

**FAITH-BASED INSTITUTIONS AS PROJECT IMPLEMENTERS:  
AN INNOVATIVE ECONOMIC EMPOWERMENT INTERVENTION  
FOR CARE AND SUPPORT OF AIDS-ORPHANED AND  
VULNERABLE CHILDREN IN RURAL UGANDA**

Fred M. Ssewamala  
Leyla Ismayilova

Among the world's adults and children with HIV, 24.7 million (63%) live in sub-Saharan Africa (UNAIDS, 2006). Despite increased access to antiretroviral therapy in the region, 72% of all deaths are due to AIDS (UNAIDS, 2006). The AIDS pandemic has devastated the African continent and it has left millions of people in poverty and poor health. It has also left millions of children without their biological parents (UNICEF, 2003). Because of the large number of orphans that are overwhelming traditional African families, it is not uncommon to find instances where families are unwilling to take in additional orphaned children, even if they are their kin. This has led to an emerging trend of child-headed households, hitherto unknown in traditional African families and cultures.

The most recent statistics from Uganda indicate that 2.3 million children below age 18 are orphaned, having lost one or both parents (UNICEF, 2008). Of these documented orphans, about half (51%) are a direct result of the AIDS pandemic. Even with the falling HIV infection rates in the country, it is projected that the number of orphans will remain high, or even increase, as parents already infected with HIV die from the disease. Estimates indicate that one of every four households in Uganda is providing care to an orphaned child (Cheng, Hite, Jacob, & Smith, 2004).

Traditionally, the burden of raising orphans in Uganda—and most parts of sub-Saharan Africa—falls primarily on extended family members, including grandparents, uncles, and aunts (Ankrah, 1993; Foster, 2004; Matshalaga & Powell, 2002). However, the steady increase in the number of orphans, coupled with the increase in poverty, has contributed to a breakdown in the traditional extended family system, and there are no established public welfare programs that can help serve these children. Thus, a considerable number of orphans who would otherwise have been cared for through the extended family system have either dropped out of school in order to farm the land to take care of themselves and their siblings or, in desperation, have migrated to large urban areas in search of employment opportunities (Ssewamala & Curley, 2006). Because the majority of the orphans who migrate to the urban areas have no employable skills, they often end up on the streets, where they beg, engage in petty theft, begin drug and other substance abuse, and

prostitute themselves for money, exposing them to HIV infection and other sexually transmitted infections (Ssewamala, 2005). Uganda is one of many African countries where there is a noticeable increase in the number of child-headed households, indicating the lack of capacity and support structure within communities to care for vulnerable children (World Bank, 2000b).

Civil society institutions, including faith-based organizations, have initiated a number of programs and services for care and support of families and communities affected by HIV/AIDS. Over and above their traditional roles, faith-based organizations are becoming more actively involved in the provision of care services for orphaned and vulnerable children (Foster, 2002, 2005; Lee, Foster, Makufa, & Hinton, 2002) and implementation of HIV-related interventions (Kagimu, 2003; Liebowitz, 2002; Parry, 2003). This does not discount the fact that for generations faith-based and religious institutions have been involved in social service provision in one form or another in various parts of the world (Cnaan, Wineburg, & Boddie, 1999; Green, 2001; Lewis, 2003; Tangenberg, 2005). Thus, it is important to examine the interventions implemented by faith-based organizations, especially with an increase in funding coming to Africa under the President's Emergency Plan for AIDS Relief (PEPFAR) (Office of the Global AIDS Coordinator, 2004). For example, for a long time, faith-based organizations in sub-Saharan Africa were primarily associated with providing food, shelter, health care, and education; whereas recently, service delivery has changed and broadened. In Uganda, several faith-based organizations are actively involved in directly meeting the psychosocial needs of orphaned and vulnerable children, running social enterprise projects, and directly operating social infrastructure such as schools and hospitals (Kuchment, 2002). Among hospitals in Uganda, 40% are missionary hospitals with a faith-based connection (Kuchment, 2002), while over 30% of nongovernmental organizations (NGOs) in the country explicitly identify themselves as faith-based (Barr, Fafchamps, & Owens, 2005).

