Access and Enrollment of Children with Intellectual Disability in Selected Special Schools in Ghana: The Influence of Parental Economic Status

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Abstract

This study explored teachers’ and parents’ opinions on access and enrollment in schools for children with intellectual disability in Ghana. Specifically, a descriptive survey using a cross-sectional research design was adopted to study the extent to which parental socio-economic status and the conceptualization of ‘intellectual disability’ influenced educational decision-making for those children. One hundred and fifty teachers and eight parents participated in the study. The results revealed that parental socio-economic status and the conceptualization of intellectual disability had significant influences on educational decision-making for these children. The implications for free appropriate public education for children with intellectual disability are discussed.

Ghana has laudable initiatives towards creating equal access in education for all children, including children with disabilities within the framework of general education. Even though, many of the initiatives are to ensure equal educational opportunities, several factors appear to influence accessibility and enrollment of children with intellectual disability in Ghana. In the past and even today, intellectual disability (mental retardation) has been associated with social inferiority and stigma (Ingstad & Whyte, 1995). Attitudes of people toward the education of these children have historically been multidimensional and reflective of a variety of factors. The evidence about attitudes surrounding these children’s education remains equivocal because of the differences in opinions that people continue to hold and maintain in spite of new ideas about the effectiveness of inclusion. In effect, those who were unable to demonstrate educational capabilities were less considered of a value (Wolfensberger, 1972). The negative conceptualization and attitudes have their own effects on parents and child concealment. These are issues that need investigation.

Access and enrollment in schools for children with intellectual disabilities reported in the special education literature, hinge on a lot of factors. According to Michael (2000) cited by Hardman, Drew and Egan (2005), poverty plays a dominant role in creating difficulties for children in education. Thus poverty, according to Webb-Mitchell (2010), can fail to inspire any educational decision-making by parents for children regarded as difficult to educate. For some parents, unless there are real possibilities of the child progressing to the level parents expect, parents will not invest in the education of their children. Chitiyo and Chitiyo (2007) also found that poor families, with little or no resources are unable to send their children to school, and the situation becomes worse for children with disabilities. Kabzems and Chimedza (2002) also noted that when families cannot raise the money for school fees or transportation, children with disabilities become the first to stay at home. This suggests that, generally, there is a strong relationship between poverty and access to education for children. Economic issues as identified in the literature, point to the fact that poverty contributes significantly to the enrollment of any
category of children in school. However, for children with intellectual disability, as noted by Bowe (2004), the importance parents attach to education may influence whether or not children with special needs will receive appropriate education.

Bowe (2004) further concluded that even if parents have resources to educate their children with special needs, the main consideration whether to educate their child or not is based on the benefit the child will derive from education. What the literature and the empirical studies tend to reveal is that socio-economic status of parents and the perceived value or educability position of a child are determinant factors and these cannot be disregarded. For instance, a UNICEF report on inclusive education in South Asia in 2003, suggested that one of the critical reasons why a number of children were not attending school was because their parents had low expectations for them. Also, Kalyanpur and Gowramma (2007) identified several reasons that account for limited access to services and low participation in educational decision-making processes for some children with disabilities. Among these were financial constraints that preclude parents taking time off from work, finding child-care facilities, transportation, and lack of knowledge about services for these children. Their study revealed further that children with disabilities place a tremendous burden on the family. Indeed, when there is economic hardship and the child is already perceived as non-productive, educational decision-making may be a secondary matter.

Special education literature has often reported that over the years, several misconceptions about the capability of children with intellectual disability resulted in serious educational marginalization leading to segregated practices (Barnes, Mercer, & Shakespeare, 2005). This has been the basis for school rejection and for charity organizations as well as philanthropic individuals in Ghana to establish special schools. Marfo (1986) noted that one major barrier to education of children with intellectual disabilities was that their education was not important to invest in. The issue may be that attitudes and parental perceived educational end-result, can limit opportunities in education for these children. From these reasons, economic status may not be the only barrier to enrollment in schools.

