-school education in Lang’ata District as affected type of curriculum offered, type of school management/sponsorship, availability of physical facilities, availability of teaching-learning materials, availability of qualified teachers and teacher-child ratio.

b) To determine which of the factors affecting the quality of pre-education contributes most to the parents’ level of satisfaction.

c) To compare the levels of satisfaction with the quality of pre-school education between low-income and high-income parents.

d) To seek for the views of respondents on how to improve the quality of pre-school education in Lang’ata District.

4.2 Preliminary Details on Respondents and Pre-schools

The head teachers HTs/managers and parents were required to provide information about their levels of education, types of pre-school sponsorship, parents’ levels of income and the curriculum offered. Table 4.1 shows the findings on the level of education of parents and HTs-Managers.
Table 4.1: The Head Teachers'/Managers' Level of Educational Qualifications

<table>
<thead>
<tr>
<th>Level of education and qualifications</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Secondary (KSCE)</td>
<td>2</td>
<td>5.0</td>
</tr>
<tr>
<td>Diploma in Education</td>
<td>7</td>
<td>17.5</td>
</tr>
<tr>
<td>Bachelor of Education</td>
<td>4</td>
<td>10.0</td>
</tr>
<tr>
<td>P1 Grade</td>
<td>26</td>
<td>65.0</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>10.8</td>
</tr>
</tbody>
</table>

Table 4.1 shows that except for the 2(5.0%) H/Ts/managers with secondary education (KSCE), the rest of the H/Ts/managers (who were 37 or 92.5%) had been formally trained as teachers; the leading being 26(65.0%) having attained a P1 certificate, followed by diploma holders (being 7 or 17.5%) and degree holders (being 4 or 10.0%). Thus, majority of the H/Ts/managers had the basic qualifications necessary for carrying out their tasks running their institutions.

The parents were asked to reveal the types and sponsors of the schools where their children were attending. Table 4.2 shows the findings.

Table 4.2: Parents' Responses on the Types of Sponsors of the Pre-Schools

<table>
<thead>
<tr>
<th>Type of pre-schools</th>
<th>Sponsor</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public (164 or 49.4%)</td>
<td>Government</td>
<td>56</td>
<td>16.9</td>
</tr>
<tr>
<td></td>
<td>Community</td>
<td>26</td>
<td>7.8</td>
</tr>
<tr>
<td></td>
<td>Religious Organisation</td>
<td>59</td>
<td>17.8</td>
</tr>
<tr>
<td></td>
<td>NGO</td>
<td>23</td>
<td>6.9</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td>158</td>
<td>47.6</td>
</tr>
<tr>
<td>No Response</td>
<td></td>
<td>10</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>332</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.2 reveals that the pre-schools were both public and private, with the public ones being slightly more (164 or 49.4%) than private ones, which were 158(47.6%). The public ones had various sponsors, the religious organizations being the leading in providing educational opportunities (59 or 17.8 %) followed by the government with 56(16.9 %), the community with 26(7.8%) and finally NGOs with 23(6.9 %). Therefore, data was collected from a wide cross-section of pre-school types and therefore was more representative to meet the objectives of the study.

The findings also confirmed that still there is a partnership between the Government and other stakeholders in the provision of ECDE as was observed by Gachie (2003). According to Gachie (2003) the expansion of the organized pre-school institutions in the towns and rural areas in Kenya were sponsored by the religious bodies, welfare organizations, parents and communities through self-help projects, local authorities, private sector and other partners like NGOs. Finally, parents’ income levels were also sought to determine disparities existing between low and high income groups in parental satisfaction in relation to the quality of ECDE. Table 4.3 shows the findings.

<table>
<thead>
<tr>
<th>Income bracket (KShs)</th>
<th>Freq.</th>
<th>%</th>
<th>Cumulative Freq.</th>
<th>Cumulative %</th>
<th>Income group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10, 000</td>
<td>155</td>
<td>46.7</td>
<td>155</td>
<td>46.7</td>
<td></td>
</tr>
<tr>
<td>KShs 10, 000 – 19, 999</td>
<td>91</td>
<td>27.4</td>
<td>246</td>
<td>74.1</td>
<td>Low income</td>
</tr>
<tr>
<td>KShs 20, 000 – 29, 999</td>
<td>12</td>
<td>3.6</td>
<td>258</td>
<td>77.7</td>
<td></td>
</tr>
<tr>
<td>KShs 30, 000 – 39, 999</td>
<td>5</td>
<td>1.5</td>
<td>263</td>
<td>79.2</td>
<td></td>
</tr>
<tr>
<td>KShs 40, 000 – 49, 999</td>
<td>11</td>
<td>3.3</td>
<td>274</td>
<td>82.5</td>
<td>High income</td>
</tr>
<tr>
<td>KShs 5,0000 &amp; Above</td>
<td>24</td>
<td>7.2</td>
<td>298</td>
<td>89.8</td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>34</td>
<td>10.2</td>
<td>332</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>**332</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Referring to Table 4.3, majority of the parents belonged to the low-income group. In short, 246 (74.1%) parents were earning less than KShs 20,000 per month. Given the cost of living in Nairobi, then these percentages represents low income group of parents since most residents of Lang'ata District live in slum areas of Kibera. Hence, those earning KShs 20,000 and above may be considered to be the high income groups. Figure 4.1 amplifies the disparities in incomes among parents.

![Figure 4.1: Monthly Income of Parents in Selected Pre-Schools](image)

According to findings in figure 4.1, majority of the parents, being 155 (46.7%), were earning less than KShs 10,000 per month, followed by those in the KShs 10,000 - 19,999 bracket, being 91 (27.4%). The middle incomes were lower than the very low and high incomes. Great disparities existed between the high and low incomes with extremes. Finally, the HTs/managers were asked to reveal the type of curriculum that was offered in their pre-schools. The findings are shown in Table 4.4.
Table 4.4: Type of School Curriculum Offered According to HTs/Managers

<table>
<thead>
<tr>
<th>Type of curriculum</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya Institute of Education (NACECE)</td>
<td>40</td>
<td>100.0</td>
</tr>
<tr>
<td>Montessori</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kenya Headmistresses association</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Referring to Table 4.4, all the ECDE centers offered the NACECE curriculum recommended, confirmed by all the 40(100%) HTs/managers. The curriculum is developed by the Kenya Institute of Education (KIE). The findings confirm that the ECDE centres had adopted the KIE-NACECE curriculum as recommended by the 2006 ECD policy. GoK (2006:15) asserts that the KIE-NACECE shall develop the curriculum/syllabus to be used in all ECD centres in Kenya.