Prior studies have illustrated the relationship between asset-ownership and adolescents' health and educational outcomes (Sherer et al., 2004; Zhan & Sherraden, 2003; Booysen & Van Der Berg, 2005). None of these studies, however, focused on care and support for adolescents through economic empowerment models—specifically microfinance-related models—implemented by a faith-based institution. Thus, this paper examines the efficacy and feasibility of an economic empowerment intervention implemented by a faith-based organization in rural Uganda. More specifically, the study aims to estimate the effects of the intervention on educational performance and aspirations, sexual risk-taking, and monetary savings behavior among orphaned and vulnerable children.<sup>1</sup>

The intervention presents an example of a nontraditional role for a faith-based organization in Uganda: collaborating with an academic institution (Columbia University) to rigorously research and test the efficacy and feasibility (including acceptability) of an economic empowerment intervention for care and support of orphaned and vulnerable children. In this particular case, the faith-based organization is not simply a recipient of aid from its collaborating institution (an American university), but an active participant in designing, implementing, monitoring, and evaluating an innovative intervention: the SEED/SUUBI<sup>2</sup>-Uganda project. This intervention presents an alternative approach for care and support of orphaned and vulnerable children by encouraging the children's caregiving families to partner with faith-based organizations and local financial institutions to save money for educating orphaned and vulnerable children affected by HIV/AIDS.

### **AN ECONOMIC EMPOWERMENT INTERVENTION**

Ensuring that the increasing number of children affected by HIV/AIDS can be cared for psychologically and economically continues to be a major challenge. Although Uganda is one of the countries highly affected by AIDS, the country still lacks a comprehensive operational national policy to support children orphaned or made vulnerable by the epidemic (for details see a joint report by UNAIDS, UNICEF, and USAID, 2004). Therefore, there is a compelling need for a program that incorporates the traditional care of marginalized populations—which tends to be provided by family and civil institutions, including faith-based institutions—with new interventions aimed at strengthening economic opportunities for families caring for orphaned and vulnerable children, developing the children's future planning skills, enhancing their health functioning and educational opportunities, and reducing their risk-taking behaviors.

The SEED/SUUBI project goes considerably beyond existing orphan care, which primarily consists of institutionalization and reactive strategies in Uganda and other developing countries heavily affected by the AIDS pandemic. The intervention focuses on economic empowerment of families caring for orphaned and vulnerable children and addresses co-occurring health risks and poor educational achievements resulting from poverty and limited life options. Specifically, the intervention promotes children's savings accounts, also known as Children's Development Accounts (CDAs), specifically for postprimary education for orphaned and vulnerable children and microenterprise development (e.g., small income-generating businesses) for families caring for these children in Uganda.

The intervention is grounded in asset theory (Sherraden, 1990, 1991), which states that assets (e.g., savings, educational opportunities, economic opportunities in the form of income-

generating activities/microenterprises) have important economic, social, and psychological benefits for individuals and families. Asset-building—defined as efforts that enable people with limited financial and economic resources to acquire and accumulate long-term productive assets—is increasingly viewed as a critical factor for reducing poverty, positively impacting attitudes and behaviors, and improving psychosocial functioning (Ssewamala, Alicea, Bannon, & Ismayilova, 2008). Thus, an intervention aimed at orphaned and vulnerable children who live in poor households should include providing these children and their families or caregivers with economic empowerment opportunities through asset-building and asset-ownership. This can help children to envision the future with optimism, encourage planning for the future, and promote behavior change among those who might otherwise be vulnerable.

### **Implementation**

SEED/SUUBI was implemented in two phases. The first phase was the SEED pilot study (2004–2006), which involved 100 orphaned and vulnerable children, with an average age of 13.6 years, who were selected from seven comparable primary schools located in the Masaka Diocese. The pilot project led to the second phase, the SUUBI Project, which was a larger study involving 286 children, with an average age of 14 years—this phase was funded by the National Institute of Mental Health (RFA # R21 MH076475-01). Hence, the current intervention name, SEED/SUUBI project. The ongoing collaboration with Masaka Diocese has been in existence since 2004.

