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## **Influence of Household Level of Income on Management of Public Early Childhood Development Education Centres in Makueni County, Kenya**

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### **Abstract**

Preschool education is crucial and helps increase academic achievements of school age pupils. Nonetheless, for a segment of society, this is not feasible, and in some ECDE centres it is hard to manage the few enrolled pupils due to household level of income. The purpose of this study was to investigate the influence of household level of income on management of public ECDE centres in Makueni county, Kenya. The study adopted cross-sectional research design. Stratified, simple random, and intentional sampling methods were utilized to collect data. Data was collected through questionnaires, structured interviews and document analysis guides. The validity and trustworthiness of the research tools were assessed by using the face validity and Cronbach Alpha tests. Quantitative data was presented using bar charts, pie charts, histograms, percentages, and frequency distributions while qualitative categorized into themes and laid out in narrative form. Linear regression analysis was adopted to test the hypothesis at 95% confidence interval. Key findings indicated that there was statistically significant influence of household level of income on management of public ECDE centres in Makueni county, Kenya at  $p=0.000$  ( $p\text{-value} < 0.05$ ). It was recommended that ECDE funding should be established properly to support children from low-income families and thus management of ECDE centres and to conduct further study on school-family cooperation on management of public ECDE centres in Makueni county, Kenya.

**Key words:** Kenya, Makueni, Household level of income, Management, ECDE, Enrolment

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### **1.1 Introduction**

Early Childhood Development and Education (ECDE) has been realized as the foundation of all learning globally. Nonetheless, rapid changes in the society have been noted due to issues of gender equality, young working mothers, industrialization, families of two working parents, high rates of single-parent homes, and the collapse of the traditional parenting. Raising family support system in some way has therefore affected the management of ECDE (Bruijns et.al 2022, p.10).

Different strategies by different school stakeholders have been put in place to enhance the management of ECDE. To support this, many countries throughout the world are stepping up to prioritize ECDE on their national agenda, putting in more efforts in the pursuit of quality and affordable ECDE. In Brazil, Guay (2017) asserts that using the BOLISA Family system mothers get cash and foodstuffs when they visit antenatal clinics. In Kenya, mothers get mosquito nets when they visits antenatal clinics which promotes the health of a child from birth. Such strategies are meant to cushion families which help them in the upbringing of children. As a result, through the family support systems, the disadvantaged families are in other words supported to take care their children which later increases the number of preschool enrolments.

Noteworthy, UNESCO (2020) argues that COVID-19 has shed light on the inequalities, marginalization, and exclusion that have long plagued our society and disproportionately impacted the poor and the excluded. Households in Makueni county just like other parts of the world have been affected too by the effects of COVID -19 besides the harsh climatic conditions experienced in some parts of the county impacting more on income levels. The different household levels of income in Makueni county has in turn affected preschool enrolments and the general management of ECDE centres.

Accordingly, the influence of household level of income on management of public ECDE centres in Makueni county is worth investigation. Biersteker (2016) observes that a number of factors are responsible in influencing children's educational requirements including family socio-economic status like income level, the community as well as policyholders ranging from the central to the regional governments. Household level of income as a measure of a family socio-economic status mirrors a family's level of income flow and thus critical for management of ECDE centres. Findings from several studies have shown that a child's family income status might explain more variation in their development and education than their school environment (Lawson, & Farah, 2017).

In Makueni county's context, the researcher did not find any recent research dealing with the current subject despite the important transitions in the Kenyan education system. The studies conducted on ECDE deal with a number of other different aspects. For instance, Musau (2013) studied the effects of the training of ECDE teachers on pupil's academic performance in Makindu division, Makueni county. The relationship between household level of income and management and government policy as intervening variable is one of the most important aspects that could indirectly measure the quality of ECDE outputs.

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Consequently, this will be important in measuring the return on investment in preschool education and specifically in public ECDE centres.

In light of inconsistent study findings on the influence of household level of income on management of ECDE centres, it is necessary to do a further investigation in the context of Makueni county particularly in the public ECDE centres. Accordingly, effective management of ECDE centres depends to great extent of stable income flow in the ECDE centres which again depends on household income levels. In this regard, the outcome of this study will have implications to policy makers in education regarding funding of ECDE centres and duties and responsibility of partners to support management ECDE centres. Moreover, Early Childhood Centres division of the Makueni County Ministry of Education could benefit greatly from this research in order to improve their management practices. For these reasons, the researchers sought to carry out the current study to investigate the influence of household level of income on management of public ECDE centres in Makueni county, Kenya.

