

## **Influence of Selected Parental Characteristics on Children's Academic Performance in Public Pre- Schools in Tigania West Sub-County, Meru County, Kenya**

Authors: Stella Karimi Muthomi and Boniface Njuguna Mwangi

Africa Nazarene University Box 53067-00200, Nairobi

Email: stellakarimi1234@gmail.com

### **Abstract**

*Previous studies point out that parents play an important role in the academic performance of learners in ECD, however, they fall short of delineating how the specific parental characteristics such as educational background, occupation, attitude and involvement influence the acquisition of skills such as language, mathematics, psychomotor, environmental, creative and religious education. Thus, the purpose of this study was to investigate the influence of selected parental characteristics on children's academic performance in public pre-schools in Tigania West Sub-County, Meru County. Then selected factors include the following: parental education background; occupation; attitude towards education; and involvement on their children's ECD academic performance. This study employed a cross-sectional survey design. The target population was 5966 subjects comprising of 111 ECDE teachers and 5855 parents for the 5855 pupils in 85 ECDE centers. A total of 350 respondents were sampled using simple random sampling technique. Questionnaires were used to collect data. Descriptive statistics such as percentages and means were used to analyze data while multiple regression analysis was used to test hypotheses. The study established that low parental educational background among others hinders them to assist their children in learning. It was also established that parental occupation determines the extent to which they assist their children in learning. The study also indicated that parental positive attitude towards ECD education does not help to explain the low academic performance of ECD children. It was further found that parental lack of involvement such as the inability to discuss with teachers on aspiration for their children supervise their children's academic work at home and inability to make any follow-ups on their children's education on their own volition negatively influences academic performance of ECD children. The selected parental characteristics accounted for 46.9 % of variance in the preschool learners' academic performance. Parental involvement was found to be the most potent predictor of learners academic performance ( $\beta = 0.487$ ,  $t(46) = 4.86$ ,  $p < 0.05$ ). The study recommended that the Ministry of Education should initiate and promote adult education in order to help counter the negative effect of low educational background on the performance of children in ECD and that the community should be sensitized on the need for parents to be actively involved in their children's education.*

**Keywords:** *Early Childhood Development Education, Parental Characteristics, Preschool Children Academic Performance*

### **1. Introduction**

Early childhood is a period of rapid increase in size and intellectual, emotional, physical and social development. It is an important stage of development which is pertinent for learning and well-being. United Nations Children's Fund (UNICEF) (2002) notes that the first four years of life of a person is instrumental for the development of their intelligence and thus any intervention

at this stage can have far-reaching impacts on a person's social behavior, personality and intellectual capacity.

Early Childhood Development (ECD) comprise of various programs and strategies directed towards children aged below eight years and their caregivers or parents (UNICEF, 2002). Children's development and resiliency can be enhanced through assisting families to provide for children's needs (Brown, Weitzman, Bzostek, Kavanaugh, Aufseeser, Bagley, Berry, & Auinge, 2004). Recognition of any challenges at this stage may help in alleviating long term problems. O'Connor and Scott (2007) argue that the relationship between a child and a parent or a caregiver helps in fostering the cognitive abilities of the child. Children whose parents are concerned about their (children's) cognitive potential are likely to learn better than those whose parents are unconcerned about their cognitive abilities. O'Connor and Scott (2007) further pointed out that parents who support, confer authoritative relations, enable their children to experience the warm home environment, and are less involved in conflicts are likely to confer positive development of their children in terms of social relationships and academic performance.

European Commission (2009) argues that the best intervention programs entail center-based, early starting, intensive education and programmed educational home activities, parent education, strong parent involvement, and measures of family support. In the USA and China, parental involvement is said to be a vital factor in the child's achievement at any educational level (Cheung & Pomerantz, 2011). The authors argued that in spite of parents' involvement being linked less to emotional and academic adjustment and more with autonomy; it predicted the child's enhanced achievement and engagement. However, parental involvement was linked strongly to positive and competent emotional functioning in the USA than in China. Bowden, Bartkowski, Xu, and Lewis (2017) also found that in the USA children with parents who are formally employed perform better in mathematics as opposed to children whose parents are employed in the informal sector. Peterson, Bruce, Patel and Chamberlain (2018) also reported that in the USA parental attitudes/behaviors impede school readiness for children in kindergarten.