This contrasts with findings by Wawire (2006) on *Factors that Influence the Quality and Relevance of Early Childhood Education in Kenya: Multiple Case Studies of Nairobi and Machakos Districts*. She found out that curriculum implementation was hampered by varied curriculum models in use. Pre-schools used curriculums from KIE, KHA, Montessori or a combination. Sponsorship played a major role in determining the curriculum to be used.

4.3 Levels of Parental Satisfaction with the Quality of ECDE

Objective one of the study sought to determine the levels of parental satisfaction with the quality of ECDE in Lang’ata District in relation to certain selected variables. The findings are presented as follows.
4.3.1: Measuring Satisfaction on the Satisfied-Dissatisfied Continuum

To measure the parental satisfaction with the quality of ECDE, the combined responses (i.e. parents, n=332 and HTs/managers, n=40 making a total of 372) were rated on the satisfied-dissatisfied continuum (a 5-item scale). This was meant to determine not only the most commonly preferred level of satisfaction but also extremes on the rating scale. Table 4.5 shows the findings on the overall ratings.

Table 4.5: Parental Satisfaction Measured on the Satisfied-Dissatisfied Continuum

<table>
<thead>
<tr>
<th>Variable</th>
<th>Strongly Satisfied f</th>
<th>Satisfied f</th>
<th>Strongly Dissatisfied f</th>
<th>Dissatisfied f</th>
<th>No Opinion f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum</td>
<td>112</td>
<td>30.1</td>
<td>191</td>
<td>51.3</td>
<td>53</td>
</tr>
<tr>
<td>Management</td>
<td>70</td>
<td>18.8</td>
<td>195</td>
<td>52.4</td>
<td>52</td>
</tr>
<tr>
<td>Facilities</td>
<td>82</td>
<td>22.0</td>
<td>150</td>
<td>40.3</td>
<td>80</td>
</tr>
<tr>
<td>T/L Materials</td>
<td>78</td>
<td>21.0</td>
<td>143</td>
<td>38.4</td>
<td>108</td>
</tr>
<tr>
<td>Qualifications</td>
<td>92</td>
<td>24.7</td>
<td>141</td>
<td>38.0</td>
<td>66</td>
</tr>
<tr>
<td>T/Child Ratio</td>
<td>57</td>
<td>15.3</td>
<td>154</td>
<td>41.4</td>
<td>82</td>
</tr>
<tr>
<td><strong>Cumulative Overall</strong></td>
<td><strong>491</strong></td>
<td><strong>22.0</strong></td>
<td><strong>974</strong></td>
<td><strong>43.6</strong></td>
<td><strong>441</strong></td>
</tr>
</tbody>
</table>

Overall, as Table 4.5 reveals, most parents, being 43.6%, were satisfied with the quality of ECDE in relation to factors determining quality, followed by strongly satisfied, rated at 22.0%, dissatisfied at 19.8% and finally strongly dissatisfied at 5.2%. The aforementioned 5-scale rating framework provides a theoretical approach of measuring the parental satisfaction with the quality of ECDE.

This framework is similar to the theoretical approach proposed by Zeithaml, Berry and Parasuraman (1993) referred to as the ‘zone of tolerance’. Brown and Swartz (1989) expounded on this model by asserting that the ‘zone of tolerance’ posits two levels of expectations, one being the desired service level which represents a blend of what
customers believe "can be" and "should be" provided (expectation). The other level, according to Woodruf, Cadotte and Jenkins (1987), is the adequate service which is the minimum level of service a customer will accept (perception). This creates an "expectation-perception gap" (Parasuraman, Zeithaml, and Berry, 1985). The range of levels of customer service expectations a customer would consider satisfactory lies between these two levels and is known as the 'zone of tolerance'. If a customer’s satisfaction lies outside the 'zone of tolerance' of tolerance, then he/she is dissatisfied.

Figure 4.2 brings out not only the disparities in ratings for each factor determining the quality of ECDE but also the extremes in the ratings.

![Bar chart showing parental satisfaction measured on the satisfied-dissatisfied continuum.](image)

Referring to figure 4.2, the most preferred level was satisfied across all variables of quality ECDE, management leading at 52.4% and the least being teachers’ qualifications.
at 38.0%. Strongly satisfied emerged stronger in curriculum, said by 30.1% while teacher-child ratio was the least as said by 15.3%. Parents were highly dissatisfied by T/L materials said by 29.0%. The findings imply that parental satisfaction occurred at various levels for each factor such that even if satisfied emerged the dominant level/most preferred across all the variables, there were some parents who were dissatisfied, too.

The findings concur with the suggestion of Parasuraman, et al (1985) that service quality can be measured using the expectation-perception gap and this view has been widely accepted. Brown and Swartz (1989), who examined customers’ expectations to understand service quality, agreed with the above view and accepted the expectation-perception gap as an efficient way of measuring service quality. This implies that those parents who expressed who said that they were strongly satisfied and satisfied scales had their perceptions of quality being higher than their expectations. However, for the dissatisfied or strongly dissatisfied lot, their perceptions of quality were lower than the expectations.

These findings concur with those of Gunaratne & Carswell (2002) on Customer Satisfaction in the Service Quality Dimensions in Tertiary Education, in which case customer (students) satisfaction was measured on 25 items. In 19 of the 25 (76%) items measured, the perceived level of satisfaction was significantly lower (perception) than that of importance (expectation), implying that in 6 of the 25 (76%) items the customers were outside the ‘zone of tolerance’, i.e. dissatisfied.

However, to determine the overall ratings per variable, scores for strongly satisfied and satisfied were integrated to represent satisfaction since the two items represent...
satisfaction but at different ranges. Similarly, dissatisfied and strongly dissatisfied were integrated to represent dissatisfaction, to a two-item rating scale of satisfaction-dissatisfaction. This enabled the researcher to determine the overall levels of parental satisfaction in relation to the factors as shown by figure 4.3.

As figure 4.3 shows, curriculum attracted the greatest satisfaction from parents at 81.4%, followed by adequacy of physical facilities at 72.3%, type of management at 71.2%, teachers’ qualifications at 62.6%, teacher-child ratio at 56.7% and finally T/L materials being the least at 59.0%. Incidentally, parents expressed great dissatisfaction with T/L materials at 34.4%, followed by adequacy of physical facilities at 31.0%, with the least being teacher-child ratio at 4.0%.

The findings in figure 4.3 confirm the findings by Gunaratne & Carswell (2002) on Customer Satisfaction in the Service Quality Dimensions in Tertiary Education. Gunaratne & Carswell (2002) found out that service quality is a relative concept and its
measurement involves the discovery of effective ways to survey customers and determine their expectations and perceptions of the quality of individual dimensions and the overall service.

