

# Relationship between Selected Home Environmental Factors and the Pupils with Hearing Impairment's Academic Performance

# Mrs. Lucy Wanjira Mwangi

PhD Education Psychology- Maasai Mara Univeristy Email: lucywanjiram@gmail.com

# **Dr. Gladys Ngao**

Lecturer - Kenyatta University

# Dr. Maithya

Lecturer – Maasai Mara University

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#### **ABSTRACT**

The study examined the relationship between home environment and academic performance of upper primary pupils with Hearing Impairments in Central Province Kenya. The study was based on Atkinson motivation theory, from literature reviewed. It was realized that a strong positive correlation between academic achievement and home environment existed (Kapila, 1976). A sample size of 75 upper primary (5,6,7,8) between the ages of 14-18 years were randomly selected from five primary schools for the Hearing Impaired in Central Province. Data was collected using two questionnaires and results of the end year examination were used as a measure of their academic performance. Pearson's product moment correlation and two taile t-test were used to test the hypothesis. One of the major findings indicated that there was a significant relationship between home environment and academic performance of children with Hearing Impairment. The study recommended that the parents ensure that children have a favorable home environment in order to achieve success in school.

#### Introduction

Education and learning of children with hearing impairment is a major problem in Kenyan educational sector. A serious problem exists in rural villages of central province whereby children never make it beyond primary school level. Though free primary education is running in those areas, it is apparent that it has not resolved the long existing problem of hearing impaired dropping out of school or performing poorly in the final examination compared to their hearing counterparts. The most significant thing a parent can give to a child is education and therefore this has to be taken seriously. The impact of home environment as well as



academic achievement motivation is a major determinant of academic performance (lexmond 2004).

## **Main Objective**

To establish whether there was any relationship between selected home environmental factors and the pupils with hearing impairment's academic performance.

#### **Problem Statement**

Girls and boys hearing impairment performances affect heir opportunities in life in society that considers academic performances a measure of success in life. For example an individual who performs well in primary school system progress well to a secondary school education and to the university education and job opportunities are based on how well they perform. Education system with this regard with HI academic performances in school system is poor as per the criteria set by the education system. This study attempted to establish some of the home environment factors that would be contributing to the poor performance with the aim of trying to get possible solutions to HI academic performance to enable them to have equal opportunities in life with other children.

#### **Literature Review**

The term home environment is a broad concept, which involves many factors and therefore cannot be defined adequately. Home environment incorporates all subjects, forces and conditions in the home, which influence the child physically, intellectually and emotionally. Different home environments vary in very many aspects such as:

- Parental level of education
- Occupational status
- Socio -economic status
- Religious background
- Parental altitude towards education of their child
- Parental value in life
- Parental interests in education of the child
- Parental expectation of the child and
- Family size

Children with hearing impairment came from different home environments and were differently affected by such aspects. The study was based on the assumption that as the child with a hearing impairment went home over the holiday; he/she interacted with the family members and the physical environment, which in turn affects his/her academic performance. That assumption is supported by Atkinson and Raynor (1974) who posit that children's performance in school is explained best by examining an interaction framework of behaviour. The interaction model proposes that the behaviour of an individual is the result of continuous interaction between the person and his environment. The assumption that different home environments affect children with handicap is further supported by Rawlings and Jonsoma (2002). In their study of 37 pairs or children with hearing impairment in Australia, they reported



that more children with hearing impairment were born of manual workers who live in broken homes and were less intelligent than children with hearing impairment born by professionals and lived with both parents.

Research findings by Lexmond (2004) have demonstrated that differences in parents level of income, parents level of occupation, living conditions, parents level of education, parents involvement and family size, determined the pupils academic progress in school to a certain extent. Boles (2003) in his study on 221 children with hearing impairment in Canada, observed that a child with quite a severe hearing loss

but who got quality help, support and encouragement from home was able to adjust well to normal schooling and had a desire to excel in school.

In contrast, a child with a mild disability with unhelpful home circumstances might need special services to adjust to normal schooling and to enable him or her to have a desire to excel in school. However, the study of the home environment as a variable by itself was difficult to be done in a single undertaking. Researchers who had attempted to investigate the relationship between home environment and academic

performance had tended to select specific home factors for their studies. In the case, the researcher selected the following home environmental factors for the purpose of the study:

- I. Parental encouragement
- 2. Parental occupation
- 3. Parental education
- 4. Family size and
- 5. Learning facilities

All home environmental factors overlapped in their effect on the child's academic performance; for instance, according to Douglas (2000) parents who were unskilled workers lacked interest in their children's schoolwork. Such parents might have large families, live in overcrowded homes and sent their children to schools, which were not well equipped; therefore, the above categorization was only for convenience. The

following sub-sections included the description of each of the variables and the discussion on how they influenced academic performance. The review of relevant researches involved the variables also discussed.

#### The Home Environment Questionnaire

The instrument was adapted fix use in Kenya after the pilot study. The IWIIIC environment questionnaire, which was a measure of pupil's home environment, consisted of 31 items. The questionnaire had the following questions and sections covering the factors, which had been selected for the study.

- Parental occupation (questions I and 2)
- Parental education (question 5)
- Family size (questions 6 and 7)
- Parental encouragement (questions 8 and 21)
- Learning facilities at home (questions 22 and 31)



The questionnaire would normally take about half an hour to complete but more time was allowed about 45 minutes for the pupils with hearing impairment.