In an endeavor to ensure enhanced financing, access, quality, equity and efficient management of ECDE services, the Kenya government has made several strides. The National Early Childhood Development Policy Framework was formulated in 2006 (Republic of Kenya, 2006). Among other things, it explicitly defines the roles of parents, communities, various government ministries and departments, development partners and other stakeholders in the provision of ECDE. However, Kang'ethe, Wakahiu and Karanja (2015) observe that the expected parental role has been hindered by certain parental characteristics such as educational background, occupation and involvement in their children scholarship.

Meru County is made up of 10 sub-counties and 31 education zones. According to Meru County Government (2017), staffing is inadequate for both teachers and education officers. Meru County has 32,945 female 28,925 male children enrolled in 813 ECD centers. The teacher-child ratio is 1:51. This is an indication that there is teacher inadequacy in ECD centers within Meru County. The average number of years of attendance for pre-school education is two.

Mikwah (2014) carried out a study on parental involvement in children's performance in number work in selected pre-schools in Kianjai Zone, Tigania West Division of Meru County. The study found out that parental involvement in their children's studies is very important. It was established that parental involvement in children's performance had a strong relationship with children's performance in number work. It was also found out that parental support and parental participation were the strongest predictors of performance in number work. This implies that parents play an important role in the academic performance of learners in ECD. However, the study did not look at parent characteristics that are vital in a pupil's academic performance in ECD. Thus the current study seeks to ascertain the influence of selected parental characteristics on the academic performance of ECD children in Tigania West Sub-County, Meru County, Kenya.

### 1.1 Objectives of the Study

- i. To assess the influence of parental education background on the academic performance of ECD children in Tigania West Sub-County, Meru County.
- ii. To examine the influence of parental attitude towards education on the academic performance of ECD children in Tigania West Sub-County, Meru County.
- iii. To establish the influence of parental involvement on the academic performance of ECD children in Tigania West Sub-County, Meru County.

### 1.2 The Study Null Hypotheses

The following null hypotheses were formulated:

**H<sub>01</sub>:** Parental education background has no influence on academic performance of ECD children in Tigania West Sub-County, Meru County

**H<sub>02</sub>:** Parental occupation has no statistically significant influence on academic performance of ECD children in Tigania West Sub-County, Meru County

**H<sub>03</sub>:** Parental attitude towards education has no statistically significant influence on academic performance of ECD children in Tigania West Sub-County, Meru County.

**H<sub>04</sub>:** Parental involvement has no statistically significant influence on academic performance of ECD children in Tigania West Sub-County, Meru County

## 2. Methodology

This study adopted a descriptive survey design. Payne and Payne (2004) noted that the descriptive survey design portrays the status quo of the existing situation and gives an understanding of the existing phenomenon under study. In this study, the influence of selected parental characteristics on ECD children academic performance in selected public pre-schools in

Tigania West Sub-County, Meru County, Kenya was discussed. A cross-sectional survey design was relevant for this study since the study targeted a vast population and aimed at acquiring a huge sample size. The target population in this study was 5966 subjects comprising of 111 ECDE teachers (3 male and 108 female) employed by the county government of Meru and 5855 parents for the 5855 children in 85 ECDE centers in Tigania West Sub-County (Tigania West Sub-county ECDE office, 2018).

