The relationship between head of household characteristics and child deprivation in a South African township

Children all over, particularly in the developing world, are increasingly becoming more and more vulnerable as the poverty rate at the household-level remains high. Children’s circumstances are to a great extent dependent on the circumstances of the head of the household. Head of household characteristics, such as employment status, education level, gender, marital status and age among other things, have a direct impact on the children in the household. The paper looks at the relationship between the head of household characteristics and child welfare in the household. The paper uses data collected from households in Boipatong Township in 2013. A child deprivation index was used as a measure of child welfare in the household. A number of questions were used to measure the level of child deprivation. Based on the responses, an index was calculated. An Ordinary Least Squares (OLS) regression was used to determine the household head characteristics that significantly affect child deprivation. Results from the regression analysis show that there is a significant negative relationship between income and child deprivation. In the sample, the parameter ‘age of the head of household’ shows that the children are less deprived when the parent in the household is older. The results further show that children from families where the parents are married or living together are less deprived than those from single-parent households. Employment status was also found to be an important attribute. The formally employed parents reduced the likelihood of children being deprived as opposed to the unemployed parents whose children were more likely to be deprived.

Introduction

Individuals can be deprived because of a shortage of resources of all types, not just financial, and deprivation may possibly be defined in an extensive way to cover a wide range of facets of a person’s living conditions. Deprivations are incoherently viewed as undesirable and unsatisfactory conditions, emotional, material, behavioural or physical, as documented by means of a fair-minded degree of social consent. Deprivations include a lack to some degree commonly believed as necessary, a sufficient income, good well-being, etc. (Gordon et al. 2003:6). Children are increasingly becoming more and more vulnerable as the poverty rate on household level remains high. Children’s circumstances are to a great extent dependent on the circumstances of the head of household. Head of household characteristics such as employment status, education level, gender, marital status and age among other things have a direct impact on the children in the household. The paper looks at the relationship between the head of household characteristics and child welfare in the household. The paper uses data collected from households in Boipatong in 2013. A Child Deprivation Index was used as a measure of child welfare in the household. A number of questions were used to measure the level of child deprivation. Based on the responses, an index was calculated. An Ordinary Least Squares (OLS) regression was used to determine the household head characteristics that significantly affect the deprivation index. The rest of the paper is organised as follows: the second section presents a literature review on deprivation and head of household characteristics to be considered as determinants of child deprivation in the regression analysis. The third section presents the methodology followed and the fourth section presents results and discussion. The conclusion is presented in the fifth section.

Literature review

A child is said to be in poverty when they experiences deprivation of fundamental aspect that are essential to their most basic well-being. These elements may include material items, spiritual wellness and emotional wellness that are crucial to their existence. In the absence of these fundamentals, a child’s wellbeing is compromised and is unable to take a stand as a valued member of society. There is a pressing need to study child poverty and deprivation for the simple...
reason that child poverty differs from poverty experienced by adults, and the poverty experienced as a child may have lasting consequences right through to the adult stages of life (Bárcena, Blázquez, Budría & Moro 2014), (Singh & Sarkar 2014). It is pertinent to define deprivation to distinguish it from poverty in general and to have a clear understanding of its meaning and how it is applied to child poverty. Townsend (1987:5) in Gordon and Nandy (2012) defined deprivation as ‘a state of observable and demonstrable disadvantage relative to the local community, society or nation in which the deprived individual or family exists’. Gordon and Nandy (2012) further points out that the deprivation idea has been applied to physical and emotional conditions rather than resources and to specific and not only general circumstances, and therefore can be distinguished from the concept of poverty (Gordon & Nandy 2012). Deprivation has numerous aspects to it. A child raised in a household that is educationally and culturally uninspiring is paralysed by environmental scarcity, a child who is rejected and unloved by their guardian experiences emotional deprivation and a child who resides in residential care permanently or for lengthy times is deprived of regular home life. Children deprived of a regular home life can be disadvantaged in several ways: they could be deprived of good nutrition, healthiness, social contact with adults or other children, affection, playing facilities, etc. (van der Ross 2010), (Kellmer-Pringle 2002).