The SEED/SUUBI project is based in St. Joseph’s Matala Parish, located in Rakai District, which is about 120 miles south of Kampala, the capital of Uganda. Rakai District is one of the districts hardest hit by HIV/AIDS and is also where the first AIDS case in Uganda was diagnosed 26 years ago (Serwadda et al., 1985). It is believed that two in five children in the district are likely to be orphaned. Currently St. Joseph’s Matala Parish—a faith-based institution (under Masaka Catholic Dioecese) located in Rakai district—is caring for or providing services to about 700 orphaned children, the majority of whom are orphaned because of AIDS. The parish provides counseling, support, and different kinds of aid to adults and children of HIV/AIDS-affected families. The children receive scholastic materials, school lunches, counseling services, and after-school programs (which include leisure and competitive sports and music activities). The parish also emphasizes the ABC model (Abstinence, Be Faithful, and Only use a Condom if you must) in its HIV prevention programs.

Across the two interventions that comprise the SEED/SUUBI project, a total of 386 children were involved in the study. The children were randomly selected from a total of 21 comparable

primary schools. The selected schools were all semi-urban public schools located in Rakai District, within Masaka Diocese. Each of the 21 primary schools was randomly assigned to the experimental or control condition such that all selected children from a particular school received the same intervention, primarily to address issues related to sample contamination. Each child in the control condition received the commonly used care for orphaned children (hereafter referred to as usual care), comprising the provision of recreation services, counseling, food aid (specifically school lunches), and scholastic materials (including text books) sponsored or administered by the Matale Parish.

In addition to the usual care mentioned above, the children in the experimental condition received an asset-based family intervention, which consisted of the following three components:

- workshops focused on asset-building and future planning;
- a monthly mentorship program with peers on life options, avoiding risk behavior, reinforcing learning, and building optimism; and
- a Child Development Account dedicated to paying for postprimary schooling and/or a family small business. This account provided the children with some financial resources with which they could begin to realistically plan for their future education or vocational training.

The argument behind providing the children with financial resources via a CDA—and the associated training—is rooted in the theory guiding the intervention. Asset theorists believe that if children do not see that they have the financial means with which to pursue long-term educational or vocational aspirations, then counseling or food aid may have little effect (Sherraden, 1986; Ssewamala et al., 2008). The one-to-one mentorship program is intended to help the orphaned children overcome a variety of challenges they face in daily life by fostering meaningful and lasting relationships with adult role models. The mentorship component is modeled on programs in the United States that have been found to improve child outcomes (Tierney, Grossman, & Resch, 1995).

The CDA is a matched savings account held in the child's name in a recognized financial institution or bank. The child's family members and friends are allowed, and indeed encouraged, to contribute to the CDA. The account is then matched with money from the program (i.e., intervention). The match cap—the maximum amount of family contribution to be matched by the intervention program—is the equivalent of US\$10 a month per family. The match rate is 2:1, which means that if a child in the treatment condition had US\$10 deposited each month in the CDA for 20 months (without withdrawals), at the end of the 20-month intervention period, this child would have a total of US\$600 in the CDA, consisting of the US\$200 family contribution

and US\$400 in matched funds. This amount of money is enough to pay for an average of 3 years of a participant's postprimary education in an ordinary public semi-urban school.

The children were restricted in the use of their matched savings to the following: (1) paying for education (postprimary school level or vocational training), and/or (2) investing in a family income-generating activity or small business (e.g., raising poultry, raising pigs for sale, buying a heifer/milk-producing cow). Each month, a savings account statement was generated for each child to see his or her accumulated savings and to serve as a morale booster for the participating families. Additionally, during the intervention period, each child (with his or her caregiver as a cosigner) had access to his or her own money in the account (excluding the matching funds), so that in case of an emergency the money could be withdrawn. The matching funds were kept in a separate account from a participant's own savings and were not accessible to the participant. When a participant was ready to attend postprimary school, the check for the matching funds was written to the school the student chose to attend. The student then contributed his or her portion of the total cost for the academic term. The process was designed to eliminate the temptation of families to pressure the children to withdraw the money for their own use. It was also intended to avoid potential misuse of the matching funds by the children's family members or caregivers.

## **METHODS**

### **Measures**

A 90-minute individual interview adapted from scales previously tested in the United States and South Africa (Auslander, Slonim-Nevo, Ozawa, Shepard, & Gehlert, 1992; Bhana et al., 2004; Levy, Lampman, Handle, Flay, & Weeks, 1993) was conducted with program participants at baseline and 12 months postintervention, assessing the effects of the SEED/SUUBI project on a wide range of children's psychosocial functioning outcomes.

This paper specifically focuses on the SUUBI part of the study (N=286) and its effects on three outcomes: (1) educational planning and performance, (2) sexual risk-taking, and (3) savings (for the treatment group only because the control condition did not have verifiable savings).