4.3.2: Parental Satisfaction Ratings based on Respondent Categories

The responses of HTs and parents on parental satisfaction with the quality of ECDE were also compared to determine differences among the respondents in rating the satisfaction levels. The findings are presented in figure 4.4.

Referring to figure 4.4, all the HTs/managers and parents concurred that parental satisfaction was generally high in relation to all the variables that determined the quality of ECDE but at varying levels of percentages. Despite that the proportion of HTs/managers in support of parental satisfaction was higher than that of the parents in relation to all the variables. However, the reverse is true for dissatisfaction, implying that a large proportion of parents vis-à-vis HTs/managers said that parents were
dissatisfied in relation to all the variables, the leading being T/L materials at 38.2% while the least was curriculum at 16.0%.

Similarly, as Gunaratne & Carswell (2002) found out, there are, disparate views about the impact of individual service encounter satisfaction and overall service satisfaction on perceived service quality. As figure 4.4 shows, HTs/managers vis-à-vis parents had disparate views on what constitutes service quality. What is clear is that the two concepts are related. Therefore, managers and academics in the tertiary education sector need to identify the explicit link between customer satisfaction and the performance of the specific service quality dimensions. Looked at from a different perspective, customer's service expectations are not confined to a single point.

4.3.3: Parental Satisfaction Ratings based on Pre-school Types

The HTs/managers and parents were asked to rate the level parental satisfaction with the quality of ECDE as based on pre-school type. The findings are shown in Table 4.6 and then presented in figure 4.5.

Table 4.6: Satisfaction with the Quality of ECDE as per Pre-school Categories

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Are you satisfied with the curriculum?</td>
<td>113</td>
<td>69.0</td>
</tr>
<tr>
<td>Are you satisfied with the management?</td>
<td>88</td>
<td>52.6</td>
</tr>
<tr>
<td>Are the physical facilities adequate?</td>
<td>126</td>
<td>76.8</td>
</tr>
<tr>
<td>Are the Teaching-learning materials adequate?</td>
<td>131</td>
<td>79.0</td>
</tr>
<tr>
<td>Are you satisfied with teachers’ qualifications?</td>
<td>131</td>
<td>79.0</td>
</tr>
<tr>
<td>Are you satisfied with the teacher-child ratio?</td>
<td>132</td>
<td>80.5</td>
</tr>
</tbody>
</table>
Referring to figure 4.5, private pre-schools vis-à-vis public ones attracted the greatest satisfaction from parents in relation to all variables of quality ECDE, curriculum leading at 90.0% for private vis-à-vis 69.0% for public and the least being physical facilities at 82.3% for private while public the lowly rated was management at 52.6%. Therefore, disparities existed between private and public pre-schools in parental satisfaction in relation to all variables determining quality of ECDE.

Disparities in parental satisfaction between the parents in public and private pre-schools concur with Zeithaml and Bitner (2000) assertion that the width of a particular dimension (factor quality), which is a function of its importance to an individual, will not be static for all customers. However, as Gunaratne & Carswell (2002) found out in tertiary education, it is possible that the “zone of tolerance” in relation to the items on different dimensions will vary from one tertiary institute to another within the education sector. Similarly, the perception-expectation gaps across pre-school types vary from one centre to another.
4.3.4: Testing for Significant Differences in Satisfaction with ECDE Quality

The findings on parental satisfaction with the quality of ECDE show that differences existed between parents in relation to all variables but they do not reveal whether the differences are significant. To this end, the hypotheses in Tables 4.7 were tested at <.05, level of significance for all the variables except curriculum since all the pre-schools adopted the same NACECE curriculum.

Table 4.7: Tests of Significance on Parental Satisfaction with the Quality of ECDE

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>$\chi^2$</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO1: There is a difference in parents’ satisfaction with the quality of ECDE between public and private pre-schools.</td>
<td>137.518</td>
<td>2</td>
<td>.000</td>
</tr>
<tr>
<td>HO2: There is a difference in parents’ satisfaction with the quality of ECDE between pre-schools with adequate physical facilities and those without the facilities.</td>
<td>226.935</td>
<td>5</td>
<td>.000</td>
</tr>
<tr>
<td>HO3: There is a difference in parent’s satisfaction with the quality of ECDE between pre-schools with adequate teaching-learning materials and those without.</td>
<td>257.129</td>
<td>5</td>
<td>.000</td>
</tr>
<tr>
<td>HO4: There is a difference in parents’ satisfaction with the quality of ECDE between pre-schools with qualified teachers and those without.</td>
<td>304.710</td>
<td>5</td>
<td>.000</td>
</tr>
<tr>
<td>HO5: There is a difference in parents’ satisfaction with the quality of ECDE between pre-schools with a low teacher-child ratio and those high ratios.</td>
<td>202.613</td>
<td>5</td>
<td>.000</td>
</tr>
</tbody>
</table>

Referring to Table 4.7, significant differences existed between parents in levels of satisfaction with the quality of ECDE in relation to all variables. The results reveal statistically significant differences among parents at $p < .05$ level of confidence, which are $\chi^2 = 137.518$, df = 2, $p = .000$ for parental satisfaction in public versus private pre-schools; $\chi^2 = 226.935$, df = 5, $p = .000$ for parental satisfaction with adequate physical facilities; $\chi^2 = 257.129$, df = 5, $p = .000$ for parental satisfaction with adequate teaching-learning materials; $\chi^2 = 304.710$, df = 5, $p = .000$ for parental satisfaction in with
teachers' qualifications; and, \( \chi^2 = 202.613, \text{df} = 5, p = .000 \) for parental satisfaction with teacher-child ratio.

Hence, the alternative hypotheses regarding these variables that there are significant differences in satisfaction with the quality of ECDE among parents due to ownership/sponsorship, adequacy of physical facilities, adequacy of teaching-learning materials, teachers' qualifications and teacher-child ratio were confirmed. Hence, there were significant differences in parental satisfaction of parents regarding the aforementioned variables. However, the level of satisfaction will depend on perceptions.

Parasuraman, et al (1985) have suggested that it may be the perception of service quality that leads to customer satisfaction. To this end, it may be the perception of service quality among parents that leads to their satisfaction about the quality of ECDE in relation to the factors. This means that if the customer (parent) perceives the service to be of high quality, then he/she will be satisfied with it. Conversely, Parasuraman, et al. (1985) add, some others believe that if the customers is satisfied with the service, they perceive it to be of high quality. Bitner (1990) and Bolton and Drew (1991) agreed with this view and said satisfaction is an antecedent of service quality.

