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Imagining the future: Community perceptions of a family-based economic empowerment intervention for AIDS-orphaned adolescents in Uganda

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Abstract

AIDS-orphaned children and adolescents in sub-Saharan Africa have inadequate access to basic services, including health and education. Using a qualitative approach, the study explores the meaning of education in rural Uganda, obstacles faced by AIDS-orphaned adolescents and their caregivers to access secondary education, and the potential of an economic empowerment intervention SEED in addressing the challenges of accessing educational opportunities for AIDS-orphaned adolescents. The findings come from 29 semi-structured interviews conducted with eleven adolescents study participants, four caregivers and fourteen community leaders involved in the pilot SEED intervention. Study participants and community members indicated that the savings accounts offer a unique opportunity for orphaned adolescents to stay in school and imagine the future with optimism.

Keywords

AIDS-orphaned adolescents; orphan children; sub-Saharan Africa; qualitative study; economic-empowerment intervention; caregivers; community perceptions

Introduction

Sub-Saharan Africa is a home to 56.1 million orphans under the age of 18 (UNICEF, 2011), defined by UNICEF as having lost one or both parents (UNICEF, 2006). The HIV/AIDS epidemic in sub-Saharan countries is engendering nearly an entire generation of orphans (UNAIDS, UNICEF, & USAID, 2004). In the absence of a state-sponsored welfare system, a family caring for an orphaned child or adolescent often has to struggle to meet the cost of taking on an extra family member. Compared to non-orphan children and adolescents, between 67% to 97% of orphaned children and adolescents attend school in the sub-Saharan region (Operario, Cluver, Rees, MacPhail, & Pettifor, 2008; UNICEF, 2011). In many instances, the orphaned child's formal education is sacrificed in favor of employment and/or

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any opportunity to earn a daily wage (Burke & Beegle, 2004; Case, Paxson, & Ableidinger, 2004; UNDP, 2007a). Interventions helping orphaned adolescents stay in school may reduce their HIV risks (Birdthistle et al., 2009; Hallfors et al., 2011).

Challenges to school participation in Uganda

Prior to 1997, education in Uganda was only free at the university level. However, in 1997, the Ugandan Government introduced a free education strategy which eliminated school fees at the primary level--grades one through seven, known as the Universal Primary Education (UPE) public program (MoE&S, 2001). Following the introduction of UPE, school enrolment rates increased from 2.7 million (in 1996) to 5.3 million (in 1997) (MoE&S, 2000). The increase in school enrollment corroborated the fact that economically vulnerable families faced financial difficulties in sending their children to school. Although UPE officially grants free primary education to all children, survey estimates indicate that about 7% of children have never attended school (UNDP, 2007a) and 28% of children and adolescents do not complete primary school in Uganda (UNICEF, 2011).

In addition to school enrollment, a number of other indicators demonstrate the challenges children and families face in accessing UPE in Uganda. About two thirds of children entering the primary school system are not expected to complete their studies through the primary level (UNDP, 2007b). School completion rates are higher for the first five grades, but the number of students completing higher levels is significantly low. According to official statistics, 55% of boys and 54.6% of girls reach 4th grade, while 31.2% of boys and 27.7% of girls complete the primary level (completion of 7th grade) (Okumu, Nakajjo, & Isoke, 2008).

Between 2005 and 2009, only 16 percent of boys and 15 percent of girls out of all children of official secondary school age were attending secondary school (UNICEF, 2011). Secondary education is predominantly not free in Uganda and many other sub-Saharan Africa countries and, hence is inaccessible to many families (Ssewamala, Wang, Karimli, & Nabunya, 2011). The situation is worse for orphaned children.

Orphanhood and education

Orphaned children are particularly disadvantaged when it comes to completing education and they face unique challenges in accessing education, in addition to obstacles experienced by non-orphaned Ugandan children. Orphans are less likely to be in school than non-orphans (Case et al., 2004; Evans & Miguel, 2007; Operario et al., 2008), and they are more likely to fall behind or drop out of school (Deininger, 2003). The experience of Uganda closely parallels that of South Africa, another country that is deeply afflicted by the AIDS epidemic. Of the 10,452 young South Africans who participated in that country's National Survey of HIV and Sexual Behavior in 2003, nearly 25% had not completed compulsory education (Operario et al., 2008). As has been seen in Uganda, survey participants who lost one or both parents as children were found less likely to complete education compared to those who lost parents later in life (Operario et al., 2008).

Multiple factors elevate the risks that orphaned children face in accessing and completing schooling. A fragile family situation can result in diminished ability to invest in the orphaned child's education (Cluver & Gardner, 2007; Operario et al., 2008). Qualitative interviews with orphans and their caregivers revealed that hunger, housework, long distances, and lack of funds for school materials were directly associated with poor school attendance and performance (Oleke, Blystad, Fylkesnes, & Tumwine, 2007). More specifically, lack of such school materials as uniform, school bag, books, and stationary may prevent orphaned children from attending school (UNICEF, 2003). Even when financial

resources are available to send children to school, families may make schooling for their biological children the priority over orphaned distant relatives in their care (Case et al., 2004; Cluver & Gardner, 2007).

Furthermore, children often take on the roles of adults as a result of illness in the family. For example, studies show that 13-17 year old teenagers whose parents have fallen ill or died due to HIV/AIDS, engage in care taking over their ill parents to share the family burden with grandparents (Kakooza & Kimuna, 2006; UBOS & Macro International Inc, 2007). Educational attainment of orphans is limited by this added responsibility of taking on the role of an absent or ill caregiver (Operario et al., 2008). All in all, parental death during childhood not only has an immediate negative effect on the child but also severely jeopardizes the child's future opportunities. Having meager chances of ever completing school and securing a decent job, most orphaned children are destined to be trapped in a vicious cycle of poverty.

Value of education

In addition to unaffordable costs, diminished value of education resulting in lack of interest and motivation, are often cited among main factors affecting poor educational outcomes of Ugandan adolescents (MoE&S, 2001). While a great deal of attention has been paid to evaluating the education system in Uganda and how the loss of parents has impacted educational attainment of orphaned adolescents, empirical studies regarding the actual value of and attitudes towards education in the lives of local Ugandans are not well documented. In a survey with 500 seventh-graders in Kampala, Owens (Owens, 2005) documents the perceptions of primary school students and the value they place on education to determine whether there is a relationship between educational values and academic performance. The study, which focused on all families (not necessarily those raising orphaned children and adolescents) found that overall, education was highly valued among Ugandan families. Gaps in empirical studies still exist in regards to the value of education specifically among orphaned adolescents and their care-giving families. Accordingly, the findings presented in this paper contribute to the much-needed empirical literature in addressing some of these gaps.

Using a qualitative approach, this paper explores potential for an economic-empowerment intervention in improving educational opportunities and life options of AIDS-orphaned adolescents in Uganda. The paper specifically addresses questions related to: (1) the meaning of education from the perspective of AIDS-orphaned adolescents, their caregivers, and community members; (2) access to education; and (3) participants' perception regarding the role of the economic-empowerment intervention SEED in influencing educational opportunities of AIDS-orphaned children.