### **1.2 Statement of the Problem**

Management of ECDEs' is a critical component of the educational systems, to foster early childhood educational development. However, there have been concerns that social and economic factors like extreme poverty amongst parents hinder parents from enrolling their children in preschools or supporting financially the management of the respective ECDE centres. The existing studies reveal that the management of the ECDE centers is a key issue, however, faced by a range of issues across communities among social economic factors. In the developing world, ECDEs have been left out in terms of policies aimed at improving their operations and better their outcomes. Most of these institutions have been realized as faced with challenges such as limited resources, insecurity, poor social status, and limited room for economic growth into the future. The disparities reveal the need for equality, through extension of relevant resources to better the educational outcomes into the future. As a result of this issue, it is crucial to analyze how household level of income influence the administration of ECDE centres. While there have been a number of studies on the impact of household level of income on ECDE centre management, very little is known about the impact of household level of income on public ECDE centre management in Makueni county, Kenya. Therefore, the purpose of this research was to address this void.

### **1.3 Research Question**

How does household level of income influence the management of public ECDE centres in Makueni county, Kenya?

### **1.4 Hypothesis of the Study**

H<sub>01</sub>: There is no statistically significant influence of household level of income on management of public ECDE centres in Makueni county, Kenya.

## **2.1 Theoretical Framework**

The origin of Maria Montessori theory goes back to early C19th when she (Maria) was working with children who were mentally handicapped. In 1907, in Italy as a care taker of children while their parents worked, she expanded the idea of learning and education coming from careful observation and experimentation. Maria Montessori's theory is based on the following educational principles: independence, observation, following the child, correcting

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the child prepared environment and absorbent mind. To develop concepts, she used resources with color, size, texture and weight. This has influenced the current development of toys and teaching aids to date. The current new curriculum in Kenya system, the Competency Based Curriculum (CBC) requires a lot of hands-on work by teachers and pupils. In this regard, more and different learning materials are required for the pupils.

In the Montessori system, the methodology of teaching and managing ECDE promotes creative, teaching from; singing, play, drama and promotes the linguistic genius of children making them articulate with good expressions. It is a method which helps transform children while based on science, modifying, and improving the child. According to Montessori systems children should be grouped per age and they learn through exploration, manipulations, order, repetition, observation, and communication. Different age groups are taught differently. In Makueni County, in some areas, children are clustered in one big hall, with or without teaching aids with a single teacher who at times is not even trained and has no expertise on how to promote talents or are too young to be parents. Crowded classes limit teacher-pupil contact thus it may be difficult to monitor what each and every pupil does. Additionally, majority of the ECDE centre have few teachers.

According to Meinke (2019) the products of Montessori theory are better prepared for life, disciplined, develop hands on independence and have keen interest in learning. Nonetheless, the critiques of the Maria Montessori theory assert that group activity cannot give individuals equal social development and interaction. The controlled environment takes away childhood from the pupils. Children are given too much freedom to choose from the many activities given in the class. The system they feel is for the rich. Too much time and teaching is spent on practical activities. Accordingly, the relevance of Montessori theory to the current study is on shared key principles that include prepared environment, respect for the child, and sensitive periods for learning which are based on effective management.

## **2.2 Review of Related Literature**

Available studies shows that research has been done on the influence of household level of income on management of ECDE. Yuko Kachi, Tsuguhiko Kato, and Ichiro Kawachi (2020) studied the influence of socio-economic disparities in early childhood education enrollment, a study based on Japanese population. Researchers analyzed information from two cohorts of Japanese people, one in 2001 (n=17,019) and one in 2010 (n=24,333). Children were evaluated for daycare facility enrollment at the ages of three and four. These were the ages of the groups born in 2001 and 2010. The researchers analyzed their data using logistic regression. The results showed that compared to children from high-income families, those from low-income families were 1.54 times more likely to not have access to center-based childcare. This confidence interval ranged from 1.20 to 1.98.

Children from disadvantaged backgrounds (in terms of development, health, and socioeconomic status) are at danger of missing out on early childhood education, according to the study's findings. Therefore, the authors of the study by Yuko Kachi, Tsuguhiko Kato, and Ichiro Kawachi (2020) looked at how socioeconomic differences affected preschool enrolment. The study's findings suggest that children's health, developmental, and socioeconomic disadvantages all play a role in determining whether or not they enroll in Japanese pre-primary schools. Here, the researchers zeroed in on the personal histories of the kids involved to determine what made them decide to start school so young in Japan. Moreover, Yuko Kachi, Tsuguhiko Kato, and Ichiro Kawachi's (2020) research does not fully account for the way in which the same elements affect management. Therefore, the purpose

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of this study was to determine the influence of household level of income on management at facilities dedicated to the care and education of young children.