### ***Education Planning***

In assessing a student's future educational plans and aspirations, questions were adapted from the CHAMP Family Study Program in the United States and South Africa (Bhana et al., 2004; Levy et al., 1993; Paikoff, 1995). Children's educational plans were measured using three questions. First, students were asked about their career interests: What do you want to be when you complete school? Further, children in both conditions were asked about their educational plans

after completing primary school (seventh grade). Finally, children who were planning to continue their education after secondary school (either through vocational training or an advanced level of education as a path to university) were asked to state how certain they were about achieving these educational plans. On this particular measure, the score ranged from 1 to 3, with a higher score indicating a higher degree of certainty.

### ***Educational Performance***

To measure educational performance, records were obtained from both the treatment and control schools on children's school attendance and grades. Primary Leaving Examinations (PLEs) grades, which are standardized and nationally administered examinations taken at the end of primary grade seven, were used to measure children's academic performance. PLEs were taken at least 7 months following the implementation of the project (i.e., the project was implemented in April and the PLE was taken in November of the same year). Because the study inclusion criteria for the schools were such that all schools to be included in the study had to have been at a comparable level of performance (as measured by the PLE grades) in the past 3 years prior to the intervention, coupled with the fact that children in the study (both in the control and the treatment condition) had relatively similar socioeconomic characteristics at baseline, any observable academic performance differences—as measured by a standardized national examination at 7 months postintervention—may to some extent be attributable to the intervention. Moreover, because the PLE grades used came directly from the schools and were confirmed with the students during the follow-up interviews, they are presumed to be accurate.

### **HIV and Sexual Risk-Taking**

To assess intentions to engage in sexual risk behaviors, including those related to HIV/AIDS, questions were adapted from several sources (Auslander et al. 1992; Slonim-Nevo, Auslander, Munro, & Ozawa, 1994; Slonim-Nevo, Auslander, & Ozawa, 1995). Specifically, to measure children's attitudes about abstinence, students were asked to assess two statements: (1) "it's OK for someone to have premarital sex," and (2) "my religion teaches me to wait until marriage." Both items were measured on a 5-point scale (strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree). Further, students were asked about their attitudes toward abstinence as a way to avoid HIV ("Is not having sex the best way to avoid AIDS?") and about their intention to abstain from sex to avoid HIV ("I do not plan to have sex because of HIV/AIDS"). Both items were measured on a scale from 1 to 4 (strongly disagree to strongly agree).

## *Savings*

Only children in the treatment group received CDAs. The financial statements used for ascertaining the actual savings were obtained directly from the banks or financial institutions participating in the study. In this paper, savings is used as a measure of feasibility and to a small extent acceptability (although this is mainly captured through qualitative measures, the results of which are presented in Appendix A) of the intervention. The key research question related to the savings intervention is: Are these poor rural families able to use financial institutions specifically to save for the education of their orphaned and vulnerable children?

## **DATA ANALYSIS**

Although the study used a mixed-method approach—combining both qualitative and quantitative measures—to evaluate the intervention, the principle focus of this paper is the quantitative findings. For a summary of emerging themes from the qualitative findings, see Appendix A.

### **Quantitative Data Analysis**

Repeated Measures Analysis of Variance/ANOVA (or General Linear Model) was used to estimate the effect of the intervention comparing the treatment and control groups at baseline (Wave 1) and at 12 months postintervention (Wave 2). Wave 3 of data collection is ongoing and as such is not included in the present analysis. The analysis controlled for a child's gender, age, and orphan status (single or double orphan, having lost one or both parents). The statistical analysis was performed using statistical package SPSS 15.0.

### **Who are SUUBI Project Beneficiaries? Sociodemographic Characteristics**

As mentioned earlier, this paper specifically focuses on the SUUBI part of the study. Table 1 presents basic sociodemographic characteristics of the children involved in the projects. Out of 286 children involved in the SUUBI project, 57% were female. Participating families had, on average, six people in the household (ranging from two to 18 people). Besides the child who participated in the studies, families had, on average, three other children in the household ranging from 0 to 17 years of age. Almost 40% of participating children are double orphans. Primarily grandparents, aunts, and uncles were among the key caregivers. The majority of children in SUUBI self-identified as Catholic Christian (78.8%), 12% self-identified as Protestant Christian, 7.3% self-identified as Muslim, and 2.4% self-identified as Born-Again Christians. Overall, the community where the SUUBI project is being implemented—like many rural communities in Uganda—is fairly religious. About 81% of children willingly go to church or mosque almost every week and only a very small percentage (1%) never attend any religious services. It is important to note that participation in a specific religious activity or faith is not a



requirement for participation in the intervention. Children and families were recruited irrespective of their religious beliefs.