Deprivation can also be viewed from both monetary and a non-monetary perspectives. Children can experience both forms of deprivation at some point in their lives. A study by Ridge (2009) showed that children were exposed to social exclusion because of the fact that they did not have the financial resources necessary to ‘fit in’ with their peers. Some of the children suffered severe stigmatisation and bullying because they were financially deprived. Children deprived of activities that entailed financial investments were often exposed to youth crimes that could be prevented. With regards to non-monetary deprivation, the emotional aspects of deprivation are considered. Although emotions cannot be measured or weighed, one can seek to determine the effects of going without certain needs or wants on a child’s emotional wellness. These can be because of loss of parents who used to provide for those needs. Family responsibility put on a child, especially in child-headed households, can also contribute to multidimensional deprivation for a child because they are deprived of their time to attend school (UNICEF 2011).

**Head of household characteristics and child deprivation:**

There are a number of household characteristics, particularly the head of household characteristics, that determine the probability of a child being deprived or not. Some of the head of household characteristics include employment status, age, education level, marital status and gender. Other general household characteristics that are not necessarily borne by the head of the household but are crucial to the welfare of children in the household may include size of the household and household income. With regards to marital status, single-headed households have a significant bearing on a child’s susceptibility to deprivation. A study in the United States suggested that child poverty has long been prevalent amongst female-headed households (Rector 2012). A child growing up in a female-headed household is exposed to deprivation in that in most cases the household has fewer resources. Most children in female-headed households are either born out of wedlock or the parents are not together anymore. However, most Northern European countries are known to have lower rates of child poverty and child bearing out of wedlock than in the United States (Heuveline & Weinschenker 2008:175). Rector (2012) also reported that in the United States, marriage reduces the probability of a child being poor by 76%. The female-headed households in South Africa also tend to be more susceptible to poverty and hence child deprivation. Makhalima, Sekatane and Dunga (2014) found that the probability of a child being poor was higher in female-headed households as opposed to male-headed households.

Child deprivation can also be triggered by parental unemployment and low levels of education. Unemployed parents with low levels of education are often overwhelmed with emotional frustration because they are in most cases unable to provide for the financial needs of the household and the children. The financial hardships also make it difficult for parents to financially invest for the future of their children, and this may lead to stress and anxiety (Mountney & Reid 2012:3). A child is therefore deprived on multiple levels in such a household. First, there is lack of financial support, and second, the frustration in the parent results in less emotional support and hope for the future. The lower educational achievement of the head of household may also act as a demotivation for the child to work hard in school. According to a study by Dunga (2012), children in households where the parents have lower levels of education are less likely to achieve in school. Household size can also be a contributing factor to child poverty and deprivation. From a poverty perspective, a large household may have to prioritise essential needs, such as food, which will ultimately lead to sacrificing of other goods. In this case, it would mean that a child or children in the household may have to go without certain recreational items that may contribute to their development. A large household living in a small house can affect the outcomes of a child in school, which is particularly so because the environment may not be conducive for studying and this can affect a child’s outcomes in school (Boston 2013). Nutritional outcomes of children with many siblings are also affected in large households. The nutritional needs of younger and/or older children may sometimes be placed above those of other children in the household (Bird 2007:4).

**Methodology**

The paper uses data that were collected in Boipatong Township, which falls under the Emfuleni Local Municipality. The township is in proximity with other townships in the municipality with similar poverty situations, such as Bophelong and Sharpeville. The population of the municipality is estimated to be 721 663, with the young population comprising children aged between 0 and 18.
accounting for 25.4% and the elderly (65+) accounting for 4.9% of the total population. The population of Boipatong is 22 168. The sample size was 300 households. Data were collected using a household questionnaire adopted from published studies such as those of Viljoen and Dunga (2014) and Dunga and Sekatane (2014). The questionnaires were adapted to suit the nature of the study, and the questions were directed to the head of household to determine what were lacking for children in their households. The deprivation index is adapted from Barnes (2009) list of essentials for children. The index which included 13 child-specific items was created using a scale ranging from one ‘never lacked’ to five ‘always lacked’.

**Model specification:** The study uses a deprivation index both as a measure of child deprivation and as a dependent variable. The independent variables were age, gender, number of people in the household, household income and employment status. Since the deprivation index is measured on a continuous scale, it can be treated as a continuous variable, necessitating the use of an OLSs regression. The OLS regression will therefore be specified as follows:

\[ DI = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 \beta \] (1)

Where DI is the deprivation index and all the other variables being the age of the household head, gender, marital status, employment status and education level. The deprivation index is derived from a number of questions that were used to measure child deprivation.

**Results and discussion**

The results are presented first by descriptive statistics of the important independent variables, such as number of people in the household, gender of head of household and the marital status of the head of the household. Then, the OLS regression is also presented.