Moyo, Wadesango, and Kurebwa, (2012) studied factors that affect the implementation of early childhood development programmes in Zimbabwe. The researchers used random sampling to select a sample size of 24, primary school heads and ECD teachers in the Chiwundura Circuit. Descriptive research design was used for this study. Questionnaires and semi-structured interviews were used in collecting data where the collected data was analyzed, and descriptive statistics was used to present the results. The findings indicated that both teachers and parents had a positive attitude towards the ECD programmes. On the other hand, lack of resources affected the teaching and learning processes as well as children being vulnerable to deprivation of standard experiences because of the ECD centres not being well equipped. Moyo, Wadesango, and Kurebwa's (2012) study had a similar goal of examining the factors that affect the administration of ECD programs for young children.

The research was conducted in Zimbabwe, a country with a very different context and set of requirements from that of Kenya's Makueni county, thus its results cannot be extrapolated to that region. This research aims to address these voids in the existing literature. Shinali, Githui, and Thinguri, (2014) studied the assessment of the impact of early childhood development capitation on ECDE programme in Kenya, a case study of Narok South Sub-County. Both qualitative and quantitative data were gathered for this study using a descriptive survey approach. Fifty participants were chosen at random from among those registered at twenty different ECDE centers. Data was collected by questionnaires and interviews, and then tabulated and displayed graphically.

The study found that 65 percent of Kenya's poorest kids were missing out on their early education. In addition, they saw that the kids in those households were especially at risk for malnutrition. The lack of parental education was another barrier to quality preschool programs. Researchers did find, however, that the ECD capitation award led to a rise in the number of children enrolled in ECDE programs. The increased capitation grant lessened the financial burden of fee payment for low-income families. Due to the study's narrow scope, it presents very little knowledge about the elements that affect the administration of ECDE programs beyond their impact on early childhood development as measured by the ECD capitation grant. This work aims to address this knowledge gap.

### **3.1 Research Methodology**

The study was conducted in Makueni county, Kenya. Convergent research methods were used to complete this study. Convergent design combines qualitative and quantitative methods for a more thorough understanding of the research problem (Razali, et al., 2019). This study was carried out using convergent designs. The purpose of the convergent design is to provide a wide analysis of the research problem as it merges quantitative and qualitative data (Razali, et al., 2019).

Similarly, the convergent designs permit the provision of in-depth information regarding the topic of research, a knowledge of the research challenge, and clarification of a given research outcome. Under quantitative approach, the researcher used the cross-sectional survey design. The researcher used this design as it is quick, inexpensive, as well as it does not face serious ethics scrutiny, unless the information collected is confidential in nature (Aggarwal, & Ranganathan, 2019). The cross-sectional study design involved the collection of information on the variables of interest, using the quantitative data collection instrument.

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In qualitative approach, participatory action research was used to gain a deeper understanding on the topic of study based on first-hand experience (Tomaszewski, Zarestky, & Gonzalez, 2020).

The target population for this research consisted of all 904 headteachers managing the public primary schools where the pre-primary schools are established, 904 ECDE parent representatives (center treasurers), 2250 pre-primary teachers (950 employed by County government and 1300 employed by parents), 30 sub county ECDE coordinators, and the County Director of Education (CDE). The research sample size was determined using the Krejcie and Morgan table (Krejcie, & Morgan, 1970). Accordingly, the accessible population consisted of 875 respondents distributed as 269 head teachers, 269 parent representatives (center treasurers), and 327 pre-primary teachers all from 269 selected schools and 30 sub-County ECDE coordinators, and the CDE calculated based on study sample size percentage (29.8%). The study used probability; simple random sampling, stratified random sampling and systematic sampling, and non-probability sampling technique; purposive sampling techniques to sample target groups mainly because of the varying characteristics describing the target population.

Quantitative data was collected using questionnaires filled by headteachers, ECDE teachers, and parent representatives (ECDE centre treasurers) whereas interviews used to collect supplementary information from headteachers, sub county ECDE coordinators, and the County Director of Education. For the study questionnaires, Likert Scale was used besides the use of open-ended and closed-ended questions. Moreover, the researcher subjected the research instrument to face validity. Face validity is based on expert judgment (Mohajan, 2017). Internal consistency reliability to assess the validity of the survey's quantitative findings while qualitative data from interview guide was determined in terms of data dependability and credibility and member checking. The study data was summarized using descriptive statistics, especially frequency, percentage, standard deviation, and averages. Analysis of variance (ANOVA) was performed to compare means whereas linear regression analysis was employed for hypothesis testing.

