

INFLUENCE OF PARENTAL OCCUPATION AND FAMILY INCOME ON STUDENTS' ACADEMIC PERFORMANCE OF PUBLIC MIXED DAY SECONDARY SCHOOLS IN KURESOI SUB-COUNTY, NAKURU COUNTY, KENYA.

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ABSTRACT

The question of parental occupation and family income affecting students' academic performance has been the subject of public discourse and academic research in the past two decades. At the centre of the debate is the understanding that parental occupation and family income in education is a travesty that developing countries cannot countenance. It is against this background that the need for this study was envisaged. This study sought to investigate the influence of parental occupation and family income on academic performance of public mixed day secondary school students. The study employed *ex-post facto* design. The researcher used stratified random sampling technique. The study involved 6 secondary schools. A sample of 180 form four students was selected out of an accessible population of 900 students. The research instrument used to collect data was questionnaires. A pilot study was carried out and a split-half method was used to determine the reliability of the research instrument. Expert judgment was employed to determine the validity of the research instrument. The researcher carried out analytical review of relevant literature. The data collected in the field was analyzed using descriptive and inferential statistics, and null hypotheses tested at $\alpha= 0.05$. The finding of this study revealed that parental occupation and family income did not significantly influence students' academic performance in Kuresoi Sub-County. The researcher recommends that schools should compensate for family background deficiencies by establishing quality learning facilities in the Sub-County instead of depending on parental occupation and income.

Key words: Academic performance, parental occupation, family income, students, questionnaire.

1.1 INTRODUCTION

The United States Department of Education (2004) has identified academic achievement gaps in low socio-economic background (parental occupation and family income). Starting from a young age, low SEB children have the odds stacked against them. They have slower language acquisition, literacy development and success in academic (Barton, 2003). After children entered elementary school, the differences in achievement widened (Borman, 2002). A family's income impacted academic achievement, with a wide achievement gap among various socio-economic backgrounds. Beginning with pre-school, low income children are more likely to attend early childhood programs of lower quality. Classroom comprised of 60% of children from low-income homes had significantly lower quality indicators of teaching, teacher-child interaction, and material for learning than classroom with fewer low-income children (Klein & Knitzer, 2007).

One of the Eight Millennium Development Goal is that by 2015 all children in developing countries should complete primary school even though learners who completed primary school often perform poorly on academic tests (Glewwe and Kremer, 2006). The parental occupation and family income of a secondary school student can either assist his/her progress or retard it; therefore there was need to inquire into how a student's parental occupation and family income affects him or her. An inquiry of this nature was particularly relevant in a Kenyan context, because a student's performance in secondary school, as determined by the Kenya Certificate of Secondary Education examination, has significant ramifications on his or her future career and livelihood. Taking the above into consideration, it is clear that there exists inequality as far as students' parental occupation and family income is concerned.

1.2 LITERATURE REVIEW

Muola (2010) found a significant correlation between parental occupation and academic achievement of pupils. Children raised by parents who hold professional jobs grow up to be more inquisitive and active in their learning when compared to children of parents who are not working. In another study, Ndege (1992), which covered only primary schools, found that parental occupation and family income have significant influence on pupil's academic performance in the primary school level. Chege (1983) in a study for education of Maasai girls found that occupation of parents and of the older family members are important factors that influence school performance rates. In Kenya, Maundu (1986) found that maternal occupation was a good predictor of pupils' mathematics scores at Kenya Certificate of Education. This study suggested that parental occupation is an important determinant of pupil's academic achievement in Kenya.

The effect of parental occupation on students' performance may not be as strong as conventional wisdom would suggest. Focusing on 14 year olds in 1989, Ainley & Long (1995) found correlations of 0.23 and 0.21 for father's occupation with achievement in Math and reading. According Lokan, Ford, & Greenwood, (1996) the correlations of father's occupation with word knowledge and Mathematics among 13 and 14 year olds were 0.19 and 0.29 respectively. Among Victorian year 9

