Influence of Family Income Level on Academic Performance Among Secondary School Students of Kitswamba and Rugendabara-Kikongo Town Councils, Kasese District, Uganda

Biitikoro Nason Masereka, Tukur Muhammad and Abdul-Rahim

Department of Foundations and Science Education, Faculty of Education Kampala International University Western Campus Uganda
Corresponding mail:tukurmuhammad.tm@kiu.ac.ug

ABSTRACT
The study investigated the impact of parental income on students' academic performance in secondary schools in Kitswamba and Rugendabara-Kikongo town councils in Kasese District. A cross-sectional research design was used, with data collected from 286 students and five head teachers. The findings showed that family income significantly influenced students' academic performance. The findings have implications for parents, teachers, policymakers, and administrators in the education sector, emphasizing the importance of parental income in determining academic success.

Keywords: Parental Income, Academic Performance

INTRODUCTION
Education is globally accepted as the mirror of human civilization yet academic performance is seen as the major fruits and harvests of the learning process. Conditions in the socioeconomic background of students are a crucial aspect in determining their performance. High socioeconomic background is what lays a firm foundation for better performance which, actually, is the main reason parents put their children in school [1]. Good academic performance of candidates gives morale to teachers and other students in school. It promotes continuity of learning and motivates other learners to study so as to become better citizens. However, the success of students highly depends on the level of socio-economic background in which they come from [1, 2]. To make matters worse, children from low socioeconomic backgrounds are becoming an increasing share of the student population. On one hand, children from high socio-economic backgrounds have access to homework, scholastic materials and their parents can communicate with them in English, guide them in decision making, career choice. Yet, families with low socioeconomic background usually lack financial, social and educational supports that are fully enjoyed in families with high socioeconomic backgrounds [3]. Parents, in such homes, face a major challenge in providing optimal care and education for their children. Educational text books, pens or uniform and so on cannot be availed due to lack of resources [4]. Thus, this study was carried out to establish how parental income influence students’ academic performance among students in the secondary schools of Kitswamba and Rugendabara-Kikongo town councils in Kasese District

Literature Review
[5] defines family income as the total compensation received by all family members aged 15 years and above, living in the same household. Family income, further, means all the earnings which come to the family in terms of rupees (shillings), coins or notes in a specific period of time [6, 7]. Yet still, it may be measured in terms of compensations like wages, salaries, rent, interest profits, sick-benefits pensions social security, child support, gifts, sales from farming and
poultry products, loyalties among others [8], [9] examined students and their families' income in China. He studied in their early years (lower primary school children). The study measured students reading skills, verbal interaction and phonological awareness in relation to their families' level of income. The results showed that low-income children exhibited lower levels of cognitive-linguistic skills, lower verbal interactions and lower phonological awareness and generally lower academic performance than their counterparts from high- and middle-income families.

[10, 11] present in their comprehensive study on how students from families with high income are best performers than those from low-income families. His study took place in United States of America. He revealed that the impact of the parents' income can be shown in the early timing of the students' learning. He maintained that parents of higher income take their children to school earlier than their lower income counterparts [1, 12]. They can afford to take their children through preschool learning and this have greater impact in their later educational outcomes since it provides them with the required cognitive and social development. Parents are the primary persons in raising children in any society [13]. That is why the family is regarded as the primary agent of socialization [14].

Due to parents' income, children are socialized to become productive citizens in education and general life [14, 15]. [16] conducted a study on the impact of parents' sources of income on academic performance of secondary school students in Kuala Terengganu, Malaysia." The result showed that students from parents with formal occupation perform well than those from parents with informal education. However, the researchers did not give any details on how the time that parents spent in their occupations (whether formal or informal) affects students' academic performance. [17, 18] revealed that families with lower incomes often have to work longer hours to earn more for their families. Therefore, they are often left with less time to spend with their family members and getting more involved in their children's educational activities. However, it's also important to note that all parents in inferior occupation work for long hours. [19, 20] stated there are many variables to consider when determining a student's socio-economic status and its effect on academic achievement. He pointed out that Parental income has a strong effect on students' performance due to the economic resources allowed for more academic components to be implemented. Resources available at home are an important indicator for the relationship between socio-economic status and academic achievement. [19, 21] further researched pupils' grade level and the relationship of income status and academic achievement. He suggested that a relationship exists between the income status and academic performance across various levels of schooling.