Based on Krejcie and Morgan (1970) formulae for a population of 5966 a sample size of 350 is adequate. Thus, 350 respondents were sampled from 30% of ECDE centers as recommended by Mugenda and Mugenda (2003). This translates to 25 ECDE centers. The centers were selected randomly. From each center, two ECDE teachers were selected using simple random sampling. Thus, 50 teachers were sampled. Twelve parents were also sampled using simple random sampling technique from each of the centers where the teachers were sampled from. Thus, a total of 300 parents were sampled making a total of 350 respondents. The instruments of data collection were questionnaires. The questionnaires were in two sets, one for the parents and the other for the teachers. The two sets of questionnaires were used to collect information on selected parental characteristics influencing ECD children academic performance. In regard to ethical issues, the researcher clarified to the participants that the study was purely for academic purposes and all information collected would be treated with utmost confidentiality.

### **3. Results and Analysis**

#### **3.1 Demographic Characteristics of the Respondents**

Out of 50 ECD teachers and 300 parents that were sampled, 47 ECD teachers and 249 parents filled the questionnaires. The response rates for ECD teachers and parents were 94 % and 83.0 % respectively. Babbie (2014) postulates that a response rate of more than 70 percent is sufficient for a study. The study established that all the teachers sampled in ECD centers were females.

This implies that majority of ECD centers in Tigania West Sub-County are taught by female teachers. The results indicated that 67% of the parents who responded to the study instruments were females while 33% were males.

#### **3.2 Influence of Parental Background on Children's Academic Performance**

The study sought to establish the influence of parental background on children's academic performance. The characteristics examined included the following: parental education background, parental occupation, parental attitude and parental involvement.

##### **Educational Level**

The study further collected data on the academic/ education level of the teachers and parents who took part in the study. Their distributions are summarized in the figures below

### Teachers' Academic/ Education Level

The results are summarized in Figure 1 and 2 respectively.

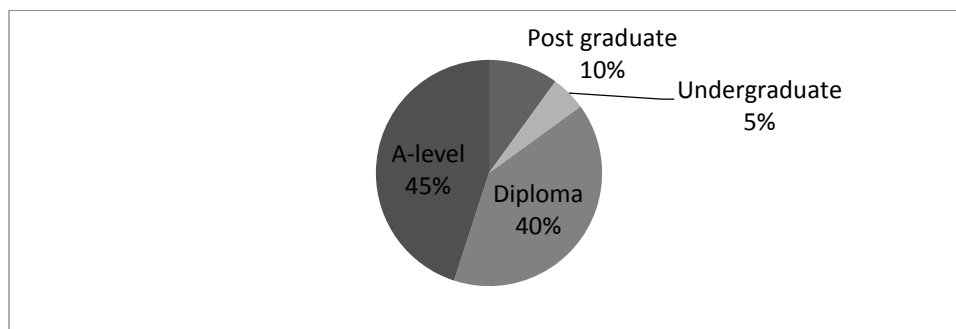


Figure 1: Teachers' academic level

The study established that majority 45% of the ECD teachers were A-level certificate holders while 40% of them were diploma holders. The study also found out that 10% of the ECD teachers were postgraduate degree holders while 5% were holders of an undergraduate degree.

### Parents' Academic Level

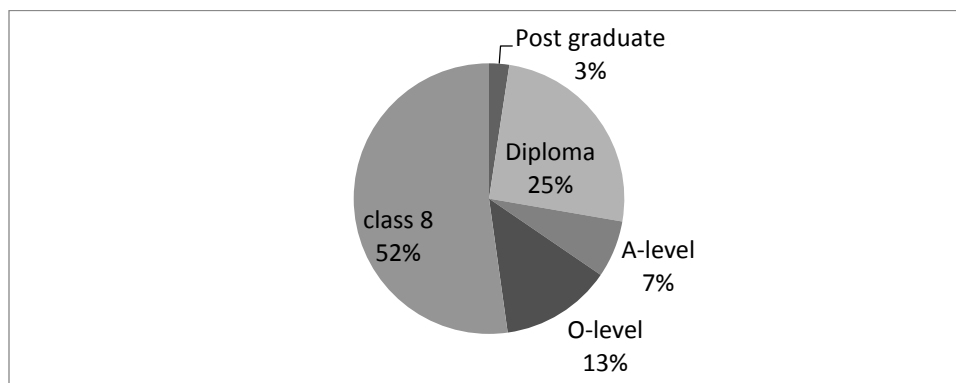


Figure 2: Parents' Highest Academic Level

The study established that majority (52%) of the parents were class eight leavers, 25% of them were diploma holders, 13% were O-level certificate holders and 7% of them were A-level certificate holders. Only 3% of the parents had postgraduate training. The fact that the majority of parents have a low educational level could be indicative of the low academic performance of their children.