Moreover, as Gunaratne & Carswell (2002) observe, in high involvement services (such as tertiary education) where customers have greater risks and expectations, the width of the "zone of tolerance" will be narrower as compared to low involvement services. This equally applies to ECDE in Langata District since parents have greater expectations also.
4.4 Contribution of Factor(s) to Parents’ Satisfaction with Quality of ECDE

Objective two of the study sought to determine which of the factors affecting the quality of ECDE contributed most to the parents’ satisfaction. The findings were as follows:

4.4.1 Factor Ratings towards the Overall Parents’ Satisfaction

Based on the HTs/Managers’ and parents’ responses there was need to determine which of the factors affecting the quality of pre-education contributes most to the parents’ level of satisfaction to reject or accept the following hypothesis.

**H06:** There is a difference in the contribution of each factor to overall parental satisfaction with the quality of ECDE.

Since there were several variables affecting the quality of education there was need to regress the variables against the overall level of parents’ satisfaction to determine which of the factors was more significant than the other in influencing the level of satisfaction. Table 4.8 shows the results.

**Table 4.8: Regression Analysis of Parental Satisfaction with Factors of ECDE Quality**

<table>
<thead>
<tr>
<th>No.</th>
<th>Factor</th>
<th>F</th>
<th>Beta</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Curriculum</td>
<td>.089</td>
<td>.016</td>
<td>.299</td>
<td>.765</td>
</tr>
<tr>
<td>2</td>
<td>Type of Management</td>
<td>.001</td>
<td>.189</td>
<td>3.499</td>
<td>.001</td>
</tr>
<tr>
<td>3</td>
<td>Physical Facilities</td>
<td>.320</td>
<td>-.031</td>
<td>-.566</td>
<td>.572</td>
</tr>
<tr>
<td>4</td>
<td>Teaching/Learning Materials</td>
<td>5.022</td>
<td>.122</td>
<td>2.241</td>
<td>.026</td>
</tr>
<tr>
<td>5</td>
<td>Teachers Qualifications</td>
<td>11.532</td>
<td>.184</td>
<td>3.396</td>
<td>.001</td>
</tr>
<tr>
<td>6</td>
<td>Teachers-Child Ratio</td>
<td>.001</td>
<td>.002</td>
<td>-.035</td>
<td>.972</td>
</tr>
</tbody>
</table>

Referring to table 4.8, ECDE quality factors were regressed against the perceived overall quality to examine for factors that may have more of an impact upon satisfaction than others. The results from this analysis show that all the six variables had a significant
influence on the parents' level of satisfaction of varying magnitudes as shown by the variances in terms of the F-test scores. For instance, teachers' qualifications have the greatest amount of the variance in total satisfaction and the least variance comes from teacher-child ratio. However, as for the contribution of each variable to overall satisfaction, the Beta values shows that the most significant factor was type of management (.189), followed by teachers' qualifications (.184), teaching-learning materials (.122), curriculum (.016), teacher-child ratio (.002) and finally, physical facilities (-.031). Therefore, the alternative hypothesis that there is a difference in the contribution of each factor to overall parental satisfaction with the quality of ECDE is confirmed. Thus significant disparities in satisfaction with the quality of ECDE existed between the low and high income parents.

These findings confirm what Gunaratne & Carswell (2002) came up with in a survey carried out among students of tertiary institutions. Hence, there were expectation gaps in the service quality of many of the factors such as physical facilities. Some factors had more of an impact than others on overall student satisfaction. For instance, when regressing the environmental factor items against the overall level of student satisfaction, Gunaratne & Carswell (2002), found out that the factor explained a small amount of the variance in total satisfaction. Within this factor, it is the perceived quality of the facilities that accounts for most of this variance.

4.4.2 Contribution of the Factors towards Children Transfers

The parents were required to reveal whether the aforementioned variables influenced them to transfer their children from one ECDE centre to another. The findings are presented in Table 4.9.
Table 4.9: Proportion of Dissatisfied Parents Transferring Children

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>68</td>
<td>20.5</td>
</tr>
<tr>
<td>NO</td>
<td>217</td>
<td>65.4</td>
</tr>
<tr>
<td>No Opinion</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>No Response</td>
<td>42</td>
<td>12.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>332</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Referring to Table 4.9, a relatively small proportion of parents, who were 68 (20.5%), had transferred their children from one ECDE center to another compared to the 217 (65.4%) who did not. Hence, HTs/managers and parents were asked to indicate how curriculum, management, physical facilities, T/L materials, teachers’ qualifications and number of teachers influenced the transfer. The findings are shown in Table 4.10.

Table 4.10: Contribution of Selected Variables to Transfer of Children

<table>
<thead>
<tr>
<th></th>
<th>HTs/Managers (N=40)</th>
<th>Parents (N=332)</th>
<th>Total (N=372)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Irrelevant curriculum</td>
<td>-</td>
<td>-</td>
<td>28</td>
</tr>
<tr>
<td>Poor management</td>
<td>21</td>
<td>52.5</td>
<td>54</td>
</tr>
<tr>
<td>Inadequate physical facilities</td>
<td>21</td>
<td>52.5</td>
<td>57</td>
</tr>
<tr>
<td>Inadequate teaching/learning materials</td>
<td>23</td>
<td>57.5</td>
<td>39</td>
</tr>
<tr>
<td>Unqualified teachers</td>
<td>23</td>
<td>57.5</td>
<td>37</td>
</tr>
<tr>
<td>Inadequate teachers</td>
<td>20</td>
<td>50.0</td>
<td>45</td>
</tr>
</tbody>
</table>

Referring to Table 4.10, inadequacy of physical facilities emerges as having the greatest influence on transfers as said by 78(21.0%), followed by poor management said by 75(20.2%), inadequate teachers as said by 65(17.4%), inadequate teaching-learning materials as said by 62(16.7%), unqualified teachers said by 60(16.1%) and the least being irrelevant curriculum identified by only parents who were 28(8.4%). These
findings confirm the assertion of Basab, Ambar & Skoufias (2009) that there is a wide range of factors influencing satisfaction with services [e.g. education] among users and may vary by the type of service and economic status of regions.

According to Gunaratne & Carswell (2002) the underlying premise with reference to tertiary education service is that if the students' perceptions of the key service quality dimensions exceed expectations the behavioural response of the satisfied customers so created will be to further their education at the same tertiary institute. In fact, they are prepared to pay a premium for a quality product. Similarly, as findings from Langata District reveal, dissatisfied parents could move their children from one ECDE centre to another and are ready to pay a premium for ECDE they perceived to meet their quality expectations.

In reference to transfers of learners from one institution to another in tertiary education, Gunaratne & Carswell (2002) assert that service organisations increasingly recognise that today's customers who insist on improvements in quality of services have many alternatives and, therefore, may more readily change providers if not satisfied. This is evident from the not so uncommon practice of “institution hopping” readily embraced by dissatisfied students at the end of each semester. In this regard the pre-school education sector in Langata District is no exception.