In view of the barriers mentioned, it is important that governments provide access to free appropriate education for children with special needs. According to Kattan (2006), most governments provide educational opportunities for children with special needs because they believe it is the right thing to do. Most countries therefore, have eliminated user fees for children with special needs from K-12 schools (Kattan, 2006). Chitiyo and Chitiyo (2007) see family resources as a significant factor in shaping placement decisions. Household income, according to Croft (2002), is an important factor in determining access to education. For instance, schooling is costly and involves both upfront and hidden costs. Croft further explained that upfront cost includes school fees while the more hidden cost includes uniforms, travelling, equipment, and the opportunity cost. These issues were also described by Hallahan, Kauffman, and Pullen’s (2009).

Woolfolk (2004) concluded that even if education is free, the low socio-economic status of parents may interrupt their child’s schooling. Sanders (2000) noted that families with exceptional children often face complex family functions because family resources can be strained by the multiple needs of the child with disability. Apart from psychological stress, educational issues concerning transportation, health needs, feeding, clothing, and many others can be labor-intensive for families who have children with disabilities. Hunt and Marshall (2002) further stated that although most families may have periods of financial strain, for some,
it may be a more chronic problem than others. Woolfolk, (2004) also observed that families in poverty seldom have access to high quality preschool care for their children.

Goldin (2003) suggests that parents will typically provide resources for their children’s education if they believe that their child will succeed in school. This has become a core debate in education so far as children with intellectual disability are concerned. With this perspective and taking into consideration the educational implications of those perceived as incapable, this study therefore, adopted the capability theory by Sen (1993). The underlining premise of this theory is that society gives value to issues on education which is critical when it comes to making decisions for those they perceive as non-capable. The theory gives one common interpretation about the conceptualization of intellectual disability as a condition and its negative effects on educational decision-making. The capability theory has some fundamental issues so far as parental decision-making in education for children with intellectual disability is concerned.

According to this theory, people considered as having disability are categorized as consumers of only economic utilities because they are perceived as nonproductive. Barnes, et al. (2005) also reported on this same issue where persons with disabilities are excluded in education. Sen’s perspective is relevant because the relationships between efficiency, capability, and expectations for a child, depend on access to skill acquisition which is through effective education. In reality, the child is entitled to education which needs to reflect his or her individual characteristics, strengths and weaknesses. With the traditional pervasive stand on capacity to function in education by those with intellectual disability, society has continued to exclude them from educational practices that most children are provided.

Generally, children with intellectual disability lack the opportunity to access public school resulting in their minimal enrollment in schools. A study by Anthony in (2009) and another by The International Bureau of Education (2004), revealed that a small number of children with disabilities are enrolled in schools in Ghana. Further studies in Ghana revealed that access issues tend to be more pronounced in areas that are prone to a range of interlocking socio-economic factors and values accorded to education for all categories of children (Edet & Ekegre, 2010). For instance, a study by Pryor and Ampiah (2003) in the Winneba Municipality of the Central Region of Ghana cited in CREATE (2007), revealed that many parents viewed education to be important if the end result will be beneficial. For children with intellectual disability, the end-results featured prominently in educational decision-making by parents because of their categorization into low expectations of success in education. This perception appears to influence enrollment of children with intellectual disability. The purpose of the study was to explore teachers’ and parents’ opinions on how parental socio-economic status influence access and enrollment in special schools for children with intellectual disability in Ghana. It was anticipated that findings from this study would help provide an empirical platform for the understanding of how these children generally have access to special education across the country. Specifically, the study would provide an evidence-based account of how parents’ economic status and their ‘‗perceived end-results’‘ influenced access and enrollment in special schools for these children.

**Methodology**

**Instrument**

This study was a cross-sectional survey using parallel sample design. The modification of the basic survey design became necessary because the problem studied was relevant to more than one population, such as teachers and parents on issues relating to access and enrollment of
children with intellectual disability in special schools in Ghana. A cross-sectional survey in particular, is one in which data are collected from selected individuals at a single point in time knowing that such information could change later.

Subjects
One hundred fifty-eight participants received the questionnaire. These comprised 150 professionally-trained special education teachers in 7 residential and 6 unit special schools and 8 parents whose children were attending the special schools at the time the study was conducted. One hundred six of the participants responded; 98 teachers completed and returned the questionnaire after two weeks, and all eight parents were interviewed.

