Pupil Home Background Characteristics and Academic Performance in Senior Secondary Schools: A Case Study of Selected Secondary Schools in Kitwe District, Zambia

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Abstract
The purpose of this research was to investigate pupil background characteristics and academic performance in senior secondary schools in Kitwe district with a view of recommending on how to improve pupils’ performance. The study was conducted in Kitwe district because in the past years pupils’ performance in senior secondary schools has been alarmingly deteriorating. The study used termly test data collected from senior secondary schools in Kitwe district. A representative sample of 150 grade ten and eleven pupils from senior secondary schools was used. The main instruments used to collect data in the study were the pupils’ questionnaire and parent interview guide. Data analysis was done using two methods. These were Statistical Package for the Social Sciences (SPSS) and the information collected through interviews were analysed by coding it into themes, while the information from the questionnaires were analysed through the SPSS – generated tables, diagrams and percentages. The findings of the study suggested considerable variation in pupil performance. The study revealed that there were positive relationships between number of books at home, the language spoken at home and pupil’s performance. Furthermore, the analysis of the quantitative data revealed that there was a negative relationship between pupils’ age and family size.

I. Introduction
Education is very vital in human existence because the society and education are interrelated and inter-dependent. This can also be seen in the nature and development of a child in a given society. The school is an umbrella governing children from different parental background and social background and as such the children learning rate of academic development is closely related to experience. The child’s performance in school is determined by environment in which the child finds him or herself. In the child’s environment different factors can be found, which include social economic, psychological, cultural genetic environmental and emotional.

Education is a basic tool used by society for transmission of its societal values. It has become an area of prime importance not only for government or voluntary agencies but also for individuals, families, and communities. Voluntary agencies and individuals are committing a lot of resources in order to achieve success in the educational enterprise (Orhungur, 1990).

The issue of pupils’ performance at schools has been of concern ever since modern education was introduced. Many countries have come to realize that pupils are at the heart of educational process and that without good performance; all innovations in education are doomed to failure. There is a wide dissatisfaction with the current situation of schooling in many countries and parents come in for the blame. This is because majority of the parents involve their children in garden and other domestic work. This makes pupils have limited time with their teachers and no time for revision, therefore, affecting their performance.

Decades of research on the effects of student, family, household, and school characteristics on student academic achievement have attempted to find a global explanation for school success or failure. Worldwide studies conclude that student characteristics (e.g. gender, social background, and future outlook) play varying roles in achievement gaps and enrollment disparities (Filmer, 2005; Lee, Zuze, and Ross, 2005). Family responsibilities, parental involvement, and available resources are some household factors that influence student achievement and aspirations (Jeynes, 2003; Sackey, 2007). However, conclusions are inconsistent across countries (Bowers & Urick, 2011; Wobmann & West, 2006), and there is a long-standing debate of whether student and family or school characteristics have larger effects on academic performance. Researchers have investigated whether academic achievement is more strongly predicted by student or school factors (Baker, Goesling & LeTendre, 2002; Nonoyama-Tarumi & Willms, 2010).

Despite widespread attention, few attempts have been made to systematically investigate various student and school characteristics that may affect academic performance among youth in Sub-Saharan Africa (SSA). Most of what we know comes from studies conducted more than 20 years ago (Heyneman & Loxley, 1983). Prior studies also focus mainly on examining the role of family background characteristics-particularly economic status—on educational outcomes (Filmer & Pritchett, 1999; Glick & Sahn, 2000; Grimm, 2011). Few studies in SSA examine the effects of student traits (e.g. academic self-efficacy and level of commitment to school) and social background on academic performance.

Education in Zambia is intended to serve individuals’ social and economic well-being and enhance the
quality of life for all. The Ministry of Education (MoE) under its educational policy “Educating our future of 1966”, emphasizes that the child is at the centre of the entire education process which exists solely for the sake of the learner. It also recognizes that each child is unique with his or her own individuality and personality, fashioned in family and community background that are themselves unique.

1.1 Statement of the problem

Societies all over the world strive to achieve quantitative education for her citizenry. In order to achieve this noble course, so many factors must be put into consideration. Among them is the family background of the child. The family has a great role to play on the overall development of the child and his educational upbringing in particular.

The purpose of secondary education is to develop quality of life of the learner so that they can properly serve the society according to their roles and responsibilities as good citizens. The learning process must be guided and controlled; and the learning environment must be conducive and supportive (Longwe, 2006). In other words, learners need to be motivated by their parents in whatever they do.

The overall research problem addressed in this study is that despite parents and teachers working together for the holistic development of children and in particular academic performance, there is still a problem in terms of home background characteristics which have to be addressed. This study, therefore, was set out to examine pupils’ home background characteristics and academic performance in selected senior secondary schools in Kitwe district. The non availability of this research in Zambia and in particular Copperbelt province is a problem.

1.2 Objectives of the study are;

a) To investigate the effect of socio-economic status of parents/guardians on academic performance of their children in senior secondary schools.

b) To establish the link between family size and academic performance of pupils in senior secondary schools.

c) To determine the effect of gender roles on academic performance in senior secondary schools.