### Academic level of Parents' Spouses

The study also collected data on the highest academic level of the spouses of parents who responded to the questionnaires. The results are shown in Figure 3.

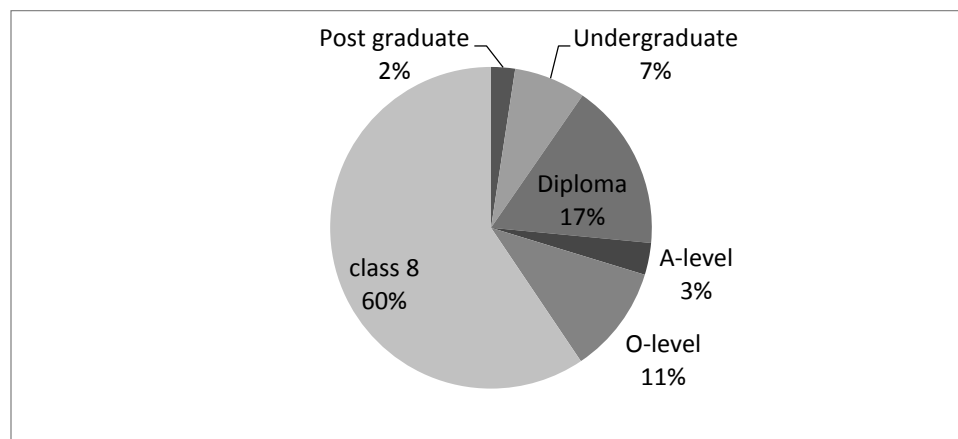


Figure 3: Highest academic level of Parents' Spouses

The study established that majority (60%) of the parents' spouses were class eight leavers, 17% of them were diploma holders, 11% were O-level certificate holders and 3% of them were A-level certificate holders. Only 3% of the parents' spouses had postgraduate training and 7% of them were holders of an undergraduate degree. The fact that the majority of parents' spouses also had a low educational level could also be indicative of the low academic performance of their children.

In order to achieve the study's objective and the formulated four hypothesis, the respondents were required to rate on five point Likert scale the extent to which they did agree or disagree to some statements aligned with the four independent variables in the study. The teachers' questionnaire responses were coded such that strongly disagree was rated number 1 while strongly agree was rated number 5. Using the SPSS, the mean response for each respondent for each independent variable was computed. The dependent variable was the preprimary two (PP2) learners' mean academic performance in terms 1 and 2 of 2017.

Further, the mean scores from the independent variable (parents' characteristics) were regressed on the mean academic performance values. This enabled the researcher to establish the composite and relative contributions of the four selected parents' characteristics to preschool learners' mean performance. Tables 1, 2 and 3 depict the summary of multiple regression analysis.

Table 1

*Multiple Regression Model Summaries*

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Standard error of the estimate
1	0.685	0.469	0.428	0.1264

**Predictors:** (constant), Parental education background, parental occupation, parental attitude, parental involvement

**Dependent variable:** Preschool learners' academic performance

It was evident from Table 1, that there was a strong correlation between the observed values of dependent variable and the values of dependent variable predicted by the multiple regression model ( $R = 0.685$ ). In other words, there was a strong correlation between the predicted and observed values of the pupils' academic performance. It can also be deduced from the value of  $R^2$  in Table 1, that 46.9 % of variance in the preschool learners' academic performance could be explained by the influence of parental education background, parental occupation, parental attitude, and parental involvement. Table 2 shows the significance of the model.