Methods

Intervention

To enhance educational opportunities of AIDS-orphaned adolescents, a novel family-based economic intervention was designed and pilot tested in Rakai District of southern Uganda (2004-2005). The pilot intervention study tested an economic empowerment model called SEED (Save for Education, Entrepreneurship and Down payment) and included 96 AIDS-orphaned adolescents from seven comparable primary schools. The selected semi-urban public schools had a student body with similar socio-economic characteristics and demonstrated similar performance on the national standardized Primary Leaving Examinations (PLEs). Eligibility criteria included: (1) being between the ages 12 and 17, (2) having lost one or both parents to AIDS, and (3) being enrolled in the last 2 years of primary

school (even though possibly not attending regularly). Adolescents in the intervention study were, on average, 13.8 years old, primarily female (69.8%) and 37.5% were double orphans (having lost both biological parents).

The study used a group-randomized design with randomization conducted at the school level to minimize cross-arm contamination. Four schools were randomized to the experimental group (n=50 adolescents) and three schools were assigned to the control group (n=46 adolescents). AIDS-orphaned adolescents from control and experimental conditions received a traditional set of care and support services available to orphaned children in Rakai District (F. Ssewamala, Alicea, Bannon, & Ismayilova, 2008). Specifically, the traditional set of care included food aid, scholastic materials, peer counseling, and health education. In addition to the usual care, AIDS-orphaned adolescents in the experimental condition received an economic empowerment intervention, which included a Child Savings Account (hereafter CSA) and six 2-hour classes on career planning, career goals, microfinance, and financial well-being. Each family in the intervention group was encouraged to save in a CSA, and their savings, up to an equivalent of \$20 a month, were matched by the SEED intervention by a ratio of 2:1. The matched savings accounts held in the child's name were managed jointly by the caregiver and the child and caregivers were encouraged to contribute toward this account. The money saved in the SEED CSA was restricted to paying for either post-primary education or for starting a small business (for a detailed description of the intervention see (Ssewamala et al., 2008; Ssewamala & Ismayilova, 2009).

The SEED intervention attempts to address the poor educational achievements and health risks resulting from poverty and limited life opportunities. The idea of CSA is based on Michael Sherraden's asset theory, which posits that the ownership of assets motivates a person to overcome obstacles and thrive towards success, thus expanding one's outcomes beyond school enrollment (Sherraden, 1991). Families in the experimental group, on average, saved an equivalent of US\$8.85 monthly. With matching rate of 2:1, the average participant accumulated US\$26.55 monthly or US\$318.60 per year, an amount sufficient to cover two years of secondary education in a low-income country like Uganda (Ssewamala et al., 2008).

Data source

The pilot randomized clinical trial SEED included 96 adolescents and collected primarily quantitative data in 1-hour interviewer-administered survey with each adolescent at baseline, 6-month and 12-month follow-ups. The outcomes of the intervention study included savings and asset-accumulation data, educational outcomes (school enrollment, school attendance, grades on the national PLE exam, and educational aspirations after primary school) and sexual risk taking (engagement in sexual activity, unsafe sexual behaviors, HIV knowledge and attitudes). The quantitative analysis demonstrated that AIDS-orphaned adolescents in the experimental condition reported a significant increase in educational plans and improvement in HIV prevention attitudes (Ssewamala et al., 2008). Having access to an economic empowerment program increased orphaned adolescents' aspirations for the future.

A separate qualitative study, presented in this paper, was conducted in the summer of 2007 to supplement quantitative information and enrich understanding of the pilot SEED intervention. The follow-up qualitative study included 29 in-depth interviews with the SEED study adolescent participants, their caregivers and select community leaders in the study area.

The pilot SEED intervention study and follow-up qualitative study laid ground for the Suubi ('Hope') and Suubi-Maka ('Hope for Families') interventions using similar economic empowerment model of care and support for orphaned children in Uganda

(ClinicalTrials.gov ID: NCT01163695 and NCT01180114, respectively). Detailed information about the Suubi study is available elsewhere (Ismayilova, Ssewamala, & Karimli, 2012; Ssewamala & Ismayilova, 2009; Ssewamala, Han, Neilands, Ismayilova, & Sperber, 2010).

Sample

The sample for qualitative study consisted of: (1) eleven adolescents who participated in the SEED study; (2) four caregivers of adolescents from the experimental group; and (3) fourteen community leaders with knowledge of the SEED intervention. Maximum variation sampling (Patton, 2002), a type of purposive sampling techniques, was used to solicit diverse opinions about educational experiences and the SEED intervention. From a list of all experimental group participants enrolled in the original SEED study at wave 3 (12-month follow-up), we randomly selected seven adolescents (adolescents with CSA)—four girls and three boys (see Table 1). We oversampled participants from the experimental group to collect more information about the intervention. From the control group participants enrolled in the SEED study at wave 3 (adolescents without the CSA), we randomly selected and interviewed four adolescents. They were all girls. The SEED intervention was designed for school-going orphaned adolescents. Therefore, at the onset of the SEED intervention, all adolescents—both from the experimental and control groups—were enrolled in last two years of primary school. Twenty-four months later, at the time of the qualitative interviews, none of four girls from the control group selected to participate in the qualitative interviews was enrolled in the secondary school. One was employed as a barmaid, two were single mothers with children, and one was married and working in her husband's small shop. One boy from the control group selected for the qualitative interview could not be located. The interview team was informed by the boy's neighbor that after primary school he (the boy) had dropped out of school and moved to town to look for employment. He was untraceable for interviews.

Four female caregivers of two boys and two girls from the experimental group participated in the interview. Caregivers included two biological mothers and two aunts. Women represent the majority of primary caregivers for orphaned children in Uganda (Karimli, Ssewamala, & Ismayilova, 2012) and no male caregivers were involved in the qualitative study. Community leaders included representatives of local governance (local council III, district chairman), school administration (headmasters, deputy headmaster, and teachers), faith-based institutions (parish priests), and financial institutions (accountant from the participating bank). All individuals consented to participate in the interviews. The study protocol was approved by the respective university's IRB and Uganda National Council of Science and Technology.

Data collection

Interviews with student participants and community leaders were conducted in English whereas interviews with guardians were conducted in Luganda, one of the local languages spoken in the study area. To reduce social desirability bias, interviews were conducted by two trained research assistants not involved in the delivery of intervention. A semi-structured interview guide was designed by the investigative team and covered topics related to savings and money, adolescents' educational goals and plans, school attendance and performance, risk taking behaviors, and perception of the SEED intervention. Examples of specific questions included: What were your initial reactions to SEED project? What concerns did you have about the project? How has your opinion of the project changed over time? What do you want (your child) to be when you (he/she) grow/s up? Have you noticed any change(s) in your child's short term and/or long term goals? What changes have you observed in your child's educational goals or school performance, if any? If your child

wasn't in school, what would they be doing now? How do you save money to send children to school? Each interview lasted about 45 minutes. Adolescents were interviewed separately from their caregivers.