**Descriptive statistics:** Table 1 illustrates the distribution of the number of people in the households in Boipatong Township. The minimum number of people in the sample was found to be one person and the maximum to be eight people in a household. The mean for the size of the household was found to be 3.2, which means that on average, a household has three people.

Table 2 illustrates the gender distribution of the heads of households in Boipatong Township. The results in the table show that there are more female-headed households than are male ones, with female-headed households accounting for 54.3% of the sample. This situation is not surprising or unique to Boipatong. A study by Dunga and Sekatane (2014) found a similar result in Bophelong Township.

Figure 1 shows the marital status of the residents of Boipatong Township. A total of 28.2% of the residents in the sample were widowed, which is a slightly greater portion than those who are married (26.5%) and those who have never been married (26.9%). A total of 9.5% of the population have been separated while 5.4% are divorced. The results give an indication that more of these households have children living in single-parent households.

Figure 2 shows the employment status of the sampled population of Boipatong Township. A total of 36.3% of the population are not economically active while 26% of the residents in the sampled population are unemployed. Only 17.7% of the sampled population is formally employed. The heads of the household who are involved in informal activities make up 20% of the sampled population. Those who are not economically active may be the disabled, the elderly/pensioners or heads of household who chose not to be employed. The implication is that the township has a significantly high rate of unemployment, and this has a bearing on the poverty status. Children living in these households are likely to be deprived as the head of household is unemployed. The high rate of unemployment is however not unique to Boipatong Township. Viljoen and Dunga (2014) published studies such as those of Viljoen and Dunga (2014) figure 2

**TABLE 1: Number of people in the household.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people in the household</td>
<td>300</td>
<td>1.00</td>
<td>8.00</td>
<td>3.2</td>
<td>1.74459</td>
</tr>
<tr>
<td>Valid N (list-wise)</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey data (2013)

**TABLE 2: Gender distribution of the heads of households.**

<table>
<thead>
<tr>
<th>Gender distribution</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
<th>Cumulative percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>137</td>
<td>45.7</td>
<td>45.7</td>
<td>45.7</td>
</tr>
<tr>
<td>Females</td>
<td>163</td>
<td>54.3</td>
<td>54.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey data (2013)

**FIGURE 1: Marital status of the head of household.**

**FIGURE 2: The employment status of the heads of households in Boipatong Township.**
have also shown high level of unemployment in Boipatong Township, where employment and poverty status of women were investigated.

**Results of the OLS regression**: Table 3 presents the OLS regression results of the determinants of deprivation using the deprivation index specified in Equation 1 as a dependent variable. The determinants are the independent variables while the index is the dependent variable. The results show that the sum of income has a negative coefficient value which means that there is a negative relationship between income and deprivation, as the income increases in a household, the less deprived a child becomes. The number of people in the household has a positive coefficient meaning that there is a positive relationship between the number of people and the deprivation index, which implies that an increase in the number of people would lead to an increase in the deprivation index, and this simply means that the number of people in the household will increase the value of the index because the bigger the household, the more deprived the children are. The age of the head of household has a negative coefficient meaning that a child is less deprived when the head of household is older. The employment status categories show the results of the index for each category. The point of reference is the ‘not economically active’. The results in the regression table show that the children in the sample are less deprived when the parents are employed. The Department for Work and Pensions of the United Kingdom (2011) argues that a child with an employed parent or parents has a lower risk of falling into the poverty trap or experiencing any material deprivation in the household. A child in a workless household has greater chances of being deprived. About 65% of inhabitants in the United Kingdom moved out of poverty after finding employment.

Children from families where the parents are involved in informal activities seem to be more deprived with a beta value of 2.098. The coefficient is positive and increasing, which means that irrespective of the parents being involved in informal activities, the children are still more likely to be deprived even more than the not economically active category, which is the reference point. The results for the unemployed category show that children coming from households with parents who are unemployed are less deprived. This result makes Boipatong Township particularly unique since there is a positive relationship between unemployment and child deprivation. The reason for such results may be that the family is sustained through government grants as a source of income or assistance from relatives. The results of the regression further show that children from families where the parents are married or living together are less deprived (beta value -0.629) compared with children living in households where the parents are either divorced or separated (beta value 0.862), which may be because of the joint income of the married parents which could be more compared with the single source of income for divorced parents.