Table 2

*Multiple Regression Model Significance (ANOVA)*

	Model	Sum of Squares	df*	Mean Square	F	Sig.
1	Regression	98.472	4	24.618	38.207	0.011
	Residual	27.048	42	0.644		
	<b>Total</b>	<b>125.52</b>	<b>46</b>			

df\*- degrees of freedom.

With reference to Table 2, the  $F$ -ratio in the ANOVA table has a value of 38.207 and a  $p$  value of 0.011. Since  $p$  was less than 0.05, it was deduced that the overall regression model was a good fit for the data. That is, the model, overall, resulted in a significantly good degree of prediction of the outcome variable. In other words, the joint independent variables statistically significantly predicted the preschool learners academic performance ( $F(4, 42) = 38.207, p < 0.05$ ). Table 3 shows the multiple regression model coefficients.

Table 3

*Summary of Multiple Regression Model Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients		
	Beta	Std. Error	Beta	t	Sig. value
1 (Constant)	0.243	0.119		3.25	0.022
Parental education background	0.383	0.124	0.315	2.218	0.007
Parental occupation	0.424	0.182	0.408	4.729	0.002
Parental attitude	0.218	0.106	0.194	2.372	0.154
Parental involvement	0.512	0.193	0.487	4.861	0.029

**Dependent variable:** Preschool pupils' academic performance

Table 3 reveals the relative contribution of the four independent variables to the dependent variable, expressed as beta weights. Assuming the error term  $\varepsilon$  to be zero and substituting the unstandardized coefficients  $\beta$  values, the estimated multiple regression equation becomes:  $Y = 0.243 + 0.383 X_1 + 0.424 X_2 + 0.218 X_3 + 0.512 X_4$ .

The  $\beta$  values indicate the individual contribution of each predictor to the model if the effects of all other predictors are held constant. Thus, when the parental education background increases positively by one unit, pupils' academic performance would increase by 0.383 units ( $\beta = 0.383$ ) while holding the other factors constant. Similarly, when the parental involvement increases by one unit, pupils' academic performance would increase by 0.512 units ( $\beta = 0.512$ ) while holding the other factors constant and so on.

In reference to Table 3, the unstandardized beta value for parental education background was found to be significantly greater than zero ( $\beta = 0.383$ ,  $t(46) = 2.218$ ,  $p < 0.05$ ). Subsequently, the first null hypothesis was rejected. It was, therefore, deduced that parental education background had a statistically significant influence on pupils' academic performance in public ECDE centres in Tigania West Sub County. This meant that children whose parents had advanced in education and in especially beyond primary school had better chances of performing well academically. Similarly, parental occupation was found to have significant influence on preschool children academic performance ( $\beta = 0.424$ ,  $t(46) = 4.729$ ,  $p < 0.05$ ). This implied that learners whose parents were in permanent employment or had a reliable source of livelihood were more likely to have better academic performance. Likewise, parental involvement was found to have significance influence on preschool learners academic performance in Tigania West Sub County ( $\beta = 0.512$ ,  $t = 4.86$ ,  $p > 0.005$ ). This meant that children whose parents were concerned and keen on their school progress were more inclined to have good academic performance. However, parental attitude was found to have insignificant influence on learners' academic performance ( $\beta = 0.218$ ,  $t = 2.372$ ,  $p = 0.154$ ). Thus, though most of the parents positive attitude towards preschool children education, did not necessarily translate to good academic performance.