Data analysis

All interviews were audio-taped. Each taped interview was transcribed verbatim. A trained research assistant conducted, transcribed and translated the Luganda interviews. The transcribed data was subsequently exported into NVivo-9 software for qualitative analysis. The data was first reviewed to elicit initial thoughts of emerging concepts and themes. Subsequent readings of the data produced a code list culminating in the formation of a list of themes. The coded data was then laid out according to the type of interviewee (adolescent participants, caregivers, or community leaders). The analysis team included two researchers, a research assistant who conducted the interviews and a graduate social work student (all are authors on the paper), who identified common themes and coded the interviews. Using a list of codes generated by the authors, the four analysts coded the same interviews. The results section contains themes, patterns, quotes, and ideas with substantial similarity from at least three of the four analysts' coding. This process was intended to increase inter-rater reliability checks (Boyatzis, 1998). To preserve authenticity of responses the passages provided in the text are direct quotes from participants without any alteration. The names reported in the article are fictional.

Results

Value of education

Education as a step toward successful future for orphaned children—The interviews demonstrated that in a rural Uganda community perceives education as highly valuable and a key step toward future success for orphaned children. For example, many caregivers in the study expressed the belief that with “*education comes better life options*”, “*good life*”, and “*successful future*”. The following passage depicts a caregiver's attitude toward educating the orphaned children under her care:

“If she accepts to do well, she will continue in school and will have a good life. I am also working hard to see that I save more money.” (Eva's mother)

Caregivers also believed that education would provide the orphaned children under their care with an opportunity to go beyond low-paid blue collar and/or physical labor jobs. For example, Abbo, a female caring for her late brother's son had this to say:

“I didn't go very far in my education but I like sending children to school. This child is not of my family.... He is my brother's son. I am sure that he will have a good life because he is not making bricks, he did not go hunting... so I think if he continues with his education, he will have a good life in future.” (Wasswa's aunt)

One of the key community leaders emphasized the need for educating orphaned children as one way of taking these children out of poverty and enabling them to keep a job, when they get one.

“Education is an important component of shaping ones future. I'm a retired school teacher I value education so much. I think it's important to educate these [children] so that they can also have a good life so they know how to keep good, how to save money, how to get a job, how they can keep a job” (Kigongo Okupa, community member).

A religious leader also emphasized the importance of education in the changing environment:

“Education is the key to success I think in this era... Formerly people were inheriting wealth from their parents... but now I think wealth is knowledge because with knowledge then they can do anything with their life” (A religious leader, Father Joseph).

It is important to note that it is not only caregivers and community leaders who value education. The orphaned adolescents themselves have a very positive attitude toward the value of education. For example, Eva recognized that attaining an education would enable her to achieve long-term goals: “My favorite subject is history. I want to become a nurse and education will help me in the future.”

Grace, a 15-year old student also in the experimental group, concurs with Eva when, in the following passage, she highlights the importance of education in improving and sustaining the quality of one's life:

“I have never thought of dropping out of school... because it's dangerous.... If you drop [out] of school your future is broken and it will no longer be bright... If you don't study there is no way you are going to earn money for your living or for the family... It's important to get jobs to be in school...if you drop out of school you are not going to have a good job; you will not get a job to earn a living.”

Kyakuwa, a 16-year old student, believes that a good life is contingent upon education:

“I don't think you can enjoy life in the future, when you are not educated. Education is important so that you can get a job and help your family and children and other relatives.”

School as a protective factor for orphaned adolescents

To community members, education serves not only as a solid foundation for the successful future of children, families, and the community at large but it is also a protective mechanism against ‘dangerous’ behaviors and a gateway to missed life opportunities for otherwise at-risk children. Community members believe that schooling is important not only because it advances the orphaned adolescents’ career opportunities, but also because schools keep these adolescents away from the streets and engage them in healthier activities.

“Generally, the situation would have been bad [if he has not been enrolled in school]; he would be one of those arrested in gambling and those who commit crimes. Schools do a lot in protecting children.” (Byamukama's aunt)

Adolescent participants believe that education protects them against very real and serious ‘dangers’ such as: sexually transmitted infections (STIs), early pregnancy, and exposure to social groups engaged in risk taking. Exposure to these ‘dangers’ was seen as a potential obstacle to a full and productive life. Similar to Grace, who had never considered dropping out of school because it would be ‘dangerous,’ Oliver, another student receiving the SEED intervention, speaks out against school drop-out because of its protective force:

“I have never thought about dropping out of school because it is very bad. When someone drops out of school, they may get dangers, they may get diseases. The dangers...first, when someone drops out of school...[he/she] loses education... may get HIV, STDs, and even early pregnancy. It is important because someone who is at school can't practice those...can't be with friends or peers, who can make you get STDs. When someone studies well, he or she gets a job...learns more about the future and the environment than those who stay home.”

Other students shared similar beliefs in regards to school drop-out, which they consider a gateway to a difficult and challenged life. This is what they had to say:

“I have never thought about dropping out of school. It is important to stay in school because you can get knowledge to attain a career. Some of the kids who drop out often get pregnant, acquire HIV/AIDS.” (Namusisi, female student)

“[D]angers... I may stay gambling, getting caught into different things like trying to cheat people and the future may not be easy for me.” (Byamukama, male student)

Indeed, despite many socioeconomic challenges orphaned adolescents face, they understand that if given the opportunity, school drop-out should not be an option in their lives. They need to stay in school if they are to have a shot at “successful living in the future.”

Access to education

Financial obstacles to staying in school—While education appears to be important to each participant, some SEED participants discussed the difficulty of striking a balance between education and money, a reality most families in this rural poor community face. While universal primary education (UPE) is free, the cost associated with securing books and uniforms bear such financial burden upon the family that caregivers cannot afford to send their children to school. An elected district leader reports:

“Even children in UPE have got problems because UPE is not totally free education. Parents or those people adopting children must contribute something. They have to buy uniforms, they have to buy exercise books, pens and more than that, they have to provide lunch. Even in the UPE these are major requirements. So sometimes we find children who cannot even access those. So they come to school without books, without pens, without uniforms, and worst of all, without lunch. So this is a major challenge...”

A school headmaster (school principal) explains that allocating money for school expenses becomes even more difficult for children whose parents have died and who may be raising younger siblings on their own:

“So you see some of these orphans come from what we call child-headed families that is, they don't have a father, they don't have a mother, they don't have an aunt, they don't have a grandmother... They are the orphans who are in the family alone... They are orphan-headed families. So those ones have got a problem, for example, in getting uniforms, in getting lunch; sometimes they fail to come with packed lunch and at times they fail to get scholastic materials like books, pens because actually do not have any assistance.”