4.5 Satisfaction with Quality of ECDE between Low and High-Income Parents

Objective three of the study sought to compare the levels of satisfaction with the quality of pre-school education between low-income and high-income parents. The low and high incomes parents were asked to rate their levels of satisfaction with the quality of ECDE
based on curriculum type, type of management, availability of physical and T/L facilities as well as teachers' qualifications and teacher-child ratio. Figure 4.6 shows their ratings.

According to figure 4.6, the low- vis-à-vis high-income parents had greater satisfaction with all the variables of quality of ECDE. The greatest satisfaction came from the curriculum (81.3% vis-à-vis 73.1%), followed by type of management (77.3% vis-à-vis 38.5%), teachers' qualifications (67.1% vis-à-vis 40.4%), physical facilities (61.8% vis-à-vis 40.4%), teaching-learning materials (61.4% vis-à-vis 38.5%) and the least being teacher-child ratio (56.5% vis-à-vis 32.7%).

It is interesting to note that whereas more than half of the low income parents were satisfied with the quality of ECDE for all the variables that was the reverse (i.e. less than half) for the high income except for the case of the curriculum. Thus, disparities existed in satisfaction between the low and high income parents in all variables of quality ECDE. Similarly, disparities existed in their levels of dissatisfaction as shown in figure 4.7.
According to findings in figure 4.7, except for teachers’ qualifications, the high-income vis-à-vis low-income parents expressed greater dissatisfaction with all the variables affecting the quality of ECDE. The greatest dissatisfaction starts with the teacher-child ratio (55.8% vis-à-vis 34.1%), followed by teaching-learning materials (53.8% vis-à-vis 32.9%), physical facilities (48% vis-à-vis 31.3%), curriculum (21.2% vis-à-vis 13.8%) and the least being type of management (19.2% vis-à-vis 15%).

Therefore, differences existed in dissatisfaction levels between the low and high income parents. The findings on the satisfaction levels with the quality of ECDE among the low and high income parents show variations but do not show whether the differences are significant. Hence, the need to test the hypothesis below at < .05 level of significance.

H07: There is a difference in parents’ satisfaction with the quality of ECDE between low-income and high-income parents.
To test whether significant disparities existed between the low and high income parents in relation to the variables determining the quality of education, the F test based on ANOVA was used. ANOVA is the most appropriate in detecting significant factors in a multi-factor model where certain factors are hypothesized to influence the dependent variable. Table 4.10 presents the results of an ANOVA test for parental satisfaction with the quality of ECDE based on parental income groups.

Table 4.10: ANOVA of Incomes' Effect on Parents' Satisfaction with ECDE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.874</td>
<td>2</td>
<td>.937</td>
<td>843</td>
<td>.431</td>
</tr>
<tr>
<td>Within Groups</td>
<td>365.846</td>
<td>329</td>
<td>1.112</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>367.720</td>
<td>331</td>
<td></td>
<td>1.112</td>
<td></td>
</tr>
<tr>
<td>Type of Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>25.296</td>
<td>2</td>
<td>12.648</td>
<td>11.684</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>356.126</td>
<td>329</td>
<td>1.082</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>381.422</td>
<td>331</td>
<td></td>
<td>1.082</td>
<td></td>
</tr>
<tr>
<td>Physical Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>11.557</td>
<td>2</td>
<td>5.779</td>
<td>3092</td>
<td>.047</td>
</tr>
<tr>
<td>Within Groups</td>
<td>614.862</td>
<td>329</td>
<td>1.869</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>626.419</td>
<td>331</td>
<td></td>
<td>1.869</td>
<td></td>
</tr>
<tr>
<td>Teaching/Learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>19.416</td>
<td>2</td>
<td>9.708</td>
<td>4830</td>
<td>.009</td>
</tr>
<tr>
<td>Within Groups</td>
<td>661.243</td>
<td>329</td>
<td>2.010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>680.660</td>
<td>331</td>
<td></td>
<td>2.010</td>
<td></td>
</tr>
<tr>
<td>Teachers Qualifications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>18.545</td>
<td>2</td>
<td>9.272</td>
<td>6149</td>
<td>.002</td>
</tr>
<tr>
<td>Within Groups</td>
<td>496.091</td>
<td>329</td>
<td>1.508</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>514.636</td>
<td>331</td>
<td></td>
<td>1.508</td>
<td></td>
</tr>
<tr>
<td>Teachers-Child Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>11.566</td>
<td>2</td>
<td>5.783</td>
<td>2920</td>
<td>.055</td>
</tr>
<tr>
<td>Within Groups</td>
<td>651.494</td>
<td>329</td>
<td>1.980</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>663.060</td>
<td>331</td>
<td></td>
<td>1.980</td>
<td></td>
</tr>
</tbody>
</table>

Referring to Table 4.10, the variables of quality ECDE had varying magnitudes of significant levels in their effects on the parents’ satisfaction. There were significant differences in satisfaction between the low and high income parents in all the variables except curriculum whose \( p = .431 \) and teacher-child ratio whose \( p = .055 \), which were far
above the < .05 level of significance. Further, the type of management (F=11.684),
teachers’ qualifications (F=6.149), teaching-learning materials (F=4.830), physical
facilities (F=3.092), teacher-child-ratio (F=2.920) and curriculum (F=.843) explains the
amount of the variance in total satisfaction from the largest to the smallest in that order.

Therefore, the alternative hypothesis that there is a significant difference in satisfaction
with the quality of ECDE between the low-income and high-income parents is
confirmed. Hence, significant disparities in satisfaction with the quality of ECDE existed
between the low and high income parents.

These findings are in line with Zeithaml and Bitner (2000) views that the width of a
particular dimension (factor), which is a function of its importance to an individual, will
not be static for all customers. Hence, in high involvement services (such as pre-school
education), where parents have greater expectations, the width of the “zone of tolerance”
will be narrower implying that their perceptions must also be high to match with
expectations for them to be satisfied with the factors determining the quality of ECDE.