Sampling Techniques
The non-probability sampling techniques involving the purposive sampling technique was adopted in selecting the special schools whose teachers were involved in the study. To select the parents whose children were in the special schools, the non-probability sampling method involving the convenient sampling technique was adopted. Teachers provided information on parents who were within the reach of the schools that were easily contacted.

Instrumentation
The questionnaire was a close-ended type in the form of a Likert-type scale designed for teachers and the items were built on the key theme ‘‗parental socio-economic status‘’. Response levels were anchored on a five-point consecutive integers ranging from strongly disagree (SD) = 1, disagree (D) = 2, neutral (N) = 3, agree (A) = 4, and strongly agree (SA) = 5.

Interview
A semi-structured interview was used in data collection from parents. The interview items were equally built on the key theme in the research question as already indicated.

Procedure for Data Collection
The researcher visited the various heads of the schools to brief them about the purpose of the study and obtain permissions distribute questionnaires to teachers. The researcher then visited each teacher’s classroom and sought their permission to participate in the study. The teachers were advised to complete the questionnaires in two weeks after which the researcher went back to collect them. A covering letter explaining the purpose of the study was attached to each set of questionnaire.

The researcher consulted with teachers to identify parents to be interviewed. The teachers and the researcher then explained the purpose of this study and the mode of the interview to the parents. Details concerning the date, time, and venues for the interviews were arranged.

Data Analysis
Questionnaire data
The items were tallied and the overall mean score for the responses for the various items were computed. Chi-square statistical method was used to test the hypothesis. Descriptive statistics was used to analyze that data, the results of which are presented as in Table 1, Table 2, and Table 3 below.
Interview data

Two persons, who were not familiar with the respondents, listened to the interviews that had been recorded. There was a 95% reliability agreement for both listeners on all the interviews. The interview data helped to identify the various viewpoints expressed by parents and how their opinions, socio-economic status, and “end-result” expectations influenced access and enrollment of children with intellectual disability in the special schools in Ghana. The data were analyzed qualitatively.

Results

To test the hypothesis, the mean score distributions generated from teachers’ responses to questionnaire items were used. This was followed by the calculated chi-square score distributions for the teachers’ responses to the items and that of the frequency distributions of opinions expressed by teachers on the Likert-type scale items. Table 1 shows the statistical mean score distributions for responses to the questionnaire items. Table 2 shows the average chi-square statistical means score distributions for responses to items, and Table 3 shows the chi-square statistical scores used to test the hypotheses.

Table 1: Statistical mean score distributions for responses to questionnaire items

<table>
<thead>
<tr>
<th>Item 1</th>
<th>Item 2</th>
<th>Item 3</th>
<th>Item 4</th>
<th>Item 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2.4490</td>
<td>4.2245</td>
<td>2.1837</td>
<td>1.8469</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.2528</td>
<td>.85591</td>
<td>1.08739</td>
<td>.73712</td>
</tr>
</tbody>
</table>

Table 1 presented the statistical means score distributions for responses to questionnaire items. The average calculated means score was at 2.53.

Table 2: Average chi-square statistical score for questionnaire items

<table>
<thead>
<tr>
<th>Item 1</th>
<th>Item 2</th>
<th>Item 3</th>
<th>Item 4</th>
<th>Item 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>29.18&lt;sup&gt;a&lt;/sup&gt;</td>
<td>59.959&lt;sup&gt;a&lt;/sup&gt;</td>
<td>98.735&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.397E2&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>df</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>
Table 3: Average chi-square statistical scores for testing the hypotheses

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage responses</th>
<th>Observed (O)</th>
<th>Expected (E)</th>
<th>[(O–E)^2]/E</th>
<th>Standardized Residual (R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>22.4</td>
<td>22</td>
<td>16.7</td>
<td>23.2</td>
<td>1.3</td>
</tr>
<tr>
<td>A</td>
<td>44.8</td>
<td>44</td>
<td>21.6</td>
<td>-11.2</td>
<td>4.8</td>
</tr>
<tr>
<td>N</td>
<td>4.1</td>
<td>4</td>
<td>16.7</td>
<td>0.9</td>
<td>-3.1</td>
</tr>
<tr>
<td>D</td>
<td>17.3</td>
<td>17</td>
<td>21.4</td>
<td>-5.2</td>
<td>-0.9</td>
</tr>
<tr>
<td>SD</td>
<td>11.2</td>
<td>11</td>
<td>21.6</td>
<td>-</td>
<td>-2.3</td>
</tr>
</tbody>
</table>