Furthermore, caregivers perceived tuition fees as another barrier that prevents their children from continuing education. As secondary education is not free, caregivers attribute their inability to send their children to secondary school to lack of financial support. A caregiver explains: “I am looking after two kids. Both of them are orphans ...I have some money saved but if it gets finished, she might stop schooling.” Another caregiver illustrates the difficulty of providing for all children in the family and particularly for orphaned children:

“I have 6 kids of my own and am taking care of 5 orphans. So I have a total of 11 kids. I have 2 kids in primary, 3 in secondary and 2 at Makerere [authors: national university]. If you put aside the orphans I am taking care of.... For those ones [biological children], we work together with their father and pay their school fees. But the other, I have to mobilize money from different sources like asking from other relatives...”

Adolescents are also aware that the lack of funds may prevent them from receiving an education. Oliver describes her fears about schooling:

“I will achieve my goal through reading my books, through asking what I don't know to the teachers. The problems may be lack of enough school fees...”

Some adolescents who participated in interviews had already dropped out of school. Their responses reflected an unfortunate familiarity with the reality that inability to pay school fees meant the end of schooling. Like many others, when Babirye, a female adolescent from the control condition, was asked why she was no longer in school, Babirye responded: “*I lacked school fees.*”

School teachers and education administrators expressed frustration about their inability to assist needy children. One school teacher describes his community's inability to assist financially struggling families in the following words:

“In fact we also we get challenges because sometimes a child can come to a teacher or to anybody and he tells you... '[Y]ou see master even if I complete this primary 7, I will go nowhere because my parents have no money.' So you see there is no way you can assist that girl. There is no way you can assist her because also you don't have any assistance.”

A caregiver confirms the lack of available community options and resources for families who are taking care of orphaned children: “This kid became an orphan at 6 years. I have a kid who is in senior 6, I have tried in many organizations but I didn't get any help.”

School drop-out: consequences of unavoidable choices—Both caregivers and adolescents talk with regrets about not being able to continue with education. Babirye, dropped out of school several months before the interview. In her interview, she highlighted the impact financial challenges have on orphaned children's ability to afford an education in Uganda, despite the existence of a UPE policy:

“I lacked school fees so I was sitting at home, and then afterwards I got a job here. My [caregiver] used to tell me that there is no money. [Now] I work here at the fridge and I'm selling sodas. I'm working; if I get some more money, then I'll be able to go back to school in the future.”

Nakatto, a 14 year old girl from the control condition, had to withdraw from school because she got pregnant. While acknowledging the necessity to work in order to provide for the family, the attainment of education remains a dream for her. Nakatto shares: “After some time...I would like to go back to school, so that I continue with my education... I like both the shop [a small business] and going back to school.”

Agnes, another participant from the control condition who had dropped out of school and gotten married by the time of the interviews, detailed the challenges of not having financial means to pursue an education. “I live here, here, Kalisizo. I live with my husband. I didn't have money. There was no money and I could also see it [so could not go beyond primary 7). I work here in this shop. It's my husband's shop ... I was still interested in continuing my education [authors: at the time she dropped out].” When asked about her future plans, Agnes responded: “Plans...? Which plans?! ...Looking for money... money to take care of myself.”

When prompted to discuss their attitudes toward education, some caregivers reflected upon their own missed opportunities for an education (due to various factors) and, therefore, knew, from personal experience, the challenges their children would go through if they did not have an education. Namusisi's mother explained why she wanted to ensure that her orphaned daughter acquired an education:

“You know what...you feel the pain of not getting [an] education when you grow up. Now, like me who never went to school, I regret having not continued with my

studies... But for me, I lacked school fees to continue. So what I want is that even if I die, she [my daughter] will still be in position to have a good life.”

Overall, although dropping out of school was not a desirable choice for all interviewed participants, it seemed to be an unavoidable step for some given the circumstances, especially in regards to lack of financial security. Nevertheless, even adolescents who drop out of school still nurture the idea of completing their education.

Perceived role of the SEED intervention

Three major groups of outcomes emerged, out of the themes from the participants’ responses, as being attributable to the SEED Intervention. These are: 1) easing the economic challenges faced by orphaned adolescents and their caregiving families; 2) stabilizing school attendance and supporting the value of education, and; 3) impacting participating orphaned adolescents’ behavior and providing them with life opportunities.

Easing the economic challenges—Participants indicated that economic challenges bar many orphaned children from achieving an education. Eva, who lives 3 km away from her school, walks to school every day and one day wants to go to Makerere University (the national university). She believes that SEED intervention will help her become a nurse because the intervention partners with care-giving families to pay for school fees.

Byamukama, who lives with his aunt, two brothers and two sisters, wants to complete his studies and become a teacher so that he can teach the younger generations. According to him, “SEED project helps in paying 2/3 of my school fees. I’m able to go to school. If it wasn’t for SEED project, I wouldn’t be in school.”

Namusisi, who lives with her mother, also shared her views about the opportunities provided by the intervention:

“[I want] to be a doctor and go to university. I need to read books and be serious about my studies to achieve my goal and to get knowledge. The project has helped me a lot with my studies. I think that I will continue with my education, that money will help me pay my school fees. The match encourages [me] to save more. My mother makes pancakes and chapatti and that’s where she gets the money to save.”

Several other study participants shared similar life and educational aspirations—partly attributable to financial support and involvement with SEED. Wasswa, for example, wants to go to university and get a diploma and has career plans of being a bank cashier. In Wasswa’s own words, SEED will help him “save the money in the bank... and use the money to study.” Wasswa goes on to say that since being recruited for the SEED study, he has never thought of dropping out of school.

All four caregivers who participated in the study expressed their desire and determination to save money to ensure that the orphaned children under their care received an education, even amidst family financial challenges and/or difficulties:

“I will fight for it and see that he remains in school because if he drops out at this time all my energy from the past will have been wasted. So right now I can look for money and work hard, [even] if it means borrowing from friends. I [have] to ensure that he doesn’t sit at home. I like it and I will try and see, even if I get 5,000 Uganda Shillings [authors: an equivalent of about USD 3], I will deposit it there.”
(Byamukama’s aunt)

Several caregivers highlighted the role of SEED in easing their economic challenges, allowing them an opportunity to save money and afford to educate their children. As one

caregiver described: “Money is a problem and school fees; this project has helped a lot getting the money”. Furthermore, caregivers reported feeling more confident about saving. For example, Eva’s mother explained that saving money was a novel concept that she would put effort towards maintaining:

“I did not save any money before. Whatever I got, I would just spend it. [The project] made it easy for me. I hope that if she accepts to do well, she will continue school and will have a good life and I am also working hard to see that I save more money. I wanted my child to be a nurse or even a doctor if possible, but as regards to my income, I will manage to pay for nursing.”

Further, by easing the economic challenges faced by most caregivers to save and afford an education for the orphaned children under their care, the intervention allowed the families to keep their children in school, which in turn enhanced their sense of pride as they were fulfilling their role as caregivers.

