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Exploring Factors Associated with Educational Outcomes for Orphan and Abandoned Children in India

Aakanksha Sinha*,

School of Social Work, Boston College, USA

Margaret Lombe,

School of Social Work, Boston College, USA

Leia Y. Saltzman,

School of Social Work, Boston College, USA

Kathryn Whetten,

Center for Health Policy and Inequalities Research, Duke University, USA

Rachel Whetten, and

Center for Health Policy and Inequalities Research, Duke University, USA

Positive Outcomes for Orphans Research Team

Center for Health Policy and Inequalities Research, Duke University, USA

Abstract

India has more than 25 million orphan and abandoned children (UNICEF, 2012). The burden of care for these OAC is on caregivers that are often ill equipped to meet their needs due to inadequate assets. Previous studies suggest that in communities with limited resources, OAC residing with non-biological caregivers are more at risk than those fostered by a biological parent. This study explores the association of caregiver and child characteristics with OAC educational outcome in India. The analysis was conducted using hierarchical logistic regression. The findings have implications for practice and policy in the global child welfare field.

Keywords

Orphan and Abandoned Children; Education; Poverty; Caregivers; Community-based care; informal care

Introduction

India has a growing proportion of orphan and abandoned children (OAC) due to factors such as HIV/AIDs, poverty and illness of parents. There are more than 25 million OAC in India (UNICEF, 2012). Many reports suggest that there are thousands of OAC who are not accounted for in these statistics (Perpappadan, 2011). UNICEF (2013) defines an “orphan”

*Corresponding author: Aakanksha Sinha, School of Social Work, Boston College, McGuinn Hall, 140 Commonwealth Avenue, Chestnut Hill, MA 02467 USA, sinhaa@bc.edu, Phone number: 917-733-0657.

as a child who has lost one or both parents. An abandoned child is defined as one who does not live with either his/her mother or father (UNICEF, 2014). OAC are often victims of emotional, physical, mental and sexual abuse (Goldman & Anastasi, 2003). In addition, they are exposed to risks such as poverty, stigma, discrimination, and unequal opportunity (Goldman & Anastasi, 2003). Social welfare literature has provided substantial evidence that education is an important tool to combat risks associated with poverty, and has a positive impact on the life course of an individual (Awan, et al, 2011; Chaudhari & Roy, 2006; Echavarri & Ezcurra, 2010; Emerson & Sauza, 2011; Jha & Kelleher, 2006; Kishor, 1993; Tsujita, 2013;).

An important part of a child's wellbeing is determined by the socioeconomic conditions in which they are born, grow and live (UNICEF, 2012). Studies by Thielman et al (2012), Ronsmans et al (2010), Whetten et al (2011) suggest that countries such as India that have a growing number of OAC suffer from poverty and low levels of human development. Therefore, caregivers are often ill equipped to meet the needs of OAC due to limited resources (Stover et al, 2007; UNICEF, 2012). Studies examining the increasing burden of caregivers of Orphan and Vulnerable children (OVC) impacted by HIV/AIDS, suggest that biological relationship of the child with the caregiver also affects wellbeing of the OVC. Studies by Nkamleu & Keilland (2006), Case et al (2011) and Ainsworth et al (2005) suggest that children who are under guardianship of their parents or grandparents have better outcomes as compared to those that are residing with non-biological caregivers or distant relatives. It is important to highlight that this disadvantage is mostly due to the additional burden that the households face as a result of their low socioeconomic status (Nkamleu & Keilland, 2006).

Recognizing studies by Case et al (2011) and Ainsworth et al (2005), we attempt to explore the importance of biological relationship with the caregiver and its impact on educational outcomes of OAC, in the context of economically poor households that face the burden of caring for OAC. We also attempt to explore how an important deterrent of educational attainment, that is, child's involvement in excessive work, might affect this relationship. It is important to note that not all work done by children can be classified as being child labor (ILO, 2014). Children or adolescent's participation in work that does not impact their health and development or interfere with their schooling is generally regarded as something positive. Child labor on the other hand is defined as work that deprives children of their childhood and is harmful to their physical and mental health.