#### **4.0 Results and Findings**

This segment presents the study response rate, descriptive and inferential statistics based on the analysis of respondent feedback on the questionnaires and interview guides.

##### **4.1 Response Rate**

Instrument return rate as explained by Mugenda and Mugenda (2019) refers to the number of questionnaires that were duly filled and returned for organization for final data analysis process. The researcher administered a questionnaire to all the sampled head teachers, Early Childhood Development Education teachers (ECDE), and parent representatives (ECDE centres treasurers). The researcher also interviewed the sampled sub county ECDE coordinators in whole of the Makueni county, head teachers, and the County Director of Education. The response rate of each category of the respondents is presented in Table 1.

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**Table 1: Instruments Return Rate**

<b>Respondents Category</b>	<b>Instruments</b>	<b>Issued (N)</b>	<b>Returned (n)</b>	<b>Return Rate</b>
Head teachers	Questionnaire	269	204	75.8%
	Interviews	269	189	70.3%
Parent Representative (ECDE center treasurers)	Questionnaire	269	252	93.7%
	Questionnaire	327	260	79.5%
County Director of Education	Interviews	1	1	100.0%
Sub County ECDE Coordinators	Interviews	30	25	83.3%

Source: Field Data, 2023

Out of the 1,165 sampled respondents by the researcher, only 931 responded to the research queries representing a response rate of 79.9%. According to Orodho (2017), in social sciences, a response rate of 70% and above is sufficient to validate the study findings. Thus, at 79.9%, this figure was considered adequate enough to enable the researcher to proceed with data analysis.

#### **4.2 Descriptive Statistics**

The researcher sought to find out the influence of household income on effective management of public early childhood development education centres in Makueni County, Kenya. Household level of income is important for evaluating the economic health of an area as it compares the livings conditions between geographic regions.

##### **4.2.1 Influence of Household Level of Income on Effective Management of Public Early Childhood Development Education Centres**

Headteachers, ECDE teachers, and parent representatives who are the centre treasurers were issued with questionnaires in order to obtain their views on influence of household level of income on management of public ECDE centres. The head teachers, sub county ECDE coordinators, and the County Director of Education officer were interviewed to triangulate the responses from the questionnaires and the findings were as follows.

Head teachers were thus asked to indicate their thoughts on how they rated the poverty levels of the residents in Makueni County. The findings were as presented in Table 2.

**Table 2: Poverty Levels of Makueni County Residents** **n=204**

<b>Extent</b>	<b>Frequency</b>	<b>Percent (%)</b>
Very Low	12	5.8
Low	33	16.2
Moderate	56	27.5
High	68	33.3
Very High	35	17.2
<b>Grand Total</b>	<b>204</b>	<b>100.0</b>

Source: Field Data, 2023

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The findings in Table 2 show that 103 (50.5%) of the headteacher respondents agreed that the poverty levels of the residents in Makueni county are very high while least of the respondents 45 (22.0%) stated that the poverty levels were low. From the results presented in Table 2, the researcher found that Makueni county has high poverty and perennial drought due to lack of work, low rainfall, and harsh climatic condition. Many families according to some headteachers’ parents are jobless, lack clean drinking water, live in ramshackle or semi-permanent buildings, have poor wealth, lack electricity, depend on food donations and hardly provide basic amenities for their children.

Parent representatives, who are the centre treasurers on the other hand, were further asked to indicate their perceptions on the parents’ ability to pay pupil’s fee/levies at their respective centres. The results were as presented in Table 3.

**Table 3: Extent on Parents’ Ability to Pay Fee** **n=252**

<b>Extent</b>	<b>Frequency</b>	<b>Percent (%)</b>
Very Unstable	41	16.3
Unstable	182	72.2
Stable	29	11.5
Very Stable	0	0.0
<b>Grand Total</b>	<b>252</b>	<b>100.0</b>

Source: Field Data, 2023

Table 3 shows that most of the parent representatives (school treasurers) 182 (72.2%) indicated that parents/guardians ability to pay respective pupils’ fee/levies was unstable. 41 (16.3%) of the respondents agreed that parents/guardians ability was very unstable while 29 (11.5%) indicated good ability to pay levies/fees. The results indicate that majority of the parents or guardians had a challenge in raising the levies/ levies needed to support the learning of their children in the respective public ECDE centres in Makueni county. The researcher found that the ECDE managers were highly challenged in their work at times pupils lacked trip money, or even food for break time and lunch .