“Actually I thought I had no money to save. Whenever I could get money, I used to put it back in my business and buy some other things. The project has helped me a lot because I can now save money, something which I could not do or even think about before. I get something useful whenever I save money. I get money to pay for school fees. I am the one taking care of him [the orphaned child].” (Wasswa’s aunt)

Caregivers repeatedly talk about the limited support available in their community to help them care for the orphaned children. As one caregiver emphasized: “I don’t have any other organization that is helping me.” Therefore, by addressing economic obstacles, participants felt that SEED provides opportunities to pursue education for the most disadvantaged, for people who never thought it could be possible.

“The project has helped me a lot because originally I thought that only educated people who speak English use the bank. I didn’t even know how money is deposited, so I have that knowledge now. I changed very much, and I told to some of my friends. My friends had told me these project people were telling lies, since there are many organizations which have come and they have not performed. So everyone got amazed because it was unbelievable that for sure they helped us.” (Byamukama’s aunt)

“She also felt happy and she tells me that she didn’t know that she would be in position to continue with her studies. Right now she is interested... she thinks about education wholeheartedly.” (Namusisi’s mother)

The family and community resources available for orphaned children are scarce and the effect of this paucity is profound. With few options to support their education, orphans are left with almost no chance to succeed. Community members believe that SEED is trying to change the expected trajectory for orphaned adolescents. A school headmaster of one of the participating schools described it as the following:

“These are the children or the orphans who don’t go for higher studies. Of course, they go back in the village(s), they [do] some odd jobs or activities and what have you...some even fail to put up some small projects for financial sort of income... So, the Project has done something good or great because it gave them some money to continue [with] higher education and also gave them support. You see these orphans... they need support from other people...”

Stabilizing academic achievements and supporting the value of education—

According to the caregivers, having means to support secondary education also positively influenced adolescents’ performance and increased their motivation to study harder.

“In general, we didn't have money, UPE was helping our children and we were also reluctant and we said after all it's for free. But now he has put in more effort in his academics, compared to the past. He has this thinking that SEED will not help those who are not performing well but rather those who are doing well. This helps him always to revise his books most of the time, something he wasn't doing before. He has now improved in his work.” (Byamukama's aunt)

Wasswa's aunt also observed a significant change within her child as he placed greater attention on his studies:

“In some subjects, he has improved because he used to like football a lot, but because I try to show him what is on the ground, it seems he has dropped football and now he is focusing on his books... So he has proved that he is interested.”

Community members and caregivers suggest that children were not initially motivated to perform well in primary school, perhaps because they realistically anticipated that they would not be able to enter secondary school. The fact that participants could not envision any real opportunities for advancing their education in the future affected their academic performance - even at the primary school level. A parish priest commented in regards to the role of SEED in motivating children to perform better at school: “People involved in [SEED] project study better...maybe because [the] project gave them hope for the future.”

A headmistress of a primary school explicitly indicated how, in her view, the SEED intervention had contributed to enhancing the value of education among orphaned children in her school and contributed to the improvements in their academic performance. The following reflects her opinion that because students know they have a chance at secondary education in the future, they begin to make changes as primary school students:

“It has helped our pupils. Some pupils...are able to join senior secondary [...] Their performance was not very good but now they are performing [well] because they know they are going for higher studies. The project is good...”

In addition to inability to afford school fees that was addressed by the SEED intervention, orphanhood status and being raised by extended family members affects adolescents' school participation and performance. A primary school headmaster explained:

“In our school we have almost half of them [auth. children] are orphans. Due to the fact that AIDS started around this district, many parents died... mothers and fathers and even cousins died, so almost half of the school are orphans. Their attendance is not good because as some of them may live with their cousins, grandmothers, and grandfathers. So sometimes they tend not to come because of certain problems at home, maybe those people are sick and they keep them home sometimes. The parents don't mind about them so much as they are not the real fathers and real mothers, so it's a problem of absence in their attendance in the classes.”

The headmaster went on to suggest that supportive relationships and closer supervision and monitoring, that orphaned adolescents usually lack, could further increase their school involvement and future aspirations: “It is hard because if they don't have a supporter, then it is very hard to go for further studies... so that they need to be helped somehow, but many of them are willing to see that they go to that secondary school, but the logistics does not allow.”

Impacting participating orphaned adolescents' behavior—In addition to increasing educational opportunities, community leaders claimed that the intervention had positively affected orphaned adolescents' behavior. Enrollment in the SEED intervention corresponded with more responsible behavior, better discipline, and avoidance of risk taking

as adolescents shifted their focus to their studies. On this topic a head teacher said the following:

“There is some kind of change... they [orphaned adolescents in SEED]...actually know they will not be sent away from school [authors: being unable to pay school fees] so they are constant at school and you find that one helps them a lot... not only [in] academics but also [with] discipline itself... You find that these students, who are actually being sponsored by SEED, their discipline is quite good and we pray that it continues that way.”

A school teacher implied that the reason for the improved behavior and academic discipline may be because the orphaned adolescents in SEED realize that someone (specifically the SEED staff) are showing care and support for them. This is how the teacher stated it:

“We have noticed the change in the academics. They are trying their level best. At first they were irregular but as they are monitored time and again they are at school and there is no way and at no time you can find them absent at school because they are monitored and they are encouraged to come to school that is why they are now changing academically and not only academically even discipline wise they are trying their level best because they are seeing that they have somebody or some people who are caring about them so they have changed totally.”

On the issue of discipline, Wasswa's aunt said the following:

“I have noticed a big change in him, which means that what they tell him, in addition to what we tell him, has helped him and I hope he will continue that way. I think that if the child gets advice from one person over and over again, he may not be in position to change. But if gets to listen to another person and see another face, then I think it makes him a good person.”

Furthermore, educators believe that the fact that children were active participants in the intervention may have contributed to the noticeable positive outcomes and to the success of the intervention.

“Actually with that idea [a matched savings account] I saw that pupils will really work hard, especially academically, because they are doing some contribution towards their education see the bad thing is giving 100% support people don't put their effort but now as they contributing themselves that's what we call community contribution they are really they are really put much emphasis or effort on what they are doing even academic studies because they are also contributing towards their wellbeing and their future.”(A headmaster for one of the SEED schools)

Sustainability of SEED approach—Finally, participants appreciate that the SEED intervention does not just give an opportunity for adolescents to enroll in school, but also provides a more sustainable approach to care and support for orphaned adolescents.

“For this particular kid, I worry less because even if the project ends and he stops in senior 4, I can as well put him in a technical school because of the money saved. That's why I don't withdraw the money because I want to use it when he gets to a higher level. I have kids in higher levels, so I know what it means and the difficulties that I go through.” (Wasswa's aunt)

Caregivers also report on the change that the intervention had on them and on the continuity of the SEED effects even if intervention is discontinued: “That's very good, I can't stop saving, I will continue saving.”