Critical value of $\chi^2$ for $p = 0.05$, $\chi^2 (N = 98) = 9.4$

Key: Observed (O) = number of respondents (N = 98)
Expected (E) = number of responses (N = 98)
Standardized residual (R) = categories that were major contributors to the rejecting of the null hypothesis. Standardized residual (R) was calculated as follows:

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

$$\chi^2 = \sum \frac{(\text{Observed frequency} - \text{Expected frequency})^2}{\text{Expected frequency}}$$

Table 3 presented the average calculated chi-square statistical scores for each response provided by teachers to items which was used to test the hypotheses.

The null hypothesis ($H_0$) was that:

(a) Parental socio-economic factors have no significant influence on access and enrollment of children with intellectual disability in special schools in Ghana.

(b) The alternative hypothesis ($H_1$) was that:

Parental socio-economic factors have significant influence on access and enrollment of children with intellectual disability in special schools in Ghana.

The overall mean of the mean scores in Table 1 was calculated at 2.53. This is higher than the alpha value of 0.05 as in Table 3. As presented in Table 3, $\chi^2 (N = 98) = 16.4$, and the alpha value was 0.05. The critical value was 9.4. This indicated that a significant opinion among the respondents was expressed relating to parental socio-economic status and enrollment of children in schools. Neutral (N) had a significant negative residual value of -3.1 and indicated that the respondents had definite opinions regarding economic status and its influences on access and enrollment in school for children. Disagree (D) had a residual value of -0.9 and indicated that 17.3% of teachers’ responses were insignificant to the statement.

With regards to the extent to which parental socio-economic factors are critical in influencing children’s access and enrollment in school, 67% were strongly in agreement, 22.4% agreed, and the rest were not. Twenty-eight percent of teachers strongly disagreed that parental socio-economic factors had significant influence on access and enrollment of children in education. The implication is that, the larger the absolute value of the standardized residual...
value, the greater is its’ contribution to the significant chi-square value. As can be seen from Table 2, the calculated chi-square score was 38.20 and is above the expected value (E) when compared with the calculated critical value of 9.4 in Table 3. The average mean score of 2.53 in Table 1 and the chi-square score of 38.20 in Table 2 skewed positively towards the higher (more positive) score values involving strongly agree (SA) and agree (A) as shown in Table 4. The skewness of both the mean and the chi-square scores to the higher values indicated that parental socio-economic status had significant influence on access and enrollment in schools for these children. This therefore, suggests that there is enough evidence to reject the null hypothesis (H₀) in favor of the alternative hypothesis (H₁). This suggests that a lot of factors can affect the education of children with intellectual disability, but parental poverty can have serious limitations on a child’s access and enrollment in schools particularly with the influence of parental values regarding the perceived end-results.

The question this study attempted to answer was how parental socio-economic factors influenced access and enrollment of children with intellectual disability in special schools in Ghana. Responses provided by teachers to 5 major items built on the key theme ‘parental socio-economic status’ and the parental interview results were used to answer this question. Table 4 shows the frequency distribution of teachers’ responses to items used to answer the research question which were transformed into frequency counts and distributions through the SPSS 16.0.

Regarding the question asked to whether or not education provision for children with intellectual disability in Ghana was free, 87 respondents (90.0%) agreed. This has implications for parental economic stability for children’s education. Eighty-seven teachers (88.7%) disagreed with the statement that parents have to pay for their children’s education. Also, 79 (90%) of the teachers responded that some children still dropped out of school in spite of the fact that in Ghana special education is free. Items 4 and 5 focused on whether parents complained about financial burdens related to their children’s special education needs and whether this hindered their support for the education of their children in special schools. Ninety-one percent of a combined number of teachers and parents agreed that parents paid extra for their children’s education and, 87.4% of the group indicated that this hindered access to and limited enrollment in special schools for children with intellectual disability.