students in 1988 the correlations with father's occupation were 0.25 and 0.22 for mathematics and reading respectively. By age 3, children from low occupational families demonstrated a significantly lower vocabulary than children from middle and high occupational families (Shannon & Bylsma, 2002). Professional parents spoke more than 2000 words per hour to their children, while skilled parents spoke about 1,300 words. The vocabulary of 4 years olds from professional families was almost 50% larger than those of skilled families and twice as large as those of unskilled families. A lower vocabulary leads to slower language development (Rothstein, 2004). Taylor, Haris & Taylor, (2004) found out that without parental approval or support, students and young adults are often reluctant to pursue or even explore diverse career possibilities and thus affecting their academic performance. Chepchieng (1995) found family income to be one of the factors which influence academic performance. He noted that parents with low incomes have been known to experience stress, unable to frequently encourage their children and monitor their schoolwork. The reason for, as they explained is that such parent's time is spent in thinking and looking for ways of generating income for the sustenance of the family. Therefore, it was necessary investigate the influence of family income on academic performance of secondary school students.

Studies show that independent variables that school cannot control, including low income, are good for predicting achievement scores (Sutton and Soderstrom, 2001). Parents who are low income earners are less able to provide for further education after high school, so students may not be working for their fullest potential that would be required to enter into higher education (Rouse and Barrow, 2006). Drummond & Stipek (2004) while discussing their " low income parent's benefit about their role in children's academic learning" mentioned that a few of these parents indicated that their responsibilities were limited to meeting children's basic and social-emotional needs, such as providing clothing, emotional support and socializing manners. Parents' shortsightedness towards their responsibilities in the educational process of their children and scarcity of fund to intensify such processes could be a challenge to their children's success.

According to Evans (2004), lower income children have less stable families, greater exposure to environmental toxins and violence, and more limited extra-familial social support networks. There is no doubt that parents in such setting would report lower educational expectations, less monitoring of children's school work and less overall supervision of social activities compared to students from high income families. Evans repeatedly discovered that low SES children are less cognitively stimulated than high SES children, as a result of reading less and being read to less, and experience less complex communications with parents involving more limited vocabulary. Unfortunately, intelligent and talented low SES students have no control over their family's income. Even though public school is free, a family must still afford school cloths and basic school supplies. Thus, a poor student who cannot afford the essentials drop out of school due to their families' financial situation, and often talented low-income children do not complete high school, get a diploma or enter college. Ultimately, they are viewed as unsuccessful and low achieving (Schiller, 2004). Thus, the poor are

not academically unsuccessful because their lack of capabilities but rather their family's financial status does not permit them to continue their education (Schiller, 2004).

Duncan and Brooks-Gunn (2001) found family income significantly affected children's ability and achievement measures. In 1999, 58% of low income fourth-grade students in the United States could not read. Similar, 68 % of low income inner-city eight-grade students could not meet basic mathematics standard for their grade level (Cater, 1999). Analysis of fourth and eighth grade Iowa Test of Basic Skills (ITBS) results in 1996-97 showed students with low income scored poorly on that test. In 2004, almost 42% of the children in the United States lived in low income families and could not meet the most basic needs thus could not afford learning materials at home (Douglas Hall, Chau, & Koball 2006). Between 2000-2004, 45% of children under age 6 in the South of United States lived in low-income families and 9% increase occurred in the number of children living in low income families in the South due to the increase in immigrants with low education levels (Douglas-Hall, et al.,).

Early childhood programs have proved critical to the future learning of young children, especially those in low income families. In 2005, 16% of low income families placed their children in center-based care and 10% with other relatives. In contrast, 25% of families at or above the poverty line placed their children in centre-based care and 6% asked relatives to watch their children (Federal Interagency Forum on Child and Family Statistics, 2006).

The majority of preschool-aged children stayed at home during the day with one of their parents. Children from families with a higher income experience a more stimulating learning environment, including better access to books, newspapers, and learning opportunities (Duncan & Magnuson, 2005). With the additional exposure to literature and activities, children were better prepared for school and more familiar with language and literacy. Likewise warmth, responsive and involved parents provided a better household climate for higher achievement. Parents were more inclined to be more warm and responsive if they did not have economic hardship, income loss or unemployment (Hanson, McLanahan & Thomson, 1999).