**Table 1. Sociodemographic Characteristics of SUUBI Participants (N=286)**

<b>Key Characteristic</b>	<b>Mean (SD) or % (n=286)</b>	<b>Mean/SD or % Control Group (n=148)</b>	<b>Mean (SD) or % Treatment Group (n=138)</b>
Female child	57%	53%	60%
Mean child age, years	13.7 (SD=1.3)	13.6 (1.47)	13.8 (1.35)
Average # of people in household	6.7 (SD=3)	6.2 (SD=2.7)	7.1 (SD=3.2)
Average # of children in household	3.5 (SD=2.5)	3.1 (SD=2.1)	3.9 (SD=2.8)
Report father not living	81%	84%	78%
Report mother not living	58%	58%	59%
Report both parents not living	39%	41%	37%
Female caregiver			
Biological mother	40%	37%	42%
Stepmother	3%	3%	3%
Grandmother	36%	40%	32%
Aunt	15%	14%	17%
Sister	2%	3%	2%
No female present	4%	4%	4%
Male caregiver			
Father	29%	24%	33%
Grandfather	14%	13%	15%
Uncle	11%	9%	15%
Brother	4%	3%	4%
No male present	41%	51%	33%
Religion			
Catholic	79%	79%	78%
Protestant	12%	11%	12%
Muslim	7%	9%	6%
Born Again/Saved	2%	1%	4%
Religiosity/Frequency of attending church/mosque			
Almost every week	81%	79%	83%
Less than once a week, but more than just on holidays	16%	20%	13%
Only holidays	2%	1%	2%
Almost never	1%	0%	2%

## FINDINGS

### Education-Related Outcomes

#### *Educational Plans and Aspirations*

The analysis indicates a significant effect of the SUUBI intervention on the educational plans of children. At baseline (also referred to as pretest), 78% of children in the control group reported that they planned to continue with their education and attend senior secondary schooling (equivalent to high school in the U.S. educational system). The percentage was nearly the same for children in the treatment group at baseline (77%). At 12-month follow-up, the number of children in the control group planning to go on to senior secondary schooling had dropped by 13 percentage points (from 78% to 65%). In contrast, the number of children in the treatment group planning to go on to secondary schooling had increased by eleven percentage points (from 77% to 88%). The results are statistically significant and the findings do not differ by gender. Similar results were reported in the pilot SEED project (Ssewamala et al., 2008; see also Appendix 2).

#### *Career Preference/Options*

The results from the SUUBI study indicate that students' professional interests remained fairly unchanged in the control group. At baseline, about 59% of children in the control group indicated a preference for getting an academic degree and becoming an accountant, teacher, doctor, or lawyer. The percentage was considerably lower for the treatment group (38%). At 12-month follow-up, the percentage of children in the control reporting interest in academic degree-awarding professions/careers had dropped slightly by four percentage points to 55%, whereas the percentage for children in the treatment group had increased to 67%. There are several possible explanations for these changes. One reason could be that there is a sense of hope or belief among the treatment group children that they can continue their education and that they have the means (through the CDAs) to achieve their educational goals. In contrast, children in the control group probably could not envision how it would be possible to accomplish obtaining a career or profession requiring a degree without having the resources.

#### *Certainty Level*

For the treatment group, the results indicate a statistically significant change in the level of certainty children had in pursuing their educational goals. Specifically, a 21 percentage point increase (58% at baseline vs. 79% at 12-month follow-up) was registered in the treatment group children regarding their certainty of achieving their educational plans. In contrast, the percentage of children in the control group who were certain about achieving their educational plans dropped by eleven percentage points (62% at baseline vs. 51% at 12-month follow-up).