Overall, orphaned adolescents, caregivers and community members (including community leaders) appreciated the ‘cost-sharing element of SEED,’ which they envisioned as something that would lead to sustainability and long-term outcomes. This particular component of the intervention was highlighted by many of the interviewees as a unique feature—compared to other orphan-care programs in Uganda. For example, one of the community leaders—a Parish Priest, said:

“Comparing...other communities [they] had another approach; there was not much involvement on the part of the beneficiaries. SEED is involving them [and] they have to do something so as to better their lives... but other communities, especially other NGOs, were mostly involved in giving health services, giving food, basics... which in a way can get old or can be depleted... but SEED is involving them and is not a short term project... it is long term even if SEED stops, the kid now has a purpose to live for... and I think that is the basic difference.”

Nevertheless, the study demonstrated that some challenges remain in adapting an economic empowerment intervention to the unstable economic environment of low-income countries. Ms. Abbo, Wasswa's aunt, shared how the difficulties of rearing animals, the primary source of livelihood for many Ugandans in rural areas, affect her participation in the project and ability to contribute financially.

“I keep pigs. Although sometime back many of them got sick and I lost them, what I would have sold at 100,000 [auth, Ugandan shillings/US\$], I only sold it at 20,000 [US\$] and others died. So I keep pigs, now I have 6 of them. I would be saving more money in the bank, but I still have a problem of looking after these kids. Because you may find that sometimes you might be looking for 30,000 [US\$] to deposit on the account, then the other one comes back to ask for school fees. So I deposit between 10,000 [US\$] and 8,000 [US\$] a month. A pig takes 3 months to give birth, but when I lost a number of them, I turned to young piglets, so right now I am trying to feed them...but let me say that per month if I add up, I can deposit 10,000 [US\$]. What I would want is that...we still have problems with money that whenever you deposit money, you find that there are other requirements at school other than school fees. For example uniforms, books and you cannot withdraw the money because you fear that they may not find the balance and hence lose the match.”

The Parish priest also pointed out that unstable economic situation in the country and weak financial institutions and regulations may also affect the outcomes of an economic empowerment intervention.

“Here, the banking system is not so stable and our economy fluctuates now and again, so if anything involves loaning, you cannot be sure whether the program will succeed. Usually our prices fluctuate and even the value of our money falls... bad especially with unstable economy.”

Discussion

The qualitative interviews with adolescents and adult residents of a rural Ugandan District demonstrate that education is highly valued in the community. Caregivers are willing to send their children to school and youth are eager to learn. Economic limitations, on the other hand, are often mentioned as major obstacles for pursuing secondary education and primary reasons for dropping out of school. The interviews demonstrated that access to education was often linked to poverty and inability of families to buy even food. Orphaned children usually do not want to drop out school, but they often have to because of their families' inability to meet the cost of schooling. Studies from other sub-Saharan countries confirm

this finding and also suggest that financial barriers are among the most common reasons why orphaned children are not enrolled in school (Bhargava & Bigombe, 2003; Deininger, Garcia, & Subbarao, 2003; Nishimura, Yamano, & Sasaoka, 2008). Inability to pay fees and stay in school results for many girls in early marriage and pregnancy (Kasente, 2003). At the time of the qualitative interviews--two years after the completion of randomized clinical trial, the female participants from the SEED's control group were not enrolled in secondary school and were married or raising their own children. As is evident from the interviews, adolescents recognize the risks of dropping out of school and look forward to the benefits of staying in school. It is important that their families in the rural communities be supported so that orphaned adolescents may access secondary education and take advantage of these benefits.

Being aware of limited family resources and realistically assessing chances of affording tuition fees, adolescents are discouraged from pursuing advanced levels of education. As reported by community members, the SEED intervention provides a unique and tangible opportunity for AIDS-orphaned adolescents and their caregiving families to receive secondary education that is otherwise unavailable to them. By providing real tools to afford enrollment in secondary school, the intervention helped some families keep their children in primary school and prevent school drop-outs. Following the implementation of SEED, caregivers have witnessed a noticeable difference in their children in terms of overall attitudes toward education and academic discipline. For some adolescents, involvement in the SEED intervention has meant improved academic performance.

Qualitative data in this study offered possible explanations to the findings of quantitative studies, which demonstrated significantly higher academic performance, measured by the score on the national standardized PLE exam, and greater educational aspirations (plans to pursue higher education and certainty about these plans) among SEED and Suubi participants when compared to adolescents from a control group receiving only traditional services for orphaned adolescents without an economic empowerment component (Curley, Ssewamala, & Han, 2010; Ssewamala et al., 2008; Ssewamala & Ismayilova, 2009). It is possible that when adolescents perceive a realistic chance of being able to continue their education beyond primary school, they feel encouraged to perform well in anticipation of future success. This is in contrast to adolescents who may sense that there is no hope of continuing beyond primary school because their families will not be able to afford secondary education. Consequently, they are not motivated to excel in their studies at the primary school level and not concerned that their academic performance will affect their chances of getting into the secondary school.

Throughout the SEED intervention, project staff met with participating adolescents and their caregivers monthly to review financial statements from the bank and discuss their progress. Caregivers and community members suggested that additional monitoring and genuine involvement and interest in orphaned adolescents' lives could have also contributed to their improved performance and increased motivation for education. Lack of parental supervision, modeling and mentoring was mentioned by other studies as an additional risk factor that affects functioning of orphaned adolescents compared to their non-orphaned peers (Foster, 2004; Ismayilova et al., 2012; Nyamukapa & Gregson, 2005).

Furthermore, community members felt that SEED offered more to their children than the opportunity to stay in school. The economic approach of saving money in the bank was deemed effective and useful, as it allowed for investment in long-term community goals and outcomes. Parents and adolescents felt that SEED offered life opportunities because access to education determines the course of one's life: whether one receives a good job in the future or whether one lives in poverty and disease. Echoing the quantitative findings from

the pilot SEED and follow-up Suubi study using the same economic-empowerment intervention approach (Ssewamala et al., 2008; Ssewamala & Ismayilova, 2009), community members observed that SEED not only contributed to improved educational outcomes, but also seem to be reducing adolescents' sexual health risks. Partially due to the young age of study participants at the time of intervention study, very few adolescents reported being sexually active and sexual risk behaviors were not analyzed. The quantitative outcome studies tested the effect of SEED and Suubi interventions on HIV knowledge and HIV attitudes (Ssewamala et al., 2008; Ssewamala & Ismayilova, 2009; Ssewamala, Han, et al., 2010; Ssewamala, Ismayilova, et al., 2010). Given that both control and experimental group participants received health education information as a part of the usual care services, there were no significant differences in the HIV knowledge. However, participants from the experimental group demonstrated stronger HIV preventive attitudes favoring sexually protective behaviors. Possibly, having economic assets to support secondary education, gives adolescents a sense of hope for better future, opens up new opportunities beyond early employment and early marriage, encourages protective choices and helps stay away from risk-exposure situations.

This qualitative study, however, has a number of limitations. The original study and follow-up qualitative interviews were conducted only in one district of Uganda and the situation there may not reflect experiences across the country. Language barrier and low literacy prevented researchers from including a larger number of caregivers in the qualitative study. In addition, the study only included female caregivers and the male caregiver perspective is missing from this discussion.