Lee and Burkham (2002) determined that children from low income families started school behind their peers from high-income families due to differences in background and experiences. According to Seccombe (2007), low income families were 5 times more likely to have high lead blood vessels than higher income children. About 16% of low income families children compared to 4% of all other children lived in older housing which still contained lead paint and caused lead poisoning. Lead exposure, even in small doses, causes learning disabilities, developmental decays and

behavioral problems. If a low income family has an increase in income the impact on academic ability and achievement is much greater than that of families from high SES (Duncan & Brooks-Gunn, 2001). For pre-school and elementary school aged children when family income was increased roughly \$ 1,000 a year, then achievement increased by approximately 0.07 standard deviations (Duncan & Magnuson, 2005). A 30-point variance in test scores existed for every \$10,000 change in household income (Darden, 2003). Just increasing the incomes of low-income families alone could positively affect child development, especially at the younger ages (Knitzer, 2007).

Smith, Brooks-Gunn, Klebanov, (1999) examined the changes in the income-to-needs ratio from the children of the National longitudinal Survey of Youth (NLSY) study. The income-to-needs ratio was calculated by dividing the family's total for each year of a child's life by the U.S Child's family based on the number of people in the household for each year of the child's life up to and including the income data for the year of the assessment (Smith et al., 1999) used students' scores on the Peabody Picture Vocabulary Test-Revised (PPVT-R) or the Peabody Individual Achievement Test (PIAT) to track groups of children: 3-4 years old, 5-6 year olds and 7-8 year olds. All tests were normed with means of 100 and standard deviations of 15. The study controlled for family structure, mother's education, child's age and birth weight. If the average family income increased from 1 point to 2 point on the income-to-needs ratio, then there was a 3.0 to 3.7 point increase in the child's score on the PPVT-R or PIAT (Smith et al). Results of the study showed an increase in income for a child in low income families had a much greater effect on achievement than for a child in high SES (wealthy families) Duncan & Brooks-Gunn, 2001). The study showed that increasing income was associated with increasing use of educational resources, and that increasing income was also associated with better performance in school.

1.3 METHODOLOGY

1.3.1 RESEARCH DESIGN

This study employed *ex-post facto* design. The main purpose of this design was to determine causes and effects for the current status of the phenomena under study. Parental occupation and family income which served as the independent variable could not be directly manipulated (Nachmias & Nachmias, 1996; Kerlinger, 2000, Mugenda and Mugenda 2003). This design was also found appropriate because it allowed the investigation of subsequent relationships between variables. The academic performances of public mixed day secondary school students are taken as the dependent variable. Thus, the researcher was able to relate an after-the-fact analysis to an outcome or the dependent variable (Kathuri & Pals, 1993). The researcher used the design to investigate the relationship between parental occupation and family income and students' academic performance in public mixed day secondary school in Kuresoi Sub- County.

1.3.2 STUDY POPULATION

One hundred and eighty form four students were selected from the six schools and used for the study. The study population was 3,913 students enrolled in public mixed day secondary schools in Kuresoi Sub- County . The accessible population was the form four students who were used as respondents because they were assumed to be mature enough in terms of age and education thus having an idea about their family socio-economic background. Stratified random sampling was adopted. The technique placed the respondents into two strata on the basis of gender (boys and girls). Simple random sampling was adopted because it necessitated selecting of schools in such a way that the schools had an equal probability of being equal. The main factor to consider in determining the sample size was the need to keep it manageable.

1.3.3 INSTRUMENTATION

Data was collected from students in the selected secondary schools. The researcher used questionnaire for students as the data collection instruments. Closed-ended items were used in the questionnaire. A closed-ended questionnaire is one which the respondent is offered the choice of alternative responses.

Data concerning the academic performance of the students was obtained from school records. Through the principals of the selected schools, the researcher requested for the last one year marks (2009) of the respondents from the teacher in charge of academics. It was assumed that each subject was graded in percentages. An average mark was based on teachers rating the end of term test marks. The marks were standardized using T-score formula. The standardized scores provided a common basis for academic comparison of students' performance. In order to achieve this scale, raw scores were transformed using the raw-score mean and standard deviation. The transformation yields a scale of Z- scores and this is used in transforming raw-scores into T-scores formulae.