Head teachers, ECDE teachers, and parent representatives were given different questions on a Likert scale where 1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, while 5=Strongly agree to rate their level of agreement and disagreement on the household income levels influence management of public ECDE centres in Makueni county. Tables 4, 5, and 6 present respondents perceptions. The analysis of their findings were merged in three (3) categories; the strongly disagree (SD) and disagree (D) to form disagreeing option, the neutral (N) remains as a category and agree (A) and strongly agree (SA) forming agreeing option. Table 4 presents the headteachers’ responses.



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**Table 4: Headteachers Responses on the Influence of Household Income on Effective Management of Public ECDE Centres**  
**n=204**

Statements	SD		D		N		A		SA		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
Most parents can buy proper school uniforms their children.	24	(11.8)	84	(41.2)	44	(21.5)	50	(24.5)	2	(1.0)	2.3	1.21
Most parents are able to buy most of the school requirements for their children.	35	(17.2)	87	(42.7)	47	(23.0)	29	(14.2)	6	(2.9)	2.2	1.16
Parent's/guardian's income level influence management of ECDE centres.	7	(3.4)	26	(12.7)	21	(10.4)	77	(37.7)	73	(35.8)	3.6	1.40
Parents/guardian's ability and willingness to pay school fees for their children influence ECDE centres management.	16	(7.8)	31	(15.2)	33	(16.2)	68	(33.3)	56	(27.5)	3.5	1.42
Most parents are able to support children enrichment activities.	39	(19.1)	86	(42.2)	39	(19.1)	34	(16.7)	6	(2.9)	2.2	1.16
Most parents participate in buying of school furniture.	40	(19.6)	73	(35.7)	33	(16.2)	55	(27.0)	3	(1.5)	2.3	1.21
Most parents are always willing to support financially the construction and renovation of classes.	62	(30.4)	80	(39.2)	37	(18.2)	16	(7.8)	9	(4.4)	2.2	1.16
Most parents are able to buy required learning materials for their children.	47	(23.0)	86	(42.2)	43	(21.1)	23	(11.3)	5	(2.4)	2.3	1.21
For the children coming from far, most parents are able pay transport for them.	85	(41.7)	69	(33.8)	24	(11.8)	16	(7.8)	10	(4.9)	2.0	1.07
Most parents are able to provide breakfast escort for their children.	54	(26.5)	78	(38.2)	42	(20.5)	25	(12.4)	5	(2.4)	2.1	1.12
<b>Average</b>											<b>2.47</b>	<b>1.21</b>

Source: Field Data, 2023

From Table 4, 108 (53.0%) majority of headteachers disagreed that most parents could buy proper school uniforms for their children timely. On whether most parents were able to buy most of the school requirements for their children, 122 (59.9%), of the

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headteachers disagreed with the assertion. Furthermore, the headteachers were asked if parent's/guardian's income level influence management of ECDE centres most of them 150 (73.5%) agreed with it. Similarly, 124 (60.8%), of the headteachers agreed that parents/guardian's ability and willingness to pay school fees for their children influence ECDE centres management. Headteachers were also asked if most of the parents were able to support children enrichment activities and most of them 125 (61.3%) disagreed with the statement.

Further, on whether most of the parents participated in buying of school furniture, 113 (55.3%), of the headteachers disagreed with the statement. Similarly, 142 (69.6%), of the headteachers disagreed that most of the parents are always willing to support financially the construction and renovation of classes. On whether most parents were able to buy required learning materials for their children, most of the headteachers 133 (65.2%) disagreed this assertion. The headteachers were also asked if most parents are able pay transport for the children coming from far and 154 (75.5%) of them disagreed with the statement. Lastly, 132 (64.7%), of the headteachers disagreed that most parents were able to provide breakfast escort to their children.

Similarly, ECDE teachers' response on the influence of household income on effective management of public ECDE centres in Makueni county are as illustrated in Table 5.