Furthermore, the qualitative study was conducted two years after the original randomized clinical trial testing the intervention and did not collect information about the school enrollment status of all participants from the control and experimental groups. During the randomized clinical trial all participants were enrolled in the last two years of primary school, which is free in Uganda. Four randomly selected participants from the control group were not enrolled in the secondary school at the same of the qualitative study. The qualitative study does not aim to compare the school enrollment status of control versus experimental group participants. However, in Uganda, where secondary education is not free, it is realistic to expect that enrollment in secondary school is limited among orphaned adolescents from impoverished families.

In addition to the secondary school enrollment status, information about other outcomes such as employment at an early age, pregnancy and marriage reported during the qualitative interviews, is not available for all participants from the original clinical trial. We are unable to compare the proportion of control and experimental group participants who had children or were married two years after the clinical trial beyond participants who participants in the qualitative interviews. While the SEED intervention was designed for school-going children, qualitative findings indicated the need to focus future investigations on children who dropped out of school but are willing to resume studies.

Finally, participants shared predominantly positive feedback about the intervention. According to the study participants, receiving direct benefits from the project—funds to attend school—greatly distinguishes this project from others. This can explain appreciation and gratefulness of impoverished families for any tangible support they are able to receive in a poor-resource setting. In addition, cultural norms may have precluded community members from expressing negative opinions or raising concerns about people or institutions that are providing care and support.

Indeed, since a considerable number of caregivers are unable to send their orphaned children to schools, CSAs provided a unique opportunity to afford the cost of education, otherwise out of reach of these families (Curley et al., 2010). Developing effective interventions to keep millions of orphaned adolescents in school is a priority for many governments and international organizations (Deininger et al., 2003; Matshalaga & Powell, 2002). As community members in Rakai District of Uganda described, education is a means of ensuring a successful future for orphaned children. Keeping orphaned adolescents in schools reduces their risks of poverty in the future (Bell, Devarajan, & Gersbach, 2006), prevents them from engaging in risk-taking behaviors, including early and unprotected sex (Gregson et al., 2005; F. Ssewamala & Ismayilova, 2009; Ssewamala, Han, et al., 2010; Ssewamala, Ismayilova, et al., 2010), which may reduce their risk for HIV infection, and, all in all, contributes to building nations' human capital (McDonald & Roberts, 2006). Economic interventions provide tangible support to care-giving families otherwise not available in the community. Providing economic assets to families and communities contributes to ending the cycle of poverty and dependence on reactive services such as provision of food aid, scholastic materials, and counseling. Thus, incorporating economic components in the care and support for orphaned adolescents demonstrates a potential for developing sustainable interventions using preventive approach and aiming to achieve long-term outcomes. Nevertheless, the qualitative study demonstrated the importance of strengthening supportive relationships available to orphaned adolescents in order to maximize the outcomes of an economic-empowerment intervention. Based on these suggestions, the Suubi and Suubi-Maka interventions included a peer-mentorship component and strengthened caregiver involvement by conducting financial education workshops jointly for children and their caregivers (Ismayilova et al., 2012; Ssewamala & Ismayilova, 2009; Ssewamala, Ismayilova, et al., 2010). Finally, to be effective and sustainable, economic empowerment interventions should develop flexible implementation mechanisms adjusted to the unstable and constantly changing economies of developing countries.

Conclusion

Having a large number of orphaned adolescents unable to attend school diminishes prospects for social and economic progress of an entire community. The economic-empowerment intervention SEED may offer a number of opportunities for program developers and policy makers who strive to help orphaned adolescents fulfill their potential. The study illustrates that education is highly valuable among orphaned adolescents and their care-giving families in rural Uganda; however, the barrier to pursuing education is high. The SEED intervention may provide a realistic opportunity for orphaned adolescents to overcome the challenges in meeting their educational and career aspirations, which in turn may protect them from risk behaviors.

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References

- Bell C, Devarajan S, Gersbach H. The Long-run Economic Costs of AIDS: A Model with an Application to South Africa. *The World Bank Economic Review*. 2006; 20(1):55–89.

- Bhargava A, Bigombe B. Public policies and the orphans of AIDS in Africa. *British Medical Journal*. 2003; 326(7403):1387–1388. [PubMed: 12816831]
- Birdthistle I, Floyd S, Nyagadza A, Mudziwapasi N, Gregson S, Glynn JR. Is education the link between orphanhood and HIV/HSV-2 risk among female adolescents in urban Zimbabwe? *Social Science & Medicine*. 2009; 68(10):1810–1818. [PubMed: 19303688]
- Boyatzis, R. *Transforming qualitative information: Thematic analysis and code development*. Sage Publications; Thousand Oaks, CA: 1998.
- Burke K, Beegle K. Why children aren't attending school: The case of Northwestern Tanzania. *Journal of African Economies*. 2004; 13(2):333–355.
- Case A, Paxson C, Ableidinger J. Orphans in Africa: parental death, poverty, and school enrollment. *Demography*. 2004; 41(3):483–508. [PubMed: 15461011]
- Cluver L, Gardner F. Risk and protective factors for psychological well-being of children orphaned by AIDS in Cape Town: A qualitative study of children and caregivers' perspectives. *AIDS care*. 2007; 19(3):318–325. [PubMed: 17453564]
- Curley J, Ssewamala F, Han C. Assets and educational outcomes: Child development accounts (CDAs) for orphaned children in Uganda. *Children and Youth Services Review*. 2010; 32(11):1585–1590. [PubMed: 21076646]
- Deininger K. Does cost of schooling affect enrollment by the poor? Universal primary education in Uganda. *Economics of Education Review*. 2003; 22(3):291–305.
- Deininger K, Garcia M, Subbarao K. AIDS-induced orphanhood as a systemic shock: Magnitude, impact, and program interventions in Africa. *World Development*. 2003; 31(7):1201–1220.
- Evans D, Miguel E. Orphans and schooling in Africa: A longitudinal analysis. *Demography*. 2007; 44(1):35–57. [PubMed: 17461335]
- Foster, G. Safety nets for children affected by HIV/AIDS in Southern Africa.. In: Pharoah, R., editor. *A generation at risk: HIV/AIDS, vulnerable children and security in Southern Africa*. ISS; Capetown, South Africa: 2004. p. 65-92.
- Gregson S, Nyamukapa C, Garnett G, Wambe M, Lewis J, Mason P, Anderson R. HIV infection and reproductive health in teenage women orphaned and made vulnerable by AIDS in Zimbabwe. *AIDS care*. 2005; 17(7):785–794. [PubMed: 16120495]
- Hallfors D, Cho H, Rusakaniko S, Iritani B, Mapfumo J, Halpern C. Supporting adolescent orphan girls to stay in school as HIV risk prevention: Evidence from a randomized controlled trial in Zimbabwe. *American Journal of Public Health*. 2011; 101(6):1082–1088. [PubMed: 21493943]
- Ismayilova L, Ssewamala FM, Karimli L. Family Support as a Mediator of Change in Sexual Risk-Taking Attitudes Among Orphaned Adolescents in Rural Uganda. *Journal of Adolescent Health*. 2012; 50(3):228–235. [PubMed: 22325127]
- Kakooza J, Kimuna S. HIV/AIDS Orphans' Education in Uganda. *Journal of Intergenerational Relationships*. 2006; 3(4):63–81.
- Karimli L, Ssewamala FM, Ismayilova L. Extended families and perceived caregiver support to AIDS orphans in Rakai district of Uganda. *Children and Youth Services Review*. 2012
- Kasente, D. *Gender and Education in Uganda.. Background paper for the UNESCO 'EFA Global Monitoring Report 2003/4: Gender and Education for All: The Leap to Equality*. 2003. Retrieved from <http://unesdoc.unesco.org/images/0014/001467/146790e.pdf>
- Matshalaga N, Powell G. Mass orphanhood in the era of HIV/AIDS. *British Medical Journal*. 2002; 324(7331):185–186. [PubMed: 11809631]
- McDonald S, Roberts J. AIDS and economic growth: A human capital approach. *Journal of Development Economics*. 2006; 80(1):228–250.
- MoE&S. *Education For All. The Year 2000 Assessment. Report of Uganda*. 2000. Retrieved from <http://www.unesco.org/education/wef/countryreports/uganda/contents.html>
- MoE&S. *The Development of Education in Uganda in the last ten years*. 2001. Retrieved from <http://www.ibe.unesco.org/International/ICE/natrap/Uganda.pdf>
- Nishimura M, Yamano T, Sasaoka Y. Impacts of the universal primary education policy on educational attainment and private costs in rural Uganda. *International Journal of Educational Development*. 2008; 28(2):161–175.