Parental interview data that explored how socio-economic status really influenced children’s enrollment and their regular attendance in school, revealed that special education provision was free for children with intellectual disability in Ghana. However, parents indicated that children dropped out of school for several other reasons, such as transportation to and from school, limited time for household duties, as well as health, and daycare needs.

**Discussion**

The purpose of this study was to identify how access and enrollment was ensured for children with intellectual disability in Ghana, with respect to the historical and cultural conceptualization of “mental retardation”. The above analysis supports the position that parental socio-economic status significantly influences children’s access and enrollment in schools. For children with intellectual disability, low expectation by society may have serious and negative connotations about involvement in education. Barnes et al. (2005) confirmed this when they concluded that the educational provisions for children when intellectual disability had not been considered critical in many societies over the years. While poverty is a significant barrier to education, the World Health Organization (WHO) (2010) report suggests that negative attitudes
and values accorded to education are even much greater barriers to access to education. This is in line with Sen’s (1993) capability theory in which entitlements to the rights are differentiated according to judgments of individual capacity or the extent to which the child is perceived to be capable enough of learning.

Table 4: Frequency distributions of teachers’ responses to items

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA (F) (%)</th>
<th>A (F) (%)</th>
<th>N (F) (%)</th>
<th>SD (F) (%)</th>
<th>D (F) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Special education is completely free for children with intellectual disability.</td>
<td>32 (32.7)</td>
<td>55 (57.8)</td>
<td>- (9.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Parents pay fees towards boarding facilities.</td>
<td>- (8.2)</td>
<td>8 (8.2)</td>
<td>- (44.9)</td>
<td>46 (46.9)</td>
<td></td>
</tr>
<tr>
<td>3. Some children stopped schooling for lack of needs</td>
<td>22 (22.5)</td>
<td>57 (58.2)</td>
<td>5 (5.1)</td>
<td>7 (7.1)</td>
<td>7 (7.1)</td>
</tr>
<tr>
<td>4. Often some parents complain of about financial burdens.</td>
<td>28 (28.6)</td>
<td>62 (63.3)</td>
<td>5 (5.1)</td>
<td>1 (1.0)</td>
<td>2 (2.0)</td>
</tr>
<tr>
<td>5. Special education provision places some financial commitments on parents.</td>
<td>32 (32.6)</td>
<td>53 (54.1)</td>
<td>3 (3.1)</td>
<td>5 (5.1)</td>
<td>5 (5.1)</td>
</tr>
</tbody>
</table>

Key: F = Frequency, % - Percentage
SA= (strongly agree), A= (disagree), N= (neutral), SD= (strongly disagree), D= (disagree)

Both teachers’ questionnaire data and parents’ interview data revealed that parental socio-economic status influenced access and enrollment of children with intellectual disability in schools in Ghana. Even though, education is free, the results suggested that there were other financial commitments that parents whose children were in, both residential and non-residential schools, faced. These were the reasons for disruptions in school attendance and dropout for some children. These findings support what was indicated in the literature that socio-economic factors have a significant influence on children’s access and enrollment in schools (Croft, 2002; Webb-Mitchell, 2010). This justifies why governments have to introduce free appropriate public education to provide access and overcome enrollment challenges for all categories of children in education.

Conclusion and Recommendations

Over the past few decades, many countries have been grappling with problems which hinder provision of education for children with and without disabilities. Poverty is often cited as one of the factors that continue to threaten effective development of special education. Poverty, however, may not be the only challenge to overcome, since people’s attitudes toward intellectual disability, their reactions to intellectual disability, and values they accord the disability has been historically negative. Many studies have revealed how parents value the end-results of children’s education and how this influenced their decision-making processes concerning education for children with intellectual disability. Overall, the combination of several factors including
poverty, views about capability, family structure and needs, among others, influence access and enrollment of children with intellectual disability in Ghanaian schools.

Governments, however, may do a number of things to mitigate the impact of these factors. First, the practice of free appropriate public education for children with special needs must be enforced to relieve parents from extra educational expenses they incur educating their children with special needs. By so doing, the government will help alleviate financial burdens of parents, and reduce school drop-out amongst children with intellectual disability. Finally, governments must introduce programs to educate the general public on promoting the understanding and acceptance of individuals with intellectual disability.

References


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