[22, 23] found that children from low-income families are more likely to be preoccupied with environmental stressors within their neighborhood such as feelings on insecurity about their safety, housing status, and violence within their community to the detriment of their academic achievement. [24, 25] asserts that pupils from low-income families have been found to score about ten percent lower on the National Assessment of Educational Programs than higher SES pupils. [26, 27] indicated that educators have known for years that pupils from high income families academically perform better than those from low-income families. Pupils from low-income families are much more likely to drop out of school or are retained in a particular grade. The answers to the problem of educating such pupils are challenging and demanding.

[28, 29] studies indicated that students from wealthier families outperform those from poor families on academic achievement tests. The pupils from low-income families' achievement are higher when they attend schools and classrooms where the majority of the population is economically advantaged. The authors further concluded that schools with a high percent of low-income pupils had a negative effect on all pupils' academic
It was also stated that pupils from poor social economic background performed better when attending schools that have a low poverty percentage. [30] study found that pupils from high poverty backgrounds tend to skip classes, have more behavioral problems, have less motivation for academic success, and even possibly feel that performing successfully on their academics is embarrassing.

The studies above show that scholars have expended significant effort to relate parental income levels and students’ performance. However, all the studies were done outside Uganda. This contextual gap makes it imperative for this empirical study to be carried out in the context of Uganda.

**OBJECTIVE OF THE STUDY**

1. To establish how family income level influences the academic performance in Kitswamba and Rugendabara-Kikongo town councils, Kasese district, Uganda.

2. To find out how parents monthly income affects students’ academic performance in Kitswamba and Rugendabara-Kikongo town councils, Kasese district, Uganda.

**Research Hypotheses**

1. Family income level leads to significant differences in students’ academic performance in the secondary schools.

2. Parental monthly income has a significant effect on students’ academic performance.

**Research Questions**

1. Does family income level lead to differences in students' academic performance in the secondary schools of Kitswamba and Rugendabara-Kikongo town councils, Kasese district, Uganda?

2. How does Monthly Incomes of Parents Students’ academic performance among students in the secondary schools of Kitswamba and Rugendabara-Kikongo town councils Kasese district, Uganda?

**METHODOLOGY**

This study was conducted in the secondary schools of Kitswamba and Rugendabara-Kikongo town councils in Kasese district. Rugendabara Town Council is located along Fort-portal-Kasese road, ten kilometres from Hiima town council along Fort-portal Kasese road in Western Uganda, while Kitswamba town council is located five kilometres off Kasese-Fort-portal Road, branching off from Rugendabara Town Council on the left. Five different secondary schools were sampled for this study. Taking these schools helped the researcher to achieve the relationship between socioeconomic background and students’ academic performance. Furthermore, the study population is all universal objects over which research is to be carried out. This involves the selection of people/objects that help to get the necessary data about the study [32]. For [33], population is the totality of persons or objects with which the study is concerned. [34] asserts that population is...
“the complete set of individual, objects or measurements having some common observable characteristics.” The population was a total of 1,112 senior one to three students for the questionnaire survey and 5 head teachers for the interview guide. The students easily reported about their socio-economic background and academic performance while the head teachers will supplement their responses.

The sample size was 286 for the questionnaire survey determined using the table by [35]. The sample of students from each school was determined by proportionate sampling to ensure proportionate representation. The proportionate sample has been calculated as follows:

Proportion Sample: \( n_1 = \frac{\text{size of entire sample}}{\text{target population}} \times \text{sample size} \)

For example, the sample for school A has determined as follows:

\[ n_1 = \frac{516}{1,112} \times 286 = 133 \]

The sample size is presented in Table 1.

<table>
<thead>
<tr>
<th>Category</th>
<th>Target population</th>
<th>Sample Size</th>
<th>Sampling method</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A</td>
<td>516</td>
<td>133</td>
<td>Simple random sampling</td>
</tr>
<tr>
<td>School B</td>
<td>218</td>
<td>56</td>
<td>Simple random sampling</td>
</tr>
<tr>
<td>School C</td>
<td>117</td>
<td>30</td>
<td>Simple random sampling</td>
</tr>
<tr>
<td>School E</td>
<td>183</td>
<td>47</td>
<td>Simple random sampling</td>
</tr>
<tr>
<td>School F</td>
<td>78</td>
<td>20</td>
<td>Simple random sampling</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,112</strong></td>
<td><strong>286</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Method of Data Collection**

Data was collected using a self-administered questionnaire and interview guides. They are good instruments of collecting quantitative data. They were precisely designed, administered, coded and analyzed. Comparisons and quantifications were done to produce fully completed questionnaires. Irrelevant responses were avoided. Questions for section “A” were on demographic characteristics and so were categorical. Questions for section “B” will ordinal based on the three-competence scale of 1= Basic, 2 = Moderate, 3 = Outstanding. This is because the scale required respondent’s little effort in filling/answering the questions. Section C contained numerical responses identifying the different socio-economic backgrounds. The levels of income (see Appendix A) have been rated basing Uganda consumer price index (CPI) of 2022 and (Uganda World Bank Country Classifications by Income Level, 2022).