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**Table 5: ECDE Teachers Responses on the Influence of Household Level of Income on Effective Management of Public ECDE Centres n=260**

Statements	SD		D		N		A		SA		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
It is easy to plan children enrichment activities as parents/guardians support.	33(12.7)		79(30.3)		72(27.7)		54(20.8)		22(8.5)		2.3	1.21
Most children have required school items	35(13.5)		91(35.0)		61(23.5)		55(21.1)		18(6.9)		2.4	1.24
Class attendance is always above average as parents pay school levies on time.	53(20.4)		85(32.7)		62(23.8)		48(18.5)		12(4.6)		2.2	1.16
Teachers receive their dues on time as parents pay fees.	70(26.9)		95(36.5)		48(18.5)		32(12.3)		15(5.8)		2.3	1.21
Household income level affects completion rate of ECDE.	24(9.2)		56(21.5)		31(11.9)		88(33.8)		61(23.6)		3.7	1.43
Most children are healthy as parents provide them with balanced diet.	36(13.8)		77(29.7)		75(28.8)		57(21.9)		15(5.8)		2.3	1.21
Most children come to school with required school uniforms as parents are able to buy.	38(14.6)		86(33.1)		72(27.7)		46(17.7)		18(6.9)		2.4	1.24
Children absenteeism is low as parents are able to respond to their medical issues.	28(10.8)		75(28.8)		62(23.8)		75(28.8)		20(7.8)		2.2	1.16
Children fights in class are low as every child is provided for snacks and other supporting learning materials.	38(14.6)		96(36.9)		55(21.2)		48(18.5)		23(8.8)		2.4	1.24
Classes start on time as parents with children from far are able to pay for their transport.	43(16.4)		80(30.8)		48(18.5)		61(23.5)		28(10.8)		2.3	1.21
<b>Average</b>											<b>2.45</b>	<b>1.23</b>

Source: Field Data, 2023

From Table 5, 112 (43.0%), of the ECDE teachers disagreed that it was easy to plan children enrichment activities as parents/guardians support. Additionally, 126 (48.5%), of the ECDE teachers disagreed that most children have required school items. ECDE teachers were also asked whether class attendance is always above average as parents pay school levies on

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time and majority of them 138 (53.1%) disagreed with this assertion. Furthermore, 165 (63.4%) of the ECDE teachers disagreed that they receive their dues on time as parents pay fees/levies timely. ECDE teachers were also asked if household income level affects completion rate of ECDE In addition and majority of them 149 (57.4%) agreed with then statement.

Additionally, 113 (43.5%), of the ECDE teachers disagreed that most children are healthy as parents provide them with balanced diet. On whether most the children come to school with required school uniforms as parents are able to buy, 124 (47.7%) of the ECDE teachers disagreed with the statement. Similarly, 103 (39.6%), of the ECDE teachers disagreed that children absenteeism was low as parents were able to respond to their medical issues. Furthermore, 134 (51.5%), of the ECDE teachers disagreed that children fights in class were low as every child was provided for snacks and other supporting learning materials. Lastly, 123 (37.2%) of the ECDE teachers disagreed that classes start on time as parents with children from far are able to pay for their transport.

To understand parent representatives who are ECDE centre treasurers' responses on the influence of household income on effective management of public ECDE centres, the results are as presented in Table 6.

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**Table 6: Parent Representative (Treasurers) Response on the Influence of Household Level of Income on Effective Management of Public ECDE Centres n=252**

Statements	SD		D		N		A		SA		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
Parents/guardians pay school levies promptly.	54	(21.4)	104	(41.3)	54	(21.4)	35	(13.9)	5	(2.0)	2.4	1.24
School levies have lowered children enrolment.	42	(16.7)	42	(16.7)	33	(13.1)	79	(31.3)	56	(22.2)	4.1	1.68
School fees from parents caters for majority of the school needs.	52	(20.6)	66	(26.3)	50	(19.8)	50	(19.8)	34	(13.5)	2.1	1.09
Parent's/guardians are positive towards school levies.	61	(24.2)	87	(34.5)	44	(17.5)	35	(13.9)	25	(9.9)	2.3	1.21
The government should abolish all school levies.	60	(23.8)	46	(18.3)	35	(13.9)	52	(20.6)	59	(23.4)	3.9	1.62
There are funds set aside to support the implementation process of the ECDE policies.	81	(32.1)	73	(29.0)	43	(17.1)	36	(14.3)	19	(7.5)	2.0	1.07
Acceptability of most parents to new activities in school that require finances is higher.	59	(23.4)	80	(31.7)	49	(19.5)	42	(16.7)	22	(8.7)	2.3	1.21
Most parents participate in buying of school furniture.	43	(17.1)	70	(27.8)	57	(22.6)	53	(21.0)	29	(11.5)	2.2	1.16
Most parents are always willing to support financially the construction and renovation of classes.	93	(36.9)	79	(31.3)	36	(14.3)	28	(11.2)	16	(6.3)	2.1	1.09
Most parents are willing to pay school fees for the needy children.	109	(43.3)	67	(26.6)	37	(14.7)	21	(8.3)	18	(7.1)	1.4	0.78
<b>Average</b>											<b>2.48</b>	<b>1.22</b>