Children living with widowed parents are more deprived according to the results of the regression. With a beta value of -0.477, the children in these households are worse off compared with children from families with married parents, which can be supported by a study by Bárcena et al. (2014) who argue that children from households where the parent is widowed are likely to be more deprived than children from families where the parents are married or living together. A widow will have a more deprived household compared with that of a widower. Looking at the qualifications category, the results show that children coming from households with parents that are less educated tend to be more deprived, which can be seen with the results of the parents with a grade 1–7 level of education. The beta value of the independent variable is considerably high at 3.640 and that for parents with a grade 8–12 level of education is lower at 1.729. The parents in the second category are better off because the more educated they are, the less deprived their children will be, and this also holds good for parents with a tertiary qualification. With a beta value of -0.949, the children can be considered to be less deprived because the parents are more educated.

The results for the gender category, in this case for the females, show that children from female-headed households are less likely to be deprived. These results can be considered to be

**TABLE 3: OLS regression results.**

<table>
<thead>
<tr>
<th>Coefficients (Model)</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>39.300</td>
<td>4.242</td>
</tr>
<tr>
<td>Sum of income</td>
<td>-0.001</td>
<td>0.000</td>
</tr>
<tr>
<td>Number of people in the household</td>
<td>0.462</td>
<td>0.391</td>
</tr>
<tr>
<td>Age</td>
<td>-0.018</td>
<td>0.073</td>
</tr>
<tr>
<td>Formally employed</td>
<td>-4.286</td>
<td>2.356</td>
</tr>
<tr>
<td>Informal activity</td>
<td>2.098</td>
<td>1.901</td>
</tr>
<tr>
<td>Unemployed</td>
<td>-0.219</td>
<td>1.757</td>
</tr>
<tr>
<td>Married/living together</td>
<td>-0.629</td>
<td>2.008</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>0.862</td>
<td>2.134</td>
</tr>
<tr>
<td>Widow/widower</td>
<td>-0.477</td>
<td>2.010</td>
</tr>
<tr>
<td>Grade 1–7</td>
<td>3.640</td>
<td>2.868</td>
</tr>
<tr>
<td>Grade 8–12</td>
<td>1.729</td>
<td>2.546</td>
</tr>
<tr>
<td>Tertiary</td>
<td>-0.949</td>
<td>3.074</td>
</tr>
<tr>
<td>Female</td>
<td>-0.812</td>
<td>1.433</td>
</tr>
</tbody>
</table>

Source: Survey data (2013)
unusual since female-headed households are considered to be more deprived than the male-headed households. Klasing, Lechtenfeld and Povel (2011) argue that female-headed households do not necessarily need to be always poor. Factors that need to be considered when determining if a female-headed household is poor are the profile of the country being surveyed, the level of the welfare available to female-headed households, the type of female-headed household, the equivalence scale to be used and finally the ‘considerations of economies of scale’. In this case, most of the female-headed households with children benefit from child grants. It could also mean that these female-headed households are placing the needs of the children ahead of need of all other members in the household.

Conclusion

The results reflected that there is a negative relationship between the Child Deprivation Index and income. As income increases, the size of the index became smaller. The results also showed that children living in households with older parents are less likely to be deprived as opposed to those living in households with younger parents. When the index was measured against the employment status, it was found that children whose parents are formally employed are less deprived compared with children whose parents were engaged in informal activities. Those whose parents were employed in informal activities were found to be deprived. An interesting observation was that children from families where the parents were unemployed were found to be less deprived, which might have been because the parents have other means of obtaining income either from child or pension grants and/or handouts from family members. The results for marital status showed that married couples and those who are living together are less deprived, and this is highly likely because of the combined income of both the individuals. The children living with parents who are widowed were found to be more deprived than children with both parents. The deceased parent could have been the breadwinner of the household, and the income of the deceased is now forfeited. The results for the level of qualification showed that children living in households where the parents have only a primary school qualification were more deprived than children from households with any other level of parental education. Children whose parents had a secondary education were also found to be more deprived compared with children whose parents have a tertiary qualification. This result was highly expected because as the theory stated, children coming from households where parents are more educated are less deprived. The results for gender depicted that children from female-headed households in Boipatong Township are less likely to be deprived compared with children from the male-headed households, and these results were not expected and are therefore unique to Boipatong Township, which may be because the children are being supported by their fathers as well as the extended family members coupled with government grants.

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Competing interests

The author declares that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.

References


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