4.6 Suggestions on How to Improve the Quality of Pre-School Education

Objective four of the study sought the suggestions of respondents on how to improve the
quality of ECDE in Lang’ata District. The HTs/mangers (n=40) and parents (n=332)
suggested the measures presented in Table 4.11.
Table 4.11: HTs’ and Parents’ Views on Improving the Quality of ECDE

<table>
<thead>
<tr>
<th>Suggested measures</th>
<th>HTs/Managers</th>
<th>Parents</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Train pre-school teachers</td>
<td>20</td>
<td>50.0</td>
<td>277</td>
</tr>
<tr>
<td>Employ (more) teachers</td>
<td>27</td>
<td>67.5</td>
<td>129</td>
</tr>
<tr>
<td>Provide instructional materials</td>
<td>8</td>
<td>20.0</td>
<td>210</td>
</tr>
<tr>
<td>Provide physical facilities</td>
<td>8</td>
<td>20.0</td>
<td>163</td>
</tr>
<tr>
<td>Improve pre-school management</td>
<td>4</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>Actualise the 2006 ECDE policy</td>
<td>2</td>
<td>5.0</td>
<td>-</td>
</tr>
<tr>
<td>Having recommended classes</td>
<td>-</td>
<td>-</td>
<td>39</td>
</tr>
<tr>
<td>Other suggestions</td>
<td>-</td>
<td>-</td>
<td>41</td>
</tr>
</tbody>
</table>

Referring to Table 4.11, most respondents, being 297(79.8%), recommended for training teachers, followed by provision of teaching-learning materials by the government said by 218(58.6%), provision of physical facilities by the government and other stakeholders as said by 171(46.0%) and government to employ enough teachers as said by 156(42.0%).

The findings in table 4.11 are also in line with recommendations of Gunaratne & Carswell (2002) on higher education. They observe that the decrease in customer loyalty has made management of service quality and customer satisfaction critically important factors for service organisations. To enhance customer satisfaction, Gunaratne & Carswell (2002) suggest, tertiary education providers ideally should measure and improve the approaches to delivery of service through designing and redesigning the provider/customer interaction processes and implementation of programmes of change. Additionally, it is mandatory they evaluate the currency of the content of their academic programmes and be in step with new developments in the field to sustain their quality.
CHAPTER FIVE
SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This study assessed the parents' level of satisfaction with the quality of pre-school education in Lang'ata District, Nairobi County, Kenya with specific reference to type of curriculum offered; type of school management/sponsorship; availability of physical facilities; availability of teaching-learning materials; availability of qualified teachers and teacher-child ratio. This section presents a summary of the findings and their implications, conclusions drawn and recommendations made based on those findings. It has also highlighted areas suggested for further research.

5.2 Summary of the Major Findings
Based on the study objectives, this sub-section presents a summary of the major findings.

5.2.1 Preliminary Findings on Respondents and Pre-schools
i) All the H/Ts/managers, except 2(5.0%) with KSCE Certificate, had professional qualifications while majority of the parents had secondary and primary education.

ii) The public pre-schools were slightly more than the private ones and were sponsored by religious organizations, government, community and NGOs.

iii) Great disparities existed between the high and low income parents. Majority of the parents (46.7%) earned less than KShs 10,000 per month. The middle incomes were lower than the low and high incomes.
iv) All the ECDE centers offered a curriculum developed by the Kenya Institute of Education (KIE) as recommended by NACECE.

5.2.2 Parental Satisfaction with Variables Determining the Quality of ECDE

i) Overall, curriculum attracted the greatest satisfaction from parents at 81.4%, followed by adequacy of physical facilities at 72.3%, type of management at 71.2%, teachers' qualifications at 62.6%, teacher-child ratio at 56.7% and finally T/L materials being the least at 59.0%.

ii) All the HTs/managers and parents concurred that parental satisfaction with the quality of ECDE was generally high, with the proportion of HTs/managers being higher than that of the parents. The reverse is true for dissatisfaction, i.e., a large proportion of parents vis-à-vis HTs/managers saying that parents were dissatisfied in relation to all the variables.

iii) Most parents expressed great dissatisfaction with T/L materials at 34.4%, followed by adequacy of physical facilities at 31.0%, with the least being teacher-child ratio at 4.0%.

iv) Private pre-schools vis-à-vis public ones attracted the greatest satisfaction from parents in relation to all variables determining quality of ECDE, with curriculum leading at 90.0% for private vis-à-vis 69.0% for public centres.

v) Despite the high levels of parental satisfaction, significant differences existed among them in relation to all variables of quality ECDE.

5.2.3 Contribution of Factors to Parental Satisfaction with Quality of ECDE

i) All the variables determining the quality of ECDE had varying significant influences on the parents' satisfaction. The most significant factor was type of
management ($\beta = 0.189$ and $t = 3.499$), followed by teachers’ qualifications ($\beta = 0.184$ and $t = 3.396$), teaching-learning materials ($\beta = 0.112$ and $t = 2.241$), curriculum ($\beta = 0.06$ and $t = .299$), teacher-child ratio ($\beta = 0.002$ and $t = -.035$), and finally, physical facilities ($\beta = -0.031$ and $t = -0.566$).

ii) Despite the high ratings of parents’ satisfaction with ECDE, parents still transferred their children due to reasons such as inadequate physical facilities, poor management, inadequate teachers, inadequate teaching-learning materials, unqualified teachers and irrelevant curriculum.

5.2.4 Satisfaction with Quality of ECDE between Low and High-Income Parents

i) There were significant differences in satisfaction between the low and high income parents in all the variables except curriculum ($p = .431$) and teacher-child ratio ($p = .055$), at $p < .05$ level of significance. The low- vis-a-vis high-income parents expressed greater satisfaction with all the variables affecting the quality of ECDE, except curriculum.

ii) Curriculum attracted the greatest satisfaction among the low-income compared to high income (81.3% vis-à-vis 73.1%), followed by type of management (77.3% vis-à-vis 38.5%), teachers’ qualifications (67.1% vis-à-vis 40.4%), physical facilities (61.8% vis-à-vis 40.4%), teaching-learning materials (61.4% vis-à-vis 38.5%) and the least being teacher-child ratio (56.5% vis-à-vis 32.7%).

iii) Except for teachers’ qualifications, the high- income vis-à-vis low-income parents expressed greater dissatisfaction with all the variables. The greatest dissatisfaction being witnessed in teacher-child ratio (55.8% vis-à-vis 34.1%), followed by teaching-learning materials (53.8% vis-à-vis 32.9%), physical
facilities (48% vis-à-vis 31.3%), curriculum (21.2% vis-à-vis 13.8%) and the least being type of management (19.2% vis-à-vis 15%).

5.2.5 Suggestions on How to Improve the Quality of ECDE

i) The main measures suggested for improving the quality of ECDE include training of pre-school teachers, government to provide physical facilities and teaching-learning materials, government to employ enough teachers, among many other measures.