#### 4. Discussion

It was also established that the majority of the parents were class eight leavers. This could explain why the majority of parents did not assist their children in learning how to read, solve arithmetic problems and to write and did not narrate/read stories to their children. This concurs with Okantey (2008) who reported that educated parents are more confident and competent in guiding their children in academics which enhances the children's academic achievement. The findings also support a study by Okantey (2008) in Indianapolis reported that educated parents are better equipped to influence a child's academic performance since they are cognizant of the importance of the parent-student community relationship. The finding also supports Mwaura (2014) finds that educated parents assist their students in doing their school work which helps to enhance student's academic performance. The study also found that parental educational background had a significant influence on children's academic performance ( $\beta = 0.383$ ,  $t(46) = 2.218$ ,  $p < 0.05$ ). The finding was consistent with Akinyi (2013) who found that preschool children whose parents attained degree level of education had higher rates of performance in language activities while the children from parents who attained KCSE certificate level and below had lower performance. More importantly, most studies have singled out mothers' educational level as particularly crucial in a child performance in school. Mattison, Scelza and Blumenfield (2014) found that mothers' education was an important predictor of the physical environment and learning experiences in the home. Similarly, Murithi (2015) affirms that highly educated mothers have greater success in providing their children with cognitive and language skills.

The study results indicated that the majority of the parents were self-employed. It was also established that parents' occupation determines whether they assist their children in learning how to read or not and whether they narrate/read stories to their children or not. Further, quantitatively, parental occupation was found to have significant influence on preschool children academic performance ( $\beta = 0.424$ ,  $t(46) = 4.729$ ,  $p < 0.05$ ). This finding was congruent with Akinsanya, Ajayi, and Salomi (2011) study which indicated that the occupation of the parents is an essential predictor of a child's achievement in Mathematics. This implies that children with parents with better-paying occupations are likely to perform better in mathematics than children whose parents have low paying occupations. This view is augmented by Organisation for Economic Co-operation and Development (OECD) (2014) report which indicated that children from families whose parents are professionals are likely to perform better in mathematics than children whose parents work in basic occupations. However, it should be noted that these studies were limited to academic performance in mathematics whereas the current study indicated that parental occupation influences general children's academic performance.

In regards to parental attitude, the study established that the majority of parents had positive attitude towards education. This supports Samal (2012) study which sought to assess parents' attitude towards schooling and education of their children and established that the respondents had a positive and favorable attitude towards education and schooling of their kids. However, parental attitude was found to have insignificant influence on learners' academic performance ( $\beta = 0.218$ ,  $t = 2.372$ ,  $p = 0.154$ ). Thus, though most of the parents had positive attitude towards preschool children education, this did not necessarily translate to good academic performance. This finding contradicts Oundo, Poipoi and Were (2014) study which established that academic performance of the children is significantly correlated to the attitude of the parents towards the education of their children. Thus, though parents of preschool children in Tigania West Sub County were positive and regarded preschool education as essential, they seemed to pay very little attention or involvement in their children school work and general progress.

Finally, the study found that parents who cultivated interest and got involved in children school work and welfare, had a significance influence on preschool learners academic performance in Tigania West Sub County ( $\beta = 0.512$ ,  $t = 4.86$ ,  $p > 0.005$ ). This meant that children whose parents were supportive in providing learning materials, and worked closely with teachers in monitoring the child progress were more inclined to enhance the child academic performance. The finding corroborates Murithi (2015) argument that most parents whose children attend public preschools in Kenya are not keen with their children progress. Murithi (2015) further discloses that there are a few parents who collaborate with teachers to establish their children's aspiration, supervise their children's academic work at home and make follow-ups on their children's education on their own volition. As noted by Ikunyua (2012) parents can be involved in ECD through providing the children with necessary stationery, assisting them in their homework, creating sufficient time for the children to attend to their school work, encouraging the children to work hard in their school work, showing love to them and participating in school activities such as attending parents' meetings.

## 5. Conclusion

Based on the study findings the study concluded that low parental educational background among majority of parents hinders them to assist their children in learning how to read, solve arithmetic problems, learning how to write and to narrate/read stories to their children hence negatively influencing academic performance of ECD children in Tigania West Sub-County, Meru County. It was also concluded that parents' positive attitude towards ECDE but with little or no involvement in their children's work, had minimal contribution towards academic excellence. The study recommends that the Ministry of Education should initiate and promote adult education in Tigania West Sub-County, Meru County in order to help counter the negative effect of low educational background on the performance of children in ECD. Further,

educational stakeholders such as school management and local political leaders should sensitize the community on the need for parents to be actively involved in their children's education

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