While many studies have focused on the condition of OAC in the African continent, there is limited literature available on this population in India. This study attempts to bridge this gap, in the light of the growing magnitude of OAC in India (Perpappadan, 2011). Lastly, the study has implications for current policy trends in India that are focusing on formalizing informal or kinship care (BOSCO, 2013; Forber-Pratt, 2013; ICPS, 2009).

Literature Review

Caregiver & Child characteristics

Caregivers are the direct source of social and financial capital that ensures proper development of a child (Scott et al, 2013). They are also the means to transmit policies and programs in the larger ecosystem, in order to support children attain their rights. Many studies have suggested that caregiver health and education are the most influential factors that impact a child's educational outcome (Berk, 1985; Chernichovsky, 1985; Davis-Kean, 2005; Dubovitz et al, 1994; Nkamleu & Kielland, 2006; Reardon, 2011). Caregivers with higher levels of education are more likely to support school enrollment and retain children in school, despite monetary constraints (Kabeer & Mahmud, 2009; Nkamleu & Kielland, 2006; Tsujita, 2013). Also, caregivers that have access to proper shelter, health care, food and other basic assets have greater ability to provide good quality care to their children, thereby improving the child's education and health outcomes (Foster, 2000; Foster & Williamson, 2000; Whetten et al, 2009).

Majority of households in India that face the burden of taking care of OAC are poverty stricken (Thielman et al, 2012; Ronsmans et al, 2010; Whetten et al, 2011). This, in turn, impacts caregiver's health, education, and access to basic needs. Along with low socioeconomic status, certain social and cultural factors further reduce the capability of caregivers, including gender, caste, religion, land distribution, and geographical location (Tsujita, 2013).

Certain child characteristics also impact educational outcomes. These include age, gender and health of the children. Recent estimates by UNICEF suggest that 57 million children are out of school worldwide (UNICEF, 2014). In India female children continue to be one of the most disadvantaged groups that are systematically left out of school due to fiscal constraints, safety, perceived economic returns, amongst other reasons (UNICEF, 2009; Plan, 2013; 2012). A study by Nkamleu & Keilland (2006) suggests that male children in low-income families, as compared to male children in higher income families, are more likely to be involved in work as compared to being enrolled in school. Another study that focuses on India's scenario specifically, suggests that although more barriers exist for female children for school enrollment, their educational achievement tends to be higher as compared to boys (Jha & Kelleher, 2006).

Age of the child is also an important determinant of educational outcomes. While there has been an increase in primary school enrollment, UNICEF reports indicate that the secondary school enrollment rates in India still remain dismal (UNICEF, 2009). India faces a high dropout rate, when children are transitioning from primary school to higher levels of education (Khokhar et al, 2005; Mukherjee, 2011). According to a recent report by USAID, a high proportion of students (15.9%) drop out of school in grade 5 in India (USAID, 2014). The primary reason for dropping out was attributed to the need to supplement income through household chores or domestic work (USAID, 2014).

Role of Caregiver & OAC biological relationship on education outcomes

Caregiver's investment in the child's education is based on the interplay of child, caregiver and household characteristics. Few studies have focused on the effect of the biological relationship of orphans with the primary caregiver on their educational outcomes (See: Ainsworth et al, 2010; Case et al 2004; Nkamleu & Kielland, 2006; Serra, 2009). Low socioeconomic status of the caregivers impacts this relationship. Studies by Balew et al (2010), Case et al (2004) and Heymann et al (2007) suggest that caregivers of HIV/AIDS affected orphans in Sub-Saharan Africa face a heavy burden of financially supporting the orphans in addition to providing for their own families. In such circumstances children that are not biologically related to the caregiver might face additional disadvantages as compared to those children that are biologically related. Case et al (2004) stated that children who live in households that are headed by non-biologically related caregivers' fare systematically worse than those living with biological parents.

According to Basu & Van (1998) participation in educational activities by orphans residing in resource-constrained households is considered a luxury. These children are often involved in paid or unpaid work and are deprived of educational opportunities due to disadvantages arising from the interaction between limited resources and relationship with the caregiver (Case et al, 2004).