5.3 Study Conclusions and Recommendations

Based on the findings it can be concluded that even if most parents were generally satisfied with the quality of ECDE in Lang’ata District, gaps still existed in the delivery of education as can be discerned from the reasons why some of the parents were transferring children from one ECDE centre to another. Hence, the following recommendations were made.

i) Recruiting qualified of teachers or giving them in-service training to improve their skills, competence and knowledge of how to handle the children.

ii) The government and management of private schools should employ enough teachers to enhance the teacher-child ratio for maximum attention of the children as well as effective teaching and learning.

iii) The government and management of ECDE centres should provide enough funds for the provision of physical and sports facilities in schools since children mainly learn through playing.

iv) The government and management of ECDE centres should provide enough funds for the provision of T/L materials for effective teaching-learning.
v) Expand and/or set up more ECDE centers to decongest the over-enrolled so as to create sizable classes for effective teaching-learning. Decongesting classes will ensure the recommended teacher-child ratio is attained.

vi) The management of ECDE institutions should provide urgent attention to those dimensions whose pointer lies outside the "zone of tolerance" and also be aware that customer's service expectations are not confined to a single point. Hence, they should plan service improvements after estimation of the perceived position of the service pointer on key dimensions of quality. If all pointers lie within the respective "tolerance zones", their relative positions and the width of the zone should be used to guide short and long-term actions for service quality improvements.

vii) The management of ECDE institutions should strategically manage key attributes to have the existing customers favourably disposed towards their centres. To reach excellence in individual dimensions it should establish benchmarks for each dimension.

viii) The right strategies should be selected in determining investment levels while prioritising important dimensions that influence the service quality expectations of parents. In summary, managers should be enlightened about the varied levels of importance parents attach to different dimensions to take prioritized proactive service quality initiatives.

ix) The managers should allocate the limited available resources appropriately to improve service quality on each dimension to the required level and prevent service problems.
5.4 Recommendations for Further Research

Based on the study findings, studies should be done in the following areas.

i) An assessment of the teachers’ and Head teachers’ levels of satisfaction with the quality of ECDE and the factors determining the established levels.

ii) An assessment of the factors contributing to disparities in levels of satisfaction with the quality of ECDE among the low income and high income groups.

iii) An exploration of the other variables affecting the quality of ECDE and their effects on the parents’ levels of satisfaction with ECDE.
REFERENCES

Basab Dasgupta, Ambar Narayan and Emmanuel Skoufias (2009) Measuring the quality of the use of perception data from Indonesia; the world bank; poverty reduction and economic management network; poverty reduction group


EYC (2004). Monitoring of the FPE and Establishing the Unit Cost of Primary Education in Kenya EYC Nairobi


Wawire, V.K. (2006) Factors that Influence the Quality and Relevance of Early Childhood Education in Kenya: Multiple Case Studies of Nairobi and Machakos Districts


APPENDIX 1

LETTER OF INTRODUCTION

MOIGE O. NELLIAH
BOX 14063 – 00100
NAIROBI

Dear Respondent

I am a postgraduate student in the Department of Early Childhood Studies of Kenyatta University currently undertaking research on the topic:

ASSESSMENT OF PARENTS’ LEVEL OF SATISFACTION WITH THE QUALITY OF PRE-SCHOOL EDUCATION IN LANG’ATA DISTRICT, NAIROBI COUNTY, KENYA

You have been identified as one of the respondents. You are kindly requested to provide the information much needed for this study. Any information you give will be treated as confidential and anonymous, and shall only be utilized for the purposes of this study. Please respond to the questions by following the instructions given. You may not write your name or even of the school anywhere on the questionnaire.

Yours Faithfully,

MOIGEO. N.

MOIGE O. N.
APPENDIX 2

PARENT'S QUESTIONNAIRE ON THE LEVEL OF PARENTS' SATISFACTION WITH THE QUALITY OF ECDE IN LANG'ATA DISTRICT

Please feel free to provide all the required information which will be kept confidential, anonymous and will be strictly used for the purpose of the study only. You may not write your name or that of your school.

PART 1: GENERAL INFORMATION

Instruction: Please tick (√) in the response which is appropriate or fill as required.

1. At what level of pre-school education is your child is enrolled? Day-care ( ) Nursery ( ) Pre-unit ( )

2. How old is your child? ............ Years.

3. What is your highest level of education? Primary [ ] Secondary [ ] Diploma [ ] Degree [ ] Other qualifications? Specify ......................

4. What is your income whether from self or salaried employment? KShs/month .......... or KShs per year ........

5. Who is the sponsor of the pre-school where your child attends? Government ( ) Community ( ) Religious Organisation ( ) Private ( ) NGO ( )

PART 2: PARENTS' SATISFACTION WITH THE QUALITY OF EDUCATION

1. The table below shows the factors that may affect satisfaction with the quality of ECDE offered to the child. With a tick (√) indicate your level of satisfaction with each of the factors in regard to the pre-school/centre where your child attends.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Strongly Satisfied</th>
<th>Satisfied</th>
<th>Not Sure</th>
<th>Dissatisfied</th>
<th>Strongly Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of curriculum offered</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of school management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of physical facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequate instructional materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification of teachers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. In the table below rate your satisfaction level with the condition and adequacy of the physical facilities in your child’s pre-school. If not available in that school then indicate so without rating the facility.

<table>
<thead>
<tr>
<th>Quantities of facilities</th>
<th>Strongly Satisfied</th>
<th>Satisfied</th>
<th>Not Sure</th>
<th>Dissatisfied</th>
<th>Strongly Dissatisfied</th>
<th>Not Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furniture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbooks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classrooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children’s toilets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Have you ever withdrawn your child from a pre-school? Yes [ ] No [ x ] No Opinion [ ]

4. If YES, then using a tick (✓), indicate which of the reasons given in the table below influenced you to transfer your child.

<table>
<thead>
<tr>
<th>Reasons for Transfer</th>
<th>Did it Influence your decision?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrelevant curriculum</td>
<td>Yes</td>
</tr>
<tr>
<td>Poor management of the pre-school.</td>
<td>No</td>
</tr>
<tr>
<td>Lack of or inadequate physical facilities</td>
<td></td>
</tr>
<tr>
<td>Inavailability of teaching and learning materials.</td>
<td></td>
</tr>
<tr>
<td>Teachers were not trained/were not qualified</td>
<td></td>
</tr>
<tr>
<td>Teachers were not enough.</td>
<td></td>
</tr>
</tbody>
</table>

5. Are there other reasons that may have influenced you to transfer your child that are not mentioned above? If so, please specify them below.

i) ................................................................................................

ii) ................................................................................................

iii) ................................................................................................

6. Suggest ways of improving the quality of ECDE to the satisfaction of parents.

i) ................................................................................................

ii) ................................................................................................

iii) ................................................................................................
APPENDIX 3

HTs/MANAGERS' INTERVIEW GUIDE ON THE LEVEL OF PARENTS' SATISFACTION WITH THE QUALITY OF ECDE IN LANG'ATA DISTRICT

Please feel free to provide all the required information which will be kept confidential, anonymous and will be strictly used for the purpose of the study only. You may not write your name or that of your school.