**Interview guide**

The study employed semi-structured interview guide to collect quantitative data from students, teachers, and head teachers. This tool was applied to
generate data from these respondents who were indirectly affected, interview guides generated detailed data because they were used to probe respondents and was conducted by telephone in case such an individual is absent or busy.

**Reliability of the Instrument**

Pre-testing of instruments was carried out to establish their validity, to check on the content and the format of the instruments to find out the relationship between scores contained using one or more other instruments to measure. The validity of the questionnaires was determined by using the Content Validity Index (CVI) formula.

\[
CVI = \frac{n}{N}
\]

Where, \( n \) = items rated relevant
\( N \) = Total numbers of items

The CVI for the questionnaire was 0.85. The questionnaire was considered valid because the minimum validity index should be 0.70 [36].

**Reliability of Instruments (Cronbach’s alpha coefficient)**

It was determined using Cronbach’s alpha coefficient

\[
a = \frac{(K\sum s_i - \sum s_i^2)}{(\sum s_i)(K - 1)}
\]

Where, \( K \) - Total number of items
\( s_i \) - variance in all items
\( s_i \) - variance in individual items

The Cronbach’s alpha obtained was 0.89 suggesting the questionnaire was reliable. This is because the minimum is \( \alpha = 0.70 \) and above which is the minimal level [37].

**Method of Data Analysis**

Quantitative data was compiled using SPSS 24.0 computer package and was analysed using descriptive and inferential statistics. Descriptive statistics was in form of frequencies and percentages. On the other hand, inferential statistics was in form of Analyses of Variance (ANOVA) to establish variance in performance of students according socio-economic background characteristics. The qualitative data generated was presented and interpreted basing on themes derived from the sub themes of the study objectives in the introductory chapter. The qualitative data was obtained from quotations and people’s experiences. Content analysis helped in the use of determining the relationship between the two variables socioeconomic background and school involvement.

**Findings of the Study**

The findings of the study were discussed based on the analysed data related to the research question and hypothesis as described below:

**Family Income Level**

Family income level was considered in terms of the income of the father or male guardian and income of the mother or female guardian. The results follow.

**Level of Income of my Father/ Male Guardian**

The first question on parent’s income level concerned the level of income of the father or male guardian. The levels of income considered were up to 198, 900 per month (low-income level), up to 343, 583 per month (middle-income level), and above 343, 583 per month (high income). The descriptive results on the same were as follows:
Table 2. Level of Income of Father/Male Guardian

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 198, 900 per month (low-income level)</td>
<td>85</td>
<td>34.0</td>
</tr>
<tr>
<td>Up to 343,583 per month (middle income level)</td>
<td>84</td>
<td>33.6</td>
</tr>
<tr>
<td>Above 343,583 per month (high income)</td>
<td>81</td>
<td>32.4</td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The results in Table 3 show that the larger percentage (34.0%) of the father or male guardians had up to 198, 900 per month (low-income level) while 33.4% had up to 343,583 per month (middle income level), and 32.4 had up to 343,583 per month (middle income level). To confirm whether the level of income of father or male guardian leads to significant differences in students’ academic performance, an analysis of variance (ANOVA) test was carried out. The results on the same are presented in Table 2.