Theoretical Framework

This study utilizes the capability approach (CA) (Sen, 1985) as an organizing framework to explore the association between caregiver characteristics and educational outcomes of OAC. Amartya Sen developed it in response to alternative philosophical and economic accounts that focused on narrow definitions of wellbeing as restricted either to utility, liberty, commodity or primary goods (Clark, 2006). According to this approach wellbeing, should be conceptualized as people's capabilities to function, or the presence of effective opportunities to undertake the activities in which they want to engage (Robeyns 2006; 2005; Sen 1985; 1992). It reemphasizes the right of an individual to have certain opportunities that would ensure their wellbeing and full development (Dixon & Nussbaum, 2012; Robeyns, 2005; 2006; Sen, 1985; Sen, 1992).

Nussbaum is one of the best-known contributors of the CA (Clark, 2006). She attempts to complete Sen's work by providing a set of central human capabilities, such as, bodily integrity, affiliation, practical reasoning amongst others (Nussbaum, 1990, 1995, 2000). She advocates for these basic capabilities to be embodied in the constitution and to be guaranteed to all.

This study draws from the frameworks articulated by both Sen and Nussbaum. We utilize only specific aspects of "asset", "capability" and "functioning" as defined by Sen to explore the impact that caregiver and child characteristics have on education outcomes of OAC in India.

According to Sen (1992) the core characteristic of an asset is its ability to enable functioning. Assets should not be limited to material goods and services alone (Robeyns,

2006). This study emphasizes caregiver and child characteristics as assets that enable or restrict the functioning of individuals. Specifically, building on previous studies by Nkamleu & Keilland, (2006), Case et al (2011) and Ainsworth et al (2005) the study recognizes the impact of biological relationship with caregiver in resource-constrained communities as an asset. Sen (1985) describes capabilities as valuable opportunities or options that individuals have to be able to function in an optimal manner. Children's involvement in excessive work, whether paid or unpaid, might constrain opportunities to attend school, to have leisure time for play, as well as other important activities needed to achieve overall wellbeing (Cigno, 2012; Hindman, 2011; UNICEF, 2011; Whetten et al, 2011; Weimer 1991).

Assets and capabilities impact the functioning of an individual. Functioning is described as real achievements that make life valuable, and would further contribute to expand other capabilities (Robeyns, 2006; Sen, 1985; 1992). Convention on the Rights of the Child (CRC) (1989) and the Universal Declaration of Human Rights (UDHR) (1948) describe education as one of the imperative functioning's of children. This study therefore uses the CA framework to explore the impact of caregiver and child characteristics, specifically biological relationship when moderated by child involvement in work on OAC educational outcomes, which is defined as "functioning". See Figure 1.

Methods

Study Description

This study uses baseline data from community living OAC aged 6 to 12 years in 2 sites (Hyderabad and Nagaland) in India from the Positive Outcomes for Orphans (POFO) study (CHPIR, 2014). POFO study used a two-stage sampling survey method in 6 sites in 5 countries (India, Kenya, Tanzania, Ethiopia and Cambodia) to identify a sample of 1,480 children in 309 community-based settings. For the purpose of this study the sample was restricted to OAC/primary caregiver dyads ($N=579$) living in community based settings in India (Hyderabad and Nagaland). OAC in a community based setting was defined as a single or double orphan, or a child abandoned by both parents, who was living in a family situation instead of an institution or on the streets (Whetten et al, 2011).

POFO is a 10-year observational study, which was started in 2006. It is a longitudinal cross-cultural research study, which is designed to identify and understand characteristics of caregiving across various care structures and cultures, and its relationship with positive child outcomes (CHPIR, 2014).

Measures

The measures that have been used in the study to explore factors impacting education outcomes of OAC in India are described below briefly.

Functioning: the outcome variable was measured by educational status of the child. This variable is a combination of items "*current school attendance*" and "*target grade*". School attendance was measured by asking the caregiver the question "*Is (Orphaned Child) currently attending school?*" The responses included 1 "*Yes*" 2 "*No*" and 3 "*Don't Know*". Target grade was measured by calculating the difference between the current grade of the

child and the target grade the child should be in based on his/her age for those who indicated the child was enrolled in school. The outcome variable was dichotomized to include 1 “currently attending and at or above target grade” and 0 “currently attending below target”. Six percent of respondents that were not currently attending school or responded “Don’t Know” were categorized as missing.