PART 1: GENERAL INFORMATION

*Instruction: Please tick (✓) in the response which is appropriate or fill as required.*

1. What is your highest level of education?
2. Who is the sponsor of the pre-school?
3. What curriculums does your school offer?

PART 2: PARENTS' SATISFACTION WITH THE QUALITY OF EDUCATION

1. What is the level of parent's satisfaction with the quality of pre-school education in relation to each of the following variables?

<table>
<thead>
<tr>
<th>Factors</th>
<th>Strongly Satisfied</th>
<th>Satisfied</th>
<th>No Opinion</th>
<th>Dissatisfied</th>
<th>Strongly Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of curriculum offered</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of school management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of physical facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of teaching/learning materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification of teachers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of teachers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. How many children have been withdrawn from the school this year due to dissatisfaction of parents with the quality of education from your school?

<table>
<thead>
<tr>
<th>CLASS</th>
<th>Day care</th>
<th>Nursery</th>
<th>Pre-Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER WITHDRAWN</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. What is the influence of each of the following variables in contributing to transfer of children?

<table>
<thead>
<tr>
<th>Reasons for Transfers</th>
<th>Does it Influence parents’ decision?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrelevant curriculum offered</td>
<td></td>
</tr>
<tr>
<td>Poor management of the pre-school.</td>
<td></td>
</tr>
<tr>
<td>Lack of or inadequate physical facilities</td>
<td></td>
</tr>
<tr>
<td>Availability of teaching-learning materials.</td>
<td></td>
</tr>
<tr>
<td>Teachers were not trained/were not qualified</td>
<td></td>
</tr>
<tr>
<td>Teachers were not enough.</td>
<td></td>
</tr>
</tbody>
</table>

4. Suggest ways of improving the quality of ECDE to the satisfaction of parents.
   i) ........................................................................................................
   ii) ........................................................................................................
   iii) .........................................................................................................
**APPENDIX 4**

**OBSERVATION SCHEDULE**

Name of Pre-school ........................................... School type: .....................

1. Observe the adequacy and conditions of the physical facilities.

<table>
<thead>
<tr>
<th>Name of Facility</th>
<th>How Many?</th>
<th>Condition of Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>New and in use</td>
</tr>
<tr>
<td>Classrooms (permanent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classrooms (temporary)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dormitories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toilets for boys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toilets for girls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports grounds /Playfields</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 5

DOCUMENT ANALYSIS (DA) CHECKLIST

1. Name of Pre-school ........................................... School type: .....................

2. School type: Public [ ] Private [ ]

3. Recording Enrollments based on class attendance registers, annual returns, etc.

4. Fill in the table below the number of teachers per qualifications shown.

<table>
<thead>
<tr>
<th>Educational Qualifications</th>
<th>KCSE</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>Diploma</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Number of teachers as per the school curriculum based establishment (CBE)……

6. Number of teachers as per the enrolment based establishment (EBE)………………

7. Rate of transfers per year per grade.

<table>
<thead>
<tr>
<th>CLASS</th>
<th>Day care</th>
<th>Nursery</th>
<th>Pre-Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER WITHDRAWN</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

80
## APPENDIX 6

### WORK PLAN

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>DEADLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Proposal</td>
<td></td>
</tr>
<tr>
<td>Proposal Defense at Department</td>
<td></td>
</tr>
<tr>
<td>Submit Corrected Proposal to Overseers</td>
<td>AUGUST 31ST, 2009</td>
</tr>
<tr>
<td>Registration by Board of Post Graduate Studies (BPGS)</td>
<td></td>
</tr>
<tr>
<td>Data Collection (Field Work):</td>
<td></td>
</tr>
<tr>
<td>Pilot Study</td>
<td></td>
</tr>
<tr>
<td>Data Collection</td>
<td>SEPTEMBER 30TH, 2009</td>
</tr>
<tr>
<td>Data Analysis and Report Writing</td>
<td></td>
</tr>
<tr>
<td>Submit Thesis for Examination by Supervisors</td>
<td></td>
</tr>
<tr>
<td>Giving Notice of Intention to Submit Thesis</td>
<td>OCTOBER 31ST, 2009</td>
</tr>
<tr>
<td>Thesis Oral Defense at Board of Post Graduate Studies</td>
<td></td>
</tr>
<tr>
<td>Make Corrections</td>
<td></td>
</tr>
<tr>
<td>Submit Thesis for External Examination</td>
<td>JANUARY 31ST, 2010</td>
</tr>
<tr>
<td>Submit Thesis for Examination by External Examiner</td>
<td></td>
</tr>
<tr>
<td>Making Corrections and Finalizing Thesis</td>
<td>MARCH 31ST, 2010</td>
</tr>
<tr>
<td>Submit Final and Hard-bound Copies of the Thesis</td>
<td>JULY 31ST, 2010</td>
</tr>
<tr>
<td>Postgraduate Seminar</td>
<td>SEPTEMBER 30TH, 2010</td>
</tr>
<tr>
<td>Graduate</td>
<td>OCTOBER 20TH, 2010</td>
</tr>
</tbody>
</table>
## APPENDIX 7

### RESEARCH BUDGET

<table>
<thead>
<tr>
<th>TASKS</th>
<th>SUB -TOTAL (KShs)</th>
<th>TOTAL (KShs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROPOSAL WRITING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typing/Printing</td>
<td>7 000</td>
<td></td>
</tr>
<tr>
<td>Stationery</td>
<td>4 000</td>
<td></td>
</tr>
<tr>
<td>Subsistence</td>
<td>4 000</td>
<td></td>
</tr>
<tr>
<td>Photocopy/Binding</td>
<td>3 000</td>
<td>18 000</td>
</tr>
<tr>
<td><strong>DATA COLLECTION/ANALYSIS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production of Instruments</td>
<td>3 000</td>
<td></td>
</tr>
<tr>
<td>Transport &amp; Subsistence</td>
<td>10 000</td>
<td></td>
</tr>
<tr>
<td>Stationery</td>
<td>3 000</td>
<td>16 000</td>
</tr>
<tr>
<td><strong>REPORT WRITING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Analysis (SPSS Expert)</td>
<td>10 000</td>
<td></td>
</tr>
<tr>
<td>Typing/Printing</td>
<td>7 000</td>
<td></td>
</tr>
<tr>
<td>Photocopy</td>
<td>4 000</td>
<td></td>
</tr>
<tr>
<td>Stationery</td>
<td>3 000</td>
<td></td>
</tr>
<tr>
<td>Binding</td>
<td>2 000</td>
<td>26 000</td>
</tr>
<tr>
<td><strong>TOTAL (SOURCE OF FUNDS: RESEARCHER)</strong></td>
<td>60 000</td>
<td></td>
</tr>
</tbody>
</table>