- Nyamukapa C, Gregson S. Extended family's and women's roles in safeguarding orphans' education in AIDS-afflicted rural Zimbabwe. *Social Science & Medicine*. 2005; 60(10):2155–2167. [PubMed: 15748665]
- Okumu, I.; Nakajjo, A.; Isoke, D. Socioeconomic determinants of primary school dropout: the logistic model analysis Vol. 7851. 2008. Retrieved from http://mpa.unimuenchen.de/7851/1/MPRA_paper_7851.pdf
- Oleke C, Blystad A, Fylkesnes K, Tumwine J. Constraints to educational opportunities of orphans: a community-based study from northern Uganda. *AIDS care*. 2007; 19(3):361–368. [PubMed: 17453570]
- Operario D, Cluver L, Rees H, MacPhail C, Pettifor A. Orphanhood and completion of compulsory school education among young people in South Africa: Findings from a national representative survey. *Journal of Research on Adolescence*. 2008; 18(1):173–186.
- Owens V. Values disparity and academic achievement among Ugandan adolescents. *Journal of Beliefs and Values*. 2005; 26(3):311–315.
- Patton, M. *Qualitative research and evaluation methods*. Sage Pubns; 2002.
- Sherraden, M. *Assets and the poor: A new American welfare policy*. ME Sharpe Inc.; 1991.
- Ssewamala F, Alicea S, Bannon W, Ismayilova L. A novel economic intervention to reduce HIV risks among school-going AIDS orphans in rural Uganda. *Journal of Adolescent Health*. 2008; 42(1): 102–104. [PubMed: 18155037]
- Ssewamala F, Ismayilova L. Integrating Children's Savings Accounts in the Care and Support of Orphaned Adolescents in Rural Uganda. *Social Service Review*. 2009; 83(3):453–472. [PubMed: 20445763]
- Ssewamala F, Wang JS-H, Karimli L, Nabunya P. Strengthening Universal Primary Education in Uganda: The potential role of an asset-based development policy. *International Journal of Educational Development*. 2011; 31(5):466–471. doi: 10.1016/j.ijedudev.2010.11.001.
- Ssewamala FM, Han CK, Neilands TB, Ismayilova L, Sperber E. Effect of economic assets on sexual risk-taking intentions among orphaned adolescents in Uganda. *American Journal of Public Health*. 2010; 100(3):483–488. [PubMed: 20075323]
- Ssewamala FM, Ismayilova L, McKay M, Sperber E, Bannon W Jr, Alicea S. Gender and the effects of an economic empowerment program on attitudes toward sexual risk-taking among AIDS-orphaned adolescent youth in Uganda. *Journal of Adolescent Health*. 2010; 46(4):372–378. [PubMed: 20307827]
- UBOS. Macro International Inc.. Uganda Demographic and Health Survey 2006. 2007. Retrieved from <http://www.measuredhs.com/pubs/pdf/FR194/FR194.pdf>
- UNAIDS. UNICEF. USAID. Children on the Brink 2004: A Joint Report of New Orphan Estimates and a Framework for Action. Population, Health and Nutrition Information Project for United States Agency for International Development (USAID); Washington, DC: 2004. p. 8
- UNDP. Millennium Development Goals - Uganda's Progress Report 2007. United Nations Development Programme - Uganda; Kampala: 2007a. p. 84
- UNDP. Uganda Human Development Report 2007: Rediscovering agriculture for human development. United Nations Development Programme - Uganda; Kampala, Uganda: 2007b. p. 136
- UNICEF. Africa's Orphaned and Vulnerable Generations: Children affected by AIDS. 2003. Retrieved from http://www.unicef.org/publications/files/Africas_Orphaned_and_Vulnerable_Generations_Children_Affected_by_AIDS.pdf
- UNICEF. Africa's Orphaned and Vulnerable Generations: Children affected by AIDS. 2006. Retrieved from http://www.unicef.org/publications/files/Africas_Orphaned_and_Vulnerable_Generations_Children_Affected_by_AIDS.pdf
- UNICEF. State of the World's Children 2011: Adolescence, an Age of Opportunity. 2011. Retrieved from http://www.unicef.org/sowc2011/pdfs/SOWC-2011-Main-Report_EN_02092011.pdf

Highlights

- ▶ AIDS-orphaned adolescents in Uganda have limited access to secondary education
- ▶ An economic empowerment intervention may help orphans stay in school
- ▶ Staying in school may prevent high risk behaviors among orphaned adolescents
- ▶ Community values long-term investment of economic empowerment approach

Table 1

List of participants

Adolescent participants	Gender	Age in years	Name and type of caregiver
<i>Treatment group</i>			
Kyakuwa	male	16	-
Byamukama	male	17	Kyaterekera, aunt
Wasswa	male	16	Abbo, aunt
Namusisi	female	15	Nabukenya, mother
Eva	female	14	Candida, mother
Grace	female	15	-
Oliver	female		-
<i>Control group</i>			
Babirye	female	16	-
Agnes	female (dropped out from school, married and works in husband's shop)	16	-
Nakatto	female (dropped out from school and has a child)	14	-
Prossie	female (dropped out from school and has a child)	15	-