Assets: were measured by identifying caregiver and child characteristics. Caregiver characteristics included health, education, marital status, age, gender and biological relationship to the child. Caregiver’s general health was measured as dichotomous variables 0 “good” and 1 “poor health”. Relationship to child was measured by asking, “What is your relationship to the Orphan Child?” The responses were 1 “biological child”, 2 “adopted”, 3 “grandparent”, 4 “niece/nephew mothers side”, 5 “niece/nephew fathers side”, 6 “not related” and 7 “other”. For the purpose of the analyses the responses were dichotomized into 0 “biological child” consisting of response “biological child” and 1 “non-biological child”, which comprised of all other categories.

Child characteristics included general health, gender, orphan status, and age. Child general health was measured using 1 item from the Medical Outcomes Study Short Form (Ware, 1996). The caregiver was asked “Would you say (Orphaned Child’s) health is very good (could do everything), good, fair and poor (couldn’t do anything)?” As there were only 8% responses in the fair and poor category, for the purposes of the analysis the responses were dichotomized into 0 “good health” which included categories “very good”, “good”; and 1 “poor health” which included categories “fair” and “poor”. Gender was measured as 0 “male” and 1 “female”. Orphan status was measured as 0 “both parents alive but not residing with child”, 1 “maternal orphan” 2 “paternal orphan” and 3 “double orphan”.

Opportunity: was measured by child’s involvement in work, which combined involvement in work outside the home and housework. Outside work was measured by asking, “During the past week, did (Orphaned Child) do any kind of work for someone who is not a member of this household?” The responses were “yes, paid” “yes, unpaid” and “no”. The responses were dichotomized as 0 “no work” and 1 “work”, which included both paid and unpaid. Outside work broadly consisted of any work that the child is involved in beyond the parameters of the house. These could include working in any informal or low skilled jobs. Housework was measured by asking “During the past week, did (Orphaned Child) do any household chores, such as farming, childcare, or other housework?” The responses were “yes”, “no” and “don’t know”. These responses were dichotomized as 0 “no work”, which included responses “no” and 1 “work”, which included response “yes”. A “Don’t know” response was categorized as missing. For the purpose of the analyses a dichotomous variable “Involvement in work” was created. The categories were, 0 “no work” where the child was not involved in any kind of work, and, 1 “work” where the child was involved in some kind of work, either outside or within the household.

Data Analyses Procedures

Preliminary statistical procedures were conducted to understand the basic characteristics of the sample. Frequencies, means, and standard deviations were obtained on child and

caregiver characteristics. Cross tabulations and mean differences were calculated to examine the relationship between the predictors and outcome variable. Hierarchical logistic regression was conducted to explore factors associated with educational outcomes of OAC. Hierarchical logistic regression has been selected as the method of analysis, as the independent variables (IVs) were entered cumulatively in an order that was decided by the authors. This decision was based on the theory model outlined in the study, which seeks to understand the cumulative impact of caregiver and child characteristics on the education outcome of the Orphan and Vulnerable Children (OAC). The first model consisted of assets measured by caregiver and child characteristics as predictors of educational outcomes. The second model included the caregiver and child characteristics as well as the 'asset' variable caregiver-child relationship and the 'opportunity' variable child involvement in work. In the final model, moderation effect of child involvement in work on the biological relationship with caregiver and educational outcomes of OAC was tested.

Prior to examining these relationships, the data were evaluated to ensure that all assumptions for logistic regression were met, as the outcome variable was dichotomous. Listwise deletion was used and any changes in sample sizes due to deleted cases are reflected in the tables presented. Analysis was conducted using STATA SE version 14.

Results

Sample Characteristics

Child Characteristics—The sample was restricted to OAC and their caregivers in 2 POFO study sites within India. Table 1 represents the demographic characteristics of the sample. The sample had 53% male and 47% female OAC. The age of the children ranged from 6 to 12.9 years. The mean age of the children at the baseline was 9 years (standard deviation, 1.7 years). Forty-nine percent of the OACs were paternal orphans, 13% were maternal orphans, 7% were double orphans and 32% had living parents who were not residing with them. Sixty-eight percent of OACs were the biological child of their primary caregiver, while 31% were not biological children of their primary caregivers. The majority of the children reported good health. Almost half of the sample was involved in some kind of work, which included domestic or nondomestic work. Ninety-four percent children were currently in school. Of the children who were currently attending school, 51% were below the target grade.