Source: Field Data, 2023

From Table 6, 158 (62.7%), of the parent representatives (treasurers) disagreed that parents/guardians pay school fees/levies promptly. Similarly, 135 (53.5%), of the parent representatives (treasurers) agreed that school fees/levies lowered children enrolment. Parent representatives (treasurers) were also asked if school levies/fees from parents caters for majority of the school needs, majority 118 (46.9%) disagreed with this assertion. Further, 148 (58.7%), of the parent representatives (treasurers) disagreed that parent's/guardians are positive towards school levies. On whether the government should abolish all school levies, majority 106 (44.0%) of the parent representatives (treasurers) agreed with this statement.

Similarly, 154 (61.1%), of the parent representatives (treasurers) disagreed that there were funds set aside to support the implementation process of the ECDE policies.

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Furthermore, 139 (55.1%), of the parent representatives (treasurers) disagreed that acceptability of most parents to new activities in school that require finances is higher. On whether most parents participated in buying of school furniture, majority 113 (44.9%) of the parent representatives (treasurers) disagreed with this assertion. Further, 172 (68.2%) of the parent representatives (treasurers) disagreed that most parents are always willing to support financially the construction and renovation of classes. Lastly, 176 (69.9%), of the parent representatives (treasurers) disagreed that most parents are willing to pay school fees/levies for the needy children.

In overall, from Tables 4, 5, and 6, 75.4% of the informants disagreed that majority of the parents/guardians in public ECDE centres in Makueni county were able to support their children by providing them with basic amenities and teaching and learning aids. Using the five-point Likert scale, headteachers' average mean response of 2.47, ECDE teachers' average mean response of 2.45, and parent representative (ECDE treasurers) average mean response of 2.48 imply that majority of the headteachers, ECDE teachers, and parent representatives disagreed with most of the perceptions presented in Table 4, 5, and 6. The researcher also found that majority of the public ECDE centres in the rural areas were most affected than those near urban or in the urban areas like Kibwezi town. This finding concur with Morrissey et al., (2022) that the enrolment levels in the ECDE centres in rural communities in the United States were low than those in the urban areas. Most rural communities have low disposable income and therefore are limited to accessing high quality early learning and education for their children. Similarly, from Table 4, 150 (73.5%), of the headteachers agreed that parent's/guardian's income level influenced management of ECDE centres. The researcher found that pupils from low-income families may suffer low self-esteem; some steal other pupils' food if they carry delicacies like chapati. This affects the process of teaching and learning, depriving vulnerable pupil's standard experiences. As such ECDE teachers advised parents on which foods they packed for their children. These results converge with Moyo, Wadesango, and Kurebwa, (2012) that lack of resources affected the teaching and learning processes.

### **4.3 Interview Responses**

Headteachers, sub county ECDE coordinators, and County Director of Education interviews generated assorted perceptions on the influence of household income level on effective management of ECDE centres in Makueni county. Responses were coded as per the responses provided by respondents. According to the interviewed headteachers:

Income from casual work is not adequate for them to support development of ECDE centres and for their basic needs. Parents' strain to make school fees payments for their children (63 respondents). Similarly, some parents are primary school drop outs and therefore do not have the required skills that enables them access better paying jobs (54 respondents). Poor parents have the donor dependence syndrome. They believe the funding from the government is enough and headteachers should not charge anything else (Head Teacher 3).

Parents in the region again strain to ensure their children enroll in ECDE classes (48 respondents). Some parents in the region have made their children skip ECDE programmes and instead try to enroll them in grade one due to lack of finance (24 respondents). The study found that the sub county ECDE

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coordinators act as quality assurance officers. They visit primary schools under which the ECDE centres are managed (Head Teacher 4)

Wakiuru (2016) found out that parental income level had a positive association with their participation level in pre-school activities. In this regard, parents with high income levels are able to participate in management of ECD through payment of fees promptly which is needed to employ ECDE teachers, furnish classrooms, among other activities.