1.3 Research questions of the study are;

a) What is the effect of socio-economic status of parents/guardians on academic performance of their children in senior secondary schools?

b) What is the link between family size and academic performance of pupils in senior secondary schools?

c) What are the effects of gender roles on academic performance of pupils in secondary schools?

1.4 Theoretical Frame-work

Two theoretical perspectives guided the work for conceptualizing optimal relations between home and school: Bronfenbrenner’s (1979) ecological systems theory and Vygotsky’s (1978) socio-cultural theory. Bronfenbrenner suggests that development occurs in an ecological context consisting of several layers of embedded systems or settings. He theorized that development is facilitated when there are linkages between the settings, such as the home and the school, that “encourage the development of mutual trust, a positive orientation, good consensus between settings and an evolving balance of power responsive to action on behalf of the developing person” (Bronfenbrenner,1979:216). Further, (Bronfenbrenner, 1972:217) states that development is facilitated when there is a two-way communication between the settings and when “valid information, advice and experience relevant to one setting are made available, on a continuing basis, to the other.”

The second perspective is that of Vygotsky (1978) who states that knowledge and understanding are socially constructed, influenced by the social, historical and cultural contexts of the participants as they interact. Vygotsky (1978) assumes that social interaction and children’s direct participation in authentic cultural activities that is necessary for their optimum development. Learning in social settings is responsible for many of the abilities we have. According to Vygotsky (1978) the way children think about the world around them and the issue of causation can be influenced by the religious and scientific beliefs of a culture.

Vygotsky’s (1978) social cultural theory asserts that culture is a prime determinant of individual development and human develops in the context of a culture including the culture of the home environment in which he/she is enmeshed. He also states that since much of what a child learns comes from the culture around him or her and much of the child’s problem solving is mediated through adult’s help, it is thus wrong to focus on a child in isolation. Interactions with surrounding culture and social agents such as parents (school teachers) and more competent peers contribute significantly to a child’s intellectual development.

2 Methodology

2.1 Population and Sample

The study population comprised five senior secondary schools in Kitwe district. The study was conducted in five
secondary schools namely: Nkana, Chamboli, Malela, Ndeke and Kamfinsa secondary schools. From a population of about 2100 pupils, a sample of one hundred and fifty (n=150) pupils in senior secondary schools in Kitwe district on the Copperbelt Province of Zambia was drawn. The school samples were selected for the following reasons. Firstly, it would be easily accessible. Secondly, the cost would be fairly low and lastly, less time would be spent in conducting fieldwork. Grades ten and eleven classes of pupils consisting of 80 boys and 70 girls participated in the study. The schools and pupils were randomly selected. A simple random sampling technique was used to avail every sample of the population an equal probability of being selected. Pupils were told to form a line then the researcher started counting them, those with odd numbers to stand on the left hand side while those with even numbers to be on the right hand side. The researcher picked pupils with odd numbers to include them in the study.

3. Results

Distribution of Pupils by Age by Gender.
The pupil questionnaire asked for the pupils’ age. Analysis of results found that the mean age was 16.9 years with the minimum at 14 years for both girls and boys and maximum 22 years for girls and boys. Figure 1 indicates that most pupils were in the age range of 16-19 years for boys and 15-17 years for girls.

**Figure 1: Distribution of Pupils’ age by gender**

A cross tabulation was done to know whether there was any significant difference in pupils’ performance in the termly tests and their age.
Table 1: Distribution of pupils’ performance in termly test by age and gender.

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>Below average</th>
<th>Average</th>
<th>Above average</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>14</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>3</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>17</td>
<td>8</td>
<td>10</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>18</td>
<td>7</td>
<td>2</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>2</td>
<td>0</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>22</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>20</td>
<td>46</td>
<td>40</td>
</tr>
</tbody>
</table>

The results show that younger pupils performed relatively better than older pupils in the termly test. The study found that pupils of the appropriate age (16 years for Grades 10 & 11) for the grades performed better. Table 1 also shows that more boys than girls were average performers. 46 (30.7%) boys were average performers while 40 (26.7%) girls were average performers. 8 (5.3%) boys performed above average while 10 (6.7%) girls performed above average, which was better than boys. 26 (17.3%) boys performed below average while 20 (13.3%) girls in the sample performed below average.

Language spoken at home.
In the questionnaire pupils were asked what language they spoke at home most of the time. The response from pupils were: (1) “English only”; (2) “Vernacular only”; (3) “Both English and Vernacular”. Below is figure 2 which shows the response to the question.
From the sample it shows that pupils who responded to this particular question, 37 (24.7%) spoke vernacular at home, 3 (2.0%) respondents spoke English at home while 110 (73.3%) pupils came from homes where English and vernacular was used.