Caregiver Characteristics—Table 2 presents all caregiver characteristics. Majority of the caregivers were female (81%). Most of the caregivers were between the ages of 18 and 50 years, with a mean age of 38 years (standard deviation, 11.3 years). Fifty percent caregivers were widowed, 35% were married and approximately 15% were single, divorced or never married. Seventy six percent caregivers reported that they had good health. The mean for caregiver education was 4.3 (standard deviation, 4.5 years), which indicates that the caregivers on average had very low level of education. Forty-eight percent of caregivers were illiterate. The range of the wealth index for all participating households in India ranged from 0–2.5, indicating a very low degree of assets. The average wealth index score was .99 (standard deviation .46).

Group Differences—Cross-tabulation and group means comparison was used to explore the relationship between predictor variables and educational outcome.

The results from the bivariate analysis indicated that out of the children that were currently attending school, majority of the boys were below the target grade. The results indicate that girls performed better in schools as compared to boys. Ninety-three percent of children that were currently in school and were above target grade were in good health. Also, about half of the children that were in school and below target grade were involved in some kind of work. Pearson's χ^2 indicated that there was a significant relationship between child's gender and involvement in work (χ^2 with 1 degree of freedom = 6.56, $p = .01$). Fifty-two percent OAC that were involved in either household chores or non-domestic work were females. With regard to caregiver characteristics there was a significant relationship between caregiver health and education outcomes (χ^2 with 1 degree of freedom = 9.89, $p = .002$).

Main Analysis: Hierarchical Logistic Regression

A hierarchical logistic regression was conducted to explore factors associated with educational outcomes of OAC. Model 1 included caregiver and child characteristics defined as “assets” as predictors of educational outcome of OAC. The biological caregiver-child relationship was added in model 2. The final model, adds an interaction between biological relationship to caregiver and child involvement in work. A goodness of fit test indicated that the final model was the best fitting model. The regression results are displayed in Table 3.

The results from the final model indicate that the overall model is significant ($\chi^2(15) = 147.58$, $p < .001$). Caregiver characteristics including health and education are significant predictors of educational outcome. When primary caregiver was in poor health, the odds of OAC being in the target grade decreases by 54%, keeping all other factors constant ($OR = .46$, $p < .01$). With a one year increase in education of the primary caregiver, the odds of the OAC being in target grade increases by 14% ($OR = 1.14$, $p < .001$). Caregiver age, gender and marital status were not significant predictors of education outcome. The same pattern was observed in model 1 and 2 as well.

With regard to child characteristics, only age of the child was a significant predictor. As the child's age increased the odds of being in target grade reduced by 43% ($OR = .57$, $p < .001$). Interestingly, gender of the child was not a significant predictor in any of the models.

The moderating effect of “opportunity” as measured by child's involvement in work on the relationship between biological relationship to caregiver and educational outcomes of the OAC was tested in the final model. The main effect of OAC involved in work was not significant. The main effect of biological relationship with the caregiver was also not significant. However, the interaction effect between biological relationship with caregiver and child's involvement in work was significant, thus indicating a conditional interaction effect. The result indicated that OAC who had non-biological caregivers and were involved in work had reduced odds of being in target grade by 64% ($OR = .36$, $p < .05$) as compared to OACs that had a biological relationship with their caregiver and were involved in work, or had a biological relationship with the caregiver and were not involved in work.

Discussion

The study results indicate that more than half of the OAC sample in the study was below their target grade level. Child education outcomes were significantly associated with caregiver's health and education. This finding supports previous studies that indicate caregiver education and health are protective factors for children at risk (Berk, 1985; Chernichovsky, 1985; Davis-Kean, 2005; Dubovitz et al 1994; Kabeer & Mahmud, 2009; Nkameleu & Keilland, 2006; Reardon, 2011; Tsujita, 2013). Educated parents are more likely to understand the value of their children being educated and its long-term positive effects, irrespective of their socioeconomic status (Nkamleu & Kielland, 2006). Also, if the caregiver is in poor health, he/she is less likely to be working and providing for the children. Studies on HIV/AIDS orphans indicate that children with ailing caregivers are more likely to drop out of school, and spend most of their time nursing the caregiver, or providing for the household (Foster & Williamson, 2000).