From sub county ECDE coordinators' interviews:

Most parents in the region are low-income earners. As a result, they see ECDE as a burden to them. In ECDE development matters, low-income earning is a burden as resources acquired are meagre (7 Respondents). Some parents are not in the position to provide required resources that can assist in the management and development of ECDE centres (5 Respondents). High income earners who are few in majority of the ECDE centres and who are meant to support ECDE development programmes are always busy and hardly attend ECDE meetings to support these developments (4 Respondents). The researcher found that low meeting attendance leads to no quorum. The organizers of the meetings are forced to declare that each pupil has to be accompanied by a parent/guardian to school. As such these results to use of a lot of time which sometime influences the management of ECDE centres negatively (Sub County ECDE coordinator 5).

Among the teachers employed by parents in majority of the centres are demoralized as they are paid in installments depending on the availability of funds or not paid frequently, which sometimes takes more than a term for them to receive their dues (6 Respondents). Most parts of the Makueni county is semi-arid, this means not much is done in terms of agriculture and business as it infested by drought in most months of the year. This has made many parents not consider developing themselves academically. Most of the parents are illiterate and this makes it hard for them to make positive contributions to development of ECDE centres (3 Respondents). The researcher found that the years the arid and semi-arid regions go without rain or harvest they depend on food donations from the government, Non-Governmental organizations (NGO), politicians, Faith Based Organizations (FBO) among others (Sub County ECDE coordinator 7).

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Qualitative results shows that 100% of the headteacher informants agreed that majority of the parents from Makueni county are low-income earners and therefore it has somehow affected their participation in management of ECDE centres.

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#### 4.4 Inferential Statistics

Regression analysis was used to establish if there was a statistically significant influence of household level of income on management of public ECDE centres in Makueni county, Kenya. The results are as presented in Tables 7, 8, and 9.

**Table 7: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.742 <sup>a</sup>	0.741	0.732	1.231

Table 7 shows that  $R^2=0.671$ , the coefficient of determination indicates that 74.1% of the variation in management of public ECDE centres is influenced by household level of income. The ANOVA Table 8 was used to indicate how well the regression fits the data ( $\alpha=5\%$ ).

**Table 8: Analysis of Variance**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	101.162	1	101.162	95.436	.002 <sup>b</sup>
	Residual	756.524	714	1.060		
	Total	857.686	715			

a. Predictors: (Constant), Household level of income

b. Dependent Variable: Management of ECDE centres

Table 8 shows that the regression equation statistically significantly predicts the outcome variable. This means, household level of income contributes statistically significantly to the study model ( $p$ -value < 0.05).

Table 9 further shows the influencing power of household level of income in the model or on management of public ECDE centres.

**Table 9: Coefficients of Variation**

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	5.412	3.915		2.019	.000
Household Level of Income	0.922	0.064	0.671	1.454	.000

a. Dependent Variable: Management of ECDE centres

Table 9 indicates that household level of income in the model is statistically significant ( $p$ -value < 0.05). In this regard, we reject all the null hypotheses ( $H_{01}$ ) and state that household level of income in the model is significantly different from zero (0). This means, for every increase in the household level of income, management of ECDE centre is predicted to change by 0.922 points.

#### **Management of Public ECDE Centres (Y)**

$$= 5.412 + 0.922 \text{ Household Level of Income} + \epsilon$$



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## **5.0 Conclusion**

Based on the study findings, the study concluded that majority of the parents/guardians in public ECDE centres in Makueni county were unable to support their children by providing them with most items needed for learning. This implies most of the children do not have all or extra learning materials like super book for learning to enhance their understanding. Noteworthy, as majority of the parents in public ECDE centres in Makueni county are low-income earners, it therefore affected their participation in management of ECDE centres. For instance, because of the high poverty levels, majority of the parents/guardians were unable to raise as well as pay pupils levies/fees on time. Poor income flows for the public ECDE centres affected management of most of the centre's activities like payment of teachers employed on board.

As parents/guardians are primary sponsors of their children, their contributions greatly count on ECDE centre revenue. As such, the study concluded that parent's/guardian's or household income level influenced management of public ECDE centres in Makueni, county, Kenya.

## **6.0 Recommendations**

The Ministry of Education through the county government of Makueni education office should review the present statement policy on role and responsibilities of partners in the provision of early childhood development and education services to allow external partners offer more support including funding of public ECDE centres.

Funding of preschool education should be increased in public ECDE centres to help some parents/guardians who cannot afford to raise pupil levies in respective ECDE centres in return it will enhance management of centre activities.

Parents/guardians should be informed through defined forums on the importance of participation and support early childhood education and cooperation with ECDE teachers for development of their children.

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