The study used each school's internal examination results, done at the end of the previous year, as a measure of school performance. The results were obtained from

the head teachers of the specified schools on request. Until 2000, the mock examination used to consist of seven papers, the same used to be offered in KCPE. From 200 I, KCPE, the examination consisted of five subjects. The KCPE examined five subjects too. The following subjects were offered in the internal examination and their results were used in the study.

- English
- Kiswahili
- Mathematics
- Science & Agriculture
- Geography, History, Civics and Religious Education

# **Research Methodology**

## **Research Design**

Correlation method was used. This method permitted the researcher to analyze the relationship variables of the study. The correlation coefficient provided a measure of degree and direction of relationship. It also allowed researcher to predict scores on one variable from subject scores on other variables. The statistical significance of the correlation coefficient indicated whether the obtained coefficient was statistically significantly different from zero, the null hypothesis could not be rejected.

#### **Population and Sample**

The sample consisted of 75 upper primary ( standard 5,6,7 ) pupils from 3 special schools namely: 1,2,3 in central province. Those schools had a total of 100 pupils in upper primary classes.

The pupils with hearing loss of not more than 51 decibels (dB) were used for the study. The pupils were between 14 and 20. They all had a set of scores for end of year examinations for the previous year. In the study, primary school pupils were preferred because they were able to display their academic achievement more readily than secondary school pupils who had varied areas of interest. Upper primary students were able to respond to questionnaire correctly because their level of understanding and reading was higher than that of lower primary pupils. (McClelland, 2001, khatena 1996). Respondents in the study were older than their counterparts in in regular primary schools. The reason was that children with hearing impairment took longer time to start school as their parents decided what to do with them. That is why the study used children between the age of 14-20 years in primary school (Chege et al 1999).

## **Data Collection and Analysis**

# The Relationship between Home Environmental Factors and Academic Performance

The null hypotheses stated that there was no significant relationship between the home environmental factors and academic performance. Table 4.3 presented the results of



correlation analysis between scores on the various environmental factors and academic performance.

Table 4.3 Relationship between home environmental factors and academic performance (N=75)

Home Factors	Examination results				
Father's occupation	0.211	0.221	0.432	0.031	-0.158
Mother's occupation	0.240	0.047	0.082	0.144	-0.011
Father's education	0.486	0.417	0.321	0.048	0.220
Mother's education	0.131	0.234	0.094	0.163	0.0045
Family size	-	-	0.021	-	-0.093
	0.167	0.192		0.002	
Parental encouragement	0.175	0.150	-	0.185	0.256
			0.083		
Facilities at home	-	-	0.205	0.065	0.179
	0.025	0.076			

### The table 4.3 above shows that:

- (i) The correlation coefficients, which ranged from 0.0 II to 0.486, indicated that there was some ignificance in the two correlated variables.
- (ii) The only significant correlations were between: (a) Father's occupation and academic performance in English; (r = -0.211), and Kiswahili (r = -0.22 I). All other factors were not significant at p<0.05 such as
- (b) Mothers' occupation and pupil performance in English (r=-0.240), Kiswahili (r=- 0.047), Mathematics (r=-0.082), Science (r=- 0.144) and GHCIU': (r=-0.0 I I).
- (e) Fathers' education and pupil performance in Mathematics.
- (iii) Mothers' education and performance in Mathematics.
- (iv) Family size and performance in all the subject areas mentioned in table 4: I
- (v) Parental encouragement and performance in Mathematics (r=-0.083).
- (vi) Learning facilities at home and performance in English (r=-0.025), Kiswahili (r=-0.076).

#### **Conclusion and Recommendation**

The results showed that the relationship between the home environmental factors and the pupils' academic performance was weak. It suggested that pupils with hearing impairments, whose fathers were well-educated, tended to perform better in English and Kiswahili than pupils whose lathers were not highly educated. The results also implied that mothers of pupils with hearing impairment did not have a relationship with their children's performance in all subject areas. The results further indicated that pupils with hearing impairment whose lathers were in high-income occupation did not correlate significantly with performance in all subject areas. That implied that father's occupation influenced performance among their children. The



other correlations, for example the family size, had no significant relationship with academic performance of pupils with hearing impairment in all subject areas as shown in table 4.2. Researchers such as Fraser (2000), Yseldyke &

Algozzine (1992) and I.cxmond (2004) in their study on family size and academ ic performance observed that there was a positive significant relationship between the two variables.

The fact that the scores on the home environmental factors were not strongly related with the pupils' academic performance in that study did not rule out the influence the home environmental factors on academic performance. There could be possible explanations as to why the pupils with hearing impairment scores on various home environmental factors did not correlate positively with their scores in academic

performance. Some of the possible explanations for such findings were discussed as below:

The negative correlations on the parental occupation and pupil performance might have implied that the parents with a high income occupation tended to spend most of their time in those occupations and had little time for their children at home. The pupils with hearing impairments were in residential schools. It implied that though there could be learning facilities at home, they rarely made use of them because they spent most of the time in schools. That explained why the home environmental factors had low correlation with academic performance of the pupils with hearing impairment. In such cases where learning facilities were not adequately and properly utilized, there might be no connection between availability of such facilities and the pupil performance. Atkinson and Raynor (1974) observe that high expectations and pressure for good performance in the name of encouragement by some parents might have negative effect on performance since they cause anxiety and fear of failure to the children with hearing impairment. That could be another explanation as to why there was no significant positive correlation between parental encouragement and pupils' academic performance in all subject areas.

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