Certain child characteristics also impact educational outcomes. Study results specified that with an increase in age, children are less likely to be in the target grade. This result concurs with current Indian national reports that indicate significantly large dropout rates at the secondary school level (Pratham, 2013; TNS, 2013). A situational analysis of education in India by USAID (2014) indicated that although primary school enrollment is high, the dropout rate for both boys and girls increases manifold when transitioning to higher-level classes. With an increase in age, boys become more labor force "ready" and are directed towards paid labor. This decision is driven by factors such as the perceived comparative cost effectiveness of work versus education and the need to provide for the household (Edmonds & Pavcnik, 2005; Weiner, 1991). For girls, the reasons for dropping out might include marriage, caretaking of younger siblings or ailing parents, reservation of resources, amongst others (Plan, 2013, 2012; UNICEF, 2009). Interestingly, child's gender was not a significant predictor of education outcome. Although previous studies (Chaudhari & Roy, 2006; Echavarri & Ezcurra, 2010; Gupta, 1987; Kishor, 1993; Weiner, 1991) have focused on gender inequality in education in India due to the patriarchal structure, the findings of this study depart from this trend. This suggests that although child's gender might be an important predictor of education outcomes, for this particular sample other factors might be more influential. In addition to this, these results could also suggest that both boys and girls in the study sample are treated equally and are both at risk.

The World Family Map Report indicates that children who are orphans or are not residing with their parents tend to fare worse than child that reside with their parents (Scott et al, 2013). To further investigate the impact of the child-caregiver biological relationship as an asset and its impact on the OAC educational outcomes, an interaction between biological relationship with caregiver and child involvement in work was examined. The interaction results indicated that children who were not biologically related to their caregivers and were involved in some kind of work, either household or paid work, were less likely to be in the target grade as compared to children who were biologically related to their caregiver and were involved in some kind of work. This finding builds on previous studies by Nklamleu & Keilland (2006), Case et al (2011) and Ainsworth et al (2005). These results suggest that when caregivers have limited resources, their caretaking abilities are compromised, as they

make choices about who to provide for and which household members have more value. Also, it can be speculated that orphans in households with non-biological caregivers might be more engaged in paid work to generate additional income, or be involved in household chores to reserve resources rather than utilizing it for education related expenses.

While this study attempts to bridge gaps in literature on OAC in India, it has several limitations. Firstly, the study uses baseline cross sectional data, and therefore does not help to understand patterns of change and development overtime. Secondly, since caregivers report the data, the authenticity of the reports for child level information cannot be validated. Thirdly, as “involvement in work” included both paid and unpaid work, we cannot differentiate between the types of work in which the OAC were involved. We also cannot differentiate between hazardous work conditions and day-to-day household work. Fourthly, the study is unable to compare the educational outcomes of non-biologically related vs. biologically related children living in the same household. Finally, although the study provides an in-depth analysis of the factors contributing to education outcomes of OAC within India, due to the cultural, social, political and economic diversity, the results cannot be generalized to all communities within the country. The results of the study are also not generalizable to children residing in other care structures such as institutions, high socioeconomic status families fostering or adopting orphan children within India, as well as non-OAC or OAC in high-income countries.

Implications

With a growing percentage of orphan and abandoned children (OAC) in India, duty bearers including the government, non government agencies, local communities and global citizens, have the responsibility of protecting the rights of every child as defined by national policies and the Convention on the Rights of the Child (UN General Assembly, 1989). Although there are several well-established national frameworks to protect the rights of vulnerable children (See: Juvenile Justice Act, 2000; Ministry of Women and Child Development; Integrated Child Development Scheme; Protection of Child Rights Act, 2005), they have limited impact at the local level. Also, while kinship or informal care is the most common form of care within the country, there are few agencies in place to monitor the services provided (Forber-Pratt, 2013; UNICEF, 2012). Initiatives should be taken to formalize kinship care, and to increase awareness about the rights available to caregivers under the current laws and policies.

To inform current policies national level data should be collected to track the exact number of OAC in India. This will help understand the magnitude of the issue and direct community, national and international attention towards protecting the rights of these children, and contribute to vigorous research. To strengthen the capacity of the primary caregivers, initiatives should be taken to gather information regarding barriers faced and support required by them. Focus group discussions, community meetings and participatory research can be used to obtain this information.