TABLE 3 ANOVA Results for Father or Male Guardians Income and Students’ Academic Performance

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Size</th>
<th>Mean</th>
<th>Std</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 198, 900 per month (low income level)</td>
<td>85</td>
<td>2.04</td>
<td>0.31</td>
<td>3.926</td>
<td>0.021</td>
</tr>
<tr>
<td>Up to 343,583 per month (middle income level)</td>
<td>84</td>
<td>2.16</td>
<td>0.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 343,583 per month (high income)</td>
<td>81</td>
<td>2.14</td>
<td>0.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>2.11</td>
<td>0.32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in Table 3 suggest that the mean scores for those with up to 343,583 per month (middle income level) (mean = 2.16) were highest followed by those with above 343,583 per month (high income) (mean = 2.14), and least category (mean = 2.04) was of those with income of up to 198, 900 per month (low-income level). The observed F = 3.847 was large with the level of significance (p = 0.010, p < 0.05). This suggested that the variations in students’ performance by income of father or male guardians were significant. Therefore, the hypothesis to the effect that parental income level parental income level leads to significant differences in students’ academic performance in the secondary schools was supported. Thus, children whose parents who had higher levels of income were likely to perform than those of lower income.

Level of Income of my Mother/ Female Guardian

The first question on parent’s income concerned the level of income of the mother or female guardian. The levels of income considered were up to 198, 900 per month (low-income level), up to 343,583 per month (middle income level), and above 343,583 per month (high income). The descriptive results on the same were as follows:

Table 4: Level of Income of Mother/ Female Guardian

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 198, 900 per month (low-income level)</td>
<td>82</td>
<td>32.8</td>
</tr>
<tr>
<td>Up to 343,583 per month (middle income level)</td>
<td>91</td>
<td>36.4</td>
</tr>
<tr>
<td>Above 343,583 per month (high income)</td>
<td>77</td>
<td>30.8</td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The results in Table 4 shows that the larger percentage (36.0%) of the father or male guardians had up to 343,583 per month (middle income level), 32.8% had up to 198, 900 per month (low-income level), and 30.8% were above 343,583 per month (high income). To confirm whether the level of income of mother or female guardian leads to significant differences in students’ academic performance, an
analysis of variance (ANOVA) test was carried out. The results on the same are presented in Table 4.

Table 5: ANOVA Results for Income of the Mother or Female Guardian and Students’ Academic Performance

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Size</th>
<th>Mean</th>
<th>Std</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 198, 900 per month (low-income level)</td>
<td>82</td>
<td>2.04</td>
<td>0.30</td>
<td>3.850</td>
<td>0.023</td>
</tr>
<tr>
<td>Up to 343,583 per month (middle income level)</td>
<td>91</td>
<td>2.16</td>
<td>0.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 343,583 per month (high income)</td>
<td>77</td>
<td>2.14</td>
<td>0.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>2.11</td>
<td>0.31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in Table 5 suggest that the mean scores for those with up to 343,583 per month (middle income level) (mean = 2.16) were highest followed by those with above 343,583 per month (high income) (mean = 2.14), and least category (mean = 2.04) was of those with income of to 198, 900 per month (low-income level). The observed F = 3.850 was large with the level of significance (p = 0.023, p < 0.05). This suggested that the variations in students’ performance by income of mother or female guardians were significant. Therefore, the hypothesis to the effect that parental income level leads to significant differences in students’ academic performance in the secondary schools was supported. Thus, children whose parents who had higher levels of income were likely to perform than those of lower income. However, the results for parents or guardians according to income showed that the income of the fathers has more significant influence than that of the mothers. This is because the F= statistic (F = 3.926) for the males was slightly higher (F= 3.850) than of the females with a lower p-value (p = 0.021) than that of females (p = 0.023). To establish how the head teachers perceived the contribution of the income of the parents or guardians on students’ academic achievement, the head teachers were asked to give their comment on the performance of children according to income of their parents or guardians. The head teachers gave various varied responses which follow. Head teacher 1 stated;

Higher household income may translate into more financial support for education in the form of paying for transportation to and from school; uniforms, investments in children's health, instructional resources, and additional private instruction. Income is crucial since a poor parent cannot afford to send his or her child to a good school with higher tuition fees, good books, good meals, and uninterrupted study time. Children whose parents are economically well off are well facilitated hence have higher changes of better academic performance. In relation to the above, head teacher 2 said; Parents who have income support their children’s education. However, students who are experiencing financial difficulty engage in income-generating activities. Due to their need to survive, students, especially day students, are compelled to use alternative coping mechanisms, such as skipping meals, taking on menial tasks, and even participating in sex for cash, particularly for girls. As a result, these actions have a negative impact on their academic achievement. Therefore, if a parent is able to provide, academic performance is likely to be high.