**Pupil performance and home language.**
Analysing the findings of the study, language spoken at home had an effect on pupil performance. It is clear from the study, that 110 pupils who came from homes where English and Vernacular was used performed average while some pupils who use vernacular performed below average among those that came from homes were English and familiar language were used as shown in the table 2

**Table 2: Distribution of pupils’ performance in termly test and home language.**

<table>
<thead>
<tr>
<th>Home language</th>
<th>Pupils performance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below average M F</td>
<td>Average M F</td>
</tr>
<tr>
<td>English</td>
<td>0 0</td>
<td>2 1</td>
</tr>
<tr>
<td>Vernacular</td>
<td>4 3</td>
<td>12 15</td>
</tr>
<tr>
<td>Both English &amp; vernacular</td>
<td>8 3</td>
<td>49 45</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12 6</strong></td>
<td><strong>63 61</strong></td>
</tr>
</tbody>
</table>

**Work at home**
This variable investigated how often the child helped with household chores. Figure 3; shows the pupils’ responses on how often pupils were given work at home.
Figure 3: Responses to how often pupils help with household chores at home.

A bigger proportion of pupils 86 (57.3%) were involved in household chores “daily” while 61(40.7%) did household chores “sometimes” and 3 (2.0%) respondents indicated that they never did household chores.

**Pupils’ performance and frequency of work at home.**

Table 3; shows the relationship between pupils’ performance and frequency of work at home. 90 (60%) of the pupils who indicated they worked at home every day, performed average compared to 32 (21.3%) pupils who performed below average despite doing household chores every day 25 (16.7%) pupils performed above average despite working every day at home. This may imply that doing household chores may not affect learning achievement. This means that working at home cannot be attributed to good performance of the child.

**Table 3: Distribution of pupils’ performance in termly test in relation to frequency of work at home.**

<table>
<thead>
<tr>
<th>Frequency of work at home</th>
<th>Pupils performance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below average</td>
<td>Average</td>
</tr>
<tr>
<td>Daily</td>
<td>M     F</td>
<td>M     F</td>
</tr>
<tr>
<td></td>
<td>5      15</td>
<td>25     30</td>
</tr>
<tr>
<td>Sometimes</td>
<td>4      8</td>
<td>33     2</td>
</tr>
<tr>
<td>Never</td>
<td>0      0</td>
<td>2      0</td>
</tr>
<tr>
<td>Total</td>
<td>9      23</td>
<td>58     32</td>
</tr>
</tbody>
</table>

4. Conclusion

Based on the findings of the study, the home environment of the pupils is multi-dimensional in nature as a number of factors come into play in affecting the intellectual development of pupils. The factors that correlated significantly were between academic achievement for senior secondary school pupil and a summary index of socio-economic status consisting of parental education, parental occupation and a number of household possessions. This study establishes a positive relationship between the number of books at home, language spoken at home, and pupil’s performance as rated by the teachers. In addition, there was a negative relationship between pupil’s ages and academic performance.

The study’s findings show that pupil’s background is a major factor in influencing learning in senior
secondary school because of the socio–cultural character of the African society. The study’s finding is consistent with those of earlier studies that concluded that pupil’s background characteristics exert strong influence on pupil’s performance. This socio – cultural characters as suggested by Vygotsky (1978) in Zambia’s case subscribes to the collectivist orientation. For example, the collective socio-cultural orientation is characterized by co-cooperativeness, mutual reciprocity and groupings. These characteristics to an extent are influenced by how children are brought up to learn, in the homes and traditional settings. Children are expected to observe, be attentive, concentrate and practice what they have observed. Adults are models for children in all aspects of development, including how to learn. Children listen to folktlores and learn moral and traditional philosophies. As they grow up they learn to represent these visually as they are not allowed to ask question of verbally reflect on what they have heard. People place more emphasis on cultural tradition and shared practices, and give less value to promoting a unique self-concept. On the other side of the coin, individualist cultures tend to promote the drive for personal control, independence and individual achievement. People from individualistic culture show more concern for establishing a career and gaining achievement than they do for establishing relationships and maintaining family ties.

The finding of the study also indicates that from pupils’ responses, the home influence alone is not adequate as far as the learning and intellectual development of pupils is concerned. As a result, this suggest that, there is need for the school and family to collaborate with each other in several ways especially those exposed by this study to help Zambia attain the education for all goals.

5. Recommendations
The effect of socio-economic status on academic performance of their children in senior secondary school was that most pupils do lose much of the learning hours because of being out of school (class) for failure to pay user fees which is beyond the reach of most parents hence their poor performance. On the other hand most of the children have either lost both parents due to death and the burden on guardians becomes unbearable hence the pupils resort to spend most of the time working for money to meet their school needs and subsequently the academic performance is affected.

It has been observed beyond doubt that the gender role on academic performance of the girl child has not been impressive due to many chores a girl child has to perform instead of studying. For instance, the girl child has to sweep the house, clean the plates, wash, cook, look after the youngest, and fetch water before she could study be it home or school while the other sex (boy) was busy studying.

The limited influence of reading materials in the home may be attributed to limited financial resources of pupils’ parents/guardians because of their low socio-economic status making them unable to purchase books. This study may also point to the need for training of teachers on effective use of textbooks. In addition, early intervention programmes that bring parents and educators together to find out how pupils may experience greater academic success need to be put in place.

REFERENCES