Community resource mobilization and support is imperative to share the responsibility of providing guardianship to OAC. For this, decentralization of power is essential, as local

leaders have a clearer understanding of the community needs and dynamics. The national and local government and non-government agencies should make efforts to mobilize community resources and work towards strengthening community solidarity, to reduce the burden that informal caregivers experience.

To specifically deal with the issue of educational outcomes, schools should recognize the additional risks that are faced by OAC. As of 2010, India guarantees every child between the ages 6–14 years, the right to free and compulsory education (Indian Constitution, 2010). In addition to this CRC (CRC, 1989) also guarantees all children the right to education irrespective of their background. Although these policies are in place OAC rights are often neglected. Steps should be taken to accommodate the special needs of the children and provide better quality of education to them. Measures that could be taken include: improving school infrastructure, quality of teachers, within school health check-ups, midday meals, provision of evening schools, and support and respite programs for caregivers.

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Figure 1.
Conceptual Model to test Moderator effect of Opportunities on Assets and Functioning of OAC in India

Table 1

Child Demographic Characteristics (N=579)

	N	%	M(S.D)	Range
Gender				
Male	309	53.37		
Female	270	46.63		
Age			9 Years (1.7)	5.75–12.9
Orphan Status				
Double Orphan	38	6.85		
Maternal Orphan	71	12.79		
Paternal Orphan	269	48.47		
No Deceased Parent	177	31.78		
Relationship to Caregiver				
Biological Child	393	67.88		
Non-biological Child	186	30.92		
Health				
Good	533	92.06		
Poor	46	7.94		
Work				
Not working	280	50.63		
Working	273	49.37		
Currently in School				
Yes	541	93.44		
No	38	6.56		
Education Outcome				
Below Target Grade	267	50.95		
At/Above Target Grade	257	49.05		

Table 2

Maternal Caregiver Demographic Characteristics (N=579)

	N	%	M(S.D)	Range
Gender				
Male	108	18.65		
Female	471	81.35		
Age			38 years (11.3)	16–89
Marital Status				
Married	202	34.89		
Widowed	288	49.74		
Single/Divorced/Separated	89	15.37		
Health				
Good	440	75.99		
Poor	139	24.01		
Education in Years			4.3 years (4.5)	0–18

Table 3
Summary of Hierarchical Logistic Regression for variables predicting OAC educational outcomes (N=549)

	Model 1		Model 2		Model 3	
	OR	SE	OR	SE	OR	SE
<i>Assets: Caregiver Characteristics</i>						
Health (Poor) [^]	.49 ^{**}	0.11	.49 ^{**}	0.12	.46 ^{**}	0.11
Years of Education	1.13 ^{***}	0.02	1.14 ^{***}	0.02	1.14 ^{***}	0.11
Sex of caregiver (Female) [^]	0.68	0.19	0.7	0.2	0.68	0.2
<i>Marital Status[^]</i>						
Widowed	1.4	0.38	1.22	0.38	1.24	0.39
Single/divorced	0.97	0.31	1.01	0.04	1.04	0.33
Age	1.01	0	1.01	0.01	1.01	0.01
<i>Assets: Child Characteristics</i>						
Sex of Child (Female) [^]	1.38	0.27	1.41	0.28	1.33	0.27
Age	.58 ^{***}	0.03	.58 ^{***}	0.03	0.57 ^{***}	0.03
Health (Poor) [^]	0.97	0.37	0.98	0.37	1.02	0.39
<i>Orphan Status[^]</i>						
Maternal Orphan	0.93	0.33	1.09	0.44	0.99	0.4
Paternal Orphan	1.44	0.42	1.62	0.53	1.61	0.53
Double Orphan	1.62	0.67	1.98	0.94	2.02	0.98
Non-biological relationship with caregiver [^]			0.76	0.23	1.28	0.48
<i>Opportunity</i>						
Involvement in work [^]					0.66	0.25
Involvement in work [^] *non biological caregiver					.36 [*]	1.21
χ^2	139.61		140.43		147.58	
df	12		13		15	

* p<.05,

** p<.01,

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p<.001
OR= Odds Ratio
SE= Standard Error
Note:

^ Marital Status has 'married' as reference category; Orphan Status has 'no dead parent' as reference category; Caregiver and Child Health, involvement in work, biological relationship to caregiver, & child and caregiver sex are dummy variables.