Further, in agreement with the other head teachers above, head teacher 5 stated; Parental income is a pointer to parental support of a students learning and school-related behavior once the student is in school. Definitely, this is related to attendance of the student or absenteeism. This means that students are whose parents are economically well are likely to perform well. The responses above from the head teachers indicated that parents who had high income effectively supported the education of their children leading to better academic performance. This finding is consistent with the ANOVA test results which revealed that the variations in students’ performance by income of the parents or guardians were significant. Therefore, the income of the
parents or guardians leads to significant differences in the academic performance of the children in school.

**Discussion of the Results**

The objective of this study sought to establish how family income level influenced the academic performance in the secondary schools. The hypothesis derived from the objective was to the effect that parental educational level leads to significant differences in students’ academic performance. The test hypothesis test results and qualitative analysis revealed that family income level was a significant determinant of the variation in students’ academic performance. This finding concurred with the findings of previous. For example, [14] asserted that parents with higher levels of income can afford to take their children through preschool learning and this has a greater impact in their later educational outcomes since it provides them with the required cognitive and social development. Similarly, [1] indicated that parents of higher income take their children to school earlier than their lower income counterparts. This affects their cognitive development affecting their academic performance. [17] revealed that families with lower incomes often have to work longer hours to earn more for their families. Therefore, they are often left with less time to spend with their family members and getting more involved in their children’s educational activities. In addition, parents in inferior occupation work for long hours hence lack the time to support their children’s learning which negatively affects their academic performance.

Concurring with the finding of the study, [22] reported that children from low-income families are more likely to be preoccupied with environmental stressors within their neighborhood such as feelings on insecurity about their safety, housing status, and violence within their community to the detriment of their academic achievement. Accordingly, students from wealthier families outperform those from poor families on academic achievement tests. Similarly, [30] indicated that pupils from high poverty backgrounds tend to skip classes, have more behavioral problems, have less motivation for academic success, and even possibly feel that performing successfully on their academics is embarrassing. [26] indicated that educators have known for years that pupils from high income families academically perform better than those from low-income families. Pupils from low-income families are much more likely to drop out of school or are retained in a particular grade. The answers to the problem of educating such pupils are so challenging and demanding.

Further, concurring with the finding of the study, [16] revealed that students from parents with formal occupation perform well than those from parents with informal education because they are paid highly than the others. Also, [19] indicated that parental income had a strong effect on student performance due to the economic resources allowed for more academic components to be implemented. Therefore, resources available at home are an important tool for academic achievement. [16] reported existence of a relationship between the income status and academic performance across various levels of schooling. Also, [9] indicated that low-income children exhibited lower levels of cognitive-linguistic skills, lower verbal interactions and lower phonological awareness and generally lower academic performance than their counterparts from high- and middle-income families. On the whole, the discussion above indicates that family income and students’ academic performance have a strong relationship.

**CONCLUSION**

From the discussion of the findings, it has been concluded that Family income level is imperative for students’ academic performance. Students, whose parents have higher levels of income, especially those who earn higher than 500,000 shillings, are most likely gifted to perform better. This is because highly earning parents effectively support the education of their children by providing appropriate
learning environment like accessing their children light, a table and a chair at home. They are further filled with the urge to provide materials for learning; say text books, computers, calculators, uniform, shoes pens and all necessary scholastic materials. Additionally, they strive to get the school dues and are timely in payments in a bid motivate their children to perform well in class.

**RECOMMENDATIONS**

Based on the findings of this study the revelations are: the government of Uganda to initiate and promote programs that enriches parental higher income levels in order that they can be able to support the education of their children; the government should more still target each family in the country to earn at least up to 343,583 = shillings and above per month. Such programs are ear marked as Parish Development Model (PDM), saving and credit Schemes (SACCOS) and Modernization of Agriculture through NAADS Programs among others; through the promotion of Universal Secondary Education (UCE) and Universal Primary Education, government should control the raising of fees charges so as to enable low income family students to study well and attain better academic results; a further point is that, Parents should be encouraged to work hard and avoid laziness. They should involve themselves in income generating activities to enable them provide for the learning of their children; by this study, teachers have been advised to devise the suitable methods of teaching that suit all types of students in the socioeconomic fabric of society. Finally, policy makers are asked to make a thorough study of the societies they lead before formulating policies that may tie the society suffering, especially in the education departments at all levels; finally, this study was largely quantitative hindering deep exploration of the relationship between Parental Income and students' academic performance in the secondary schools. Therefore, future scholars should dominantly use the qualitative approach for deep exploration of the impact of Parental income and students' academic performance in the secondary schools.

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