1.3.4 PROCEDURE

The researcher and research assistants ensured the sampled respondents were the ones providing appropriate responses in the questionnaire. The research assistants were trained in administering of the instrument and participated in piloting and correcting of the instrument before the final use. The researcher read the items to the students one after another without offering any interpretation to the items. The respondents were not allowed to fill in the instruments until they indicated that they had clearly understood the procedure. Enough time was allowed for all the respondents to finish. A researcher asked the students to use permanent ink pens.

1.4 RESULTS AND DISCUSSION

The main reason for this study was to determine whether relationship existed in academic performance of secondary school students from parental occupation and family income. The results

obtained from analysis showed that parental occupation and family income appear to have no direct influence on secondary students' performance.

The result obtained from analysis showed that the type of occupation appear to have no direct influence on public mixed day secondary students performance. The Chi-square of the fathers' occupation $\chi^2_{(ob)} = 3.89$, $\chi^2_{crit(0.05, 4)} = 9.49$ with $df = 4$. This showed that $\chi^2_{(ob)} \leq \chi^2_{crit(0.05, 4)}$, then the null hypothesis was accepted. The mother's occupation also was computed using Chi-square. $\chi^2_{(ob)} = 1.90$, $\chi^2_{crit(4, 0.05)} = 9.49$ thus $\chi^2_{(ob)} \leq \chi^2_{crit(4, 0.05)}$ then the null hypothesis was accepted. Therefore, the (H_0) which stated that parental occupation has no significant relationship on academic performance of secondary students was accepted. Therefore, parental occupation may not contribute to the children's school work in secondary level. The result obtained from analysis showed that family income appear to have no direct influence on public mixed day secondary students performance. The result obtained from analysis showed that $\chi^2_{(ob)} = 0.33$, $\chi^2_{crit(0.05, 2)} = 5.99$ with degree of freedom being 2, hence $\chi^2_{(ob)} \leq \chi^2_{crit(0.05, 2)}$ then the null hypothesis (H_0) was accepted. Therefore, the H_0 which stated that family income has no significant relationship on students' academic performance was accepted. This was supported by a very low degree of association with a contingency coefficient 0.04.

This finding contradicted the findings of Evans (2004), Rouse and Barrow (2006), Duncan and Brooks-Gunn (2001), Schiller (2004), Secombe (2007), Cater, 1999), Lee and Burkham (2002), Knitzer (2007), Ndege (1992), and Darden (2003) in their various studies found a correlation between the two variables. This was not the case in this study because 59.5% of students from high-income families scored below average and 40.5% of students from low-income families scored below average. Ndege (1992), found family income to have significant influence on pupil's academic performance in the primary school level. Duncan and Brooks-Gunn (2001) found family income significantly affected children's ability and achievement measures. Similar, 68 % of low income inner-city eight-grade students could not meet basic mathematics standard for their grade level (Cater, 1999). Evans (2004), found lower income children to have less stable families, greater exposure to environmental toxins and violence, and more limited extra-familial social support networks. This study supported the finding of Chepchieng (1995) who did the same in boarding secondary school level in Kabartonjo division.

A possible reason why this study differed with other researchers may be because of the level in which the study was carried out. Many researchers above did their research in primary level or lower grades. The present study was carried out in secondary level. This may have brought out the variation of the result. This shows that family income did not significantly influence students' academic performance of secondary school students in Kuresoi Sub- County.

1.5 CONCLUSION AND RECOMMENDATIONS

It was revealed from the findings that family income and parental occupation had no significant influence on academic performance of secondary students. In view of the finding of this study, the following conclusions have been drawn. It was revealed from the findings that family income and parental occupation had no significant influence on academic performance of secondary students. The literature review indicated clearly that the relationship between family income and parental occupation and academic performance is stronger in developed countries than in developing ones. The relationship between the two variables is strong in primary school level in developing countries and the reverse is true in secondary level. From the findings and foregoing conclusions, the following recommendations were made: Many parents may not be aware of the influence of various factors on the academic performance of their children. Parents need to be informed that they can contribute to the education of their children through other strategies instead of relying on the influence of their income and occupation alone. Parents are encouraged to provide learning facilities at home in form of relevant textbooks, revision books, conducive and spacious study room, and allowing time for their children to study at home because their occupation and income may not directly influence the secondary school performance of their children in Kuresoi Sub- County, Kenya.

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