In regard to gender, the analysis indicated a statistically significant effect on girls in the treatment group compared with their male counterparts in the same group. Certainty score for girls in the treatment group rose by 28 percentage points (63% at baseline vs. 91% at posttest). The certainty change for boys in the treatment group increased by five percentage points (37% at baseline vs. 42% at posttest). These findings raise a key question: Why is the certainty change level for boys so much lower than that of their female counterparts? This might be at least partly explained by the fact that Uganda is a patriarchal society and, in such a setting, when children are orphaned, boys typically take on the responsibility of caring for the family and it is possible that most of the orphaned boys in the study were thinking more about taking care of their siblings and much less about going to school. However, given the current dataset, it is not possible to determine a precise explanation. A more qualitative measure may be necessary to address this question/observation.

### ***Educational Performance***

The PLE score can range from 4 to 36, with a lower score representing better academic achievement. Children in the treatment group demonstrated a better score on the national exam (26.82 average score) compared with their counterparts in the control condition (28.97 average score). The differences between the two groups are statistically significant.

In regard to gender, the results on educational performance indicate that girls in the treatment group scored, on average, 26.55 points on the PLE; whereas girls in the control group scored, on average, 29.58 points. The differences were statistically significant. There were, however, no statistical differences between the academic performance of boys in the treatment group (27.33 points) compared with the academic performance of boys in the control group (28.26 points).

### ***School Attendance***

The analysis indicated that at 12-month follow-up, compared with pretest, school attendance improved significantly in the treatment group and did not show statistically significant changes in the control group. In the treatment group, the number of days children attended school increased, on average, by 3 days (from 57.92 in the first term to 60.46 days in the second term). School attendance of children in the control group decreased slightly (from 62.7 in the first term to 61.85 in the second term). There were no significant differences by gender on school attendance following the intervention.

### ***Attitudes about HIV and Sexual Risk-Taking***

It is important to note that because the study uses an experimental research design with a treatment and control group, and because the two groups were drawn from very similar

socioeconomic and geographical circumstances at baseline (preintervention), the observable differences at the follow-up period (postintervention) may, to some extent, be attributable to the intervention.

### ***Sexual Risk-Taking Behavior***

At pretest only, three respondents (1%) reported having ever had sexual intercourse. All three children had had their first intercourse before age 15, and none of them reported using protection during the first intercourse. Although it is not possible to determine definitively, there may be several reasons as to why children reported low rates of sexual activity. One reason may be because of the age of respondents enrolled in the project. These are still relatively young children. Second, although devastated by disease, these are children from relatively stable rural communities. There could be some level of conservatism compared with children in an urban setting. Third, children might be underreporting their own sexual experiences, especially given the fact that 23% of the children in the study reported knowing one or more friends who had had sexual intercourse, and 18% reported feeling pressure to have sex. At 12-month follow-up, seven children reported having had intercourse in the past year (an increase of four children).

Attitudes are an important factor that could be used to predict future sexual risk-taking behavior (Raj, 1996; White, Terry, & Hogg, 1994). Because the numbers representing “actual” sexual risk-taking behaviors are small, the focus instead is on estimating the effects of the intervention on adolescents’ attitudes toward abstinence.

### ***Attitudes Toward and Acceptance of Abstinence from Sex Until Marriage***

During the follow-up period (posttest), there was an observable difference between students in the treatment group vis-à-vis students in the control group on “attitude and acceptance of abstinence from sex until marriage.” Adolescents in the control group had a mean score of 4.56 points (on the scale used to measure this construct) at pretest and 4.06 points at posttest—a reduction of 0.5 points in the mean score. In contrast, adolescents in the treatment group had a mean score of 3.73 points (on the same scale) at pretest and 4.35 points at posttest—an increase of 0.62 points. Because a high score represents a positive improvement in the attitudes toward abstinence until marriage, the results indicate that students in the treatment group demonstrated a significant improvement on this particular measure. The effect of intervention was statistically significant and was stronger for boys.

In regard to the second measure of abstinence from sex until marriage (specified as “my religion teaches me to abstain from sex”), there was no significant difference in the response to this

measure between the treatment group and control group, either at baseline or at postintervention follow-up.

Turning to the attitudes toward “abstinence as the surest way to avoid HIV,” the results indicate that at follow-up, the treatment group registered a more positive attitude toward abstinence as the best way to avoid HIV compared with their counterparts in the control group. The change is statistically significant. The treatment group’s score on this measure increased from 3.65 at baseline to 3.79 at 12-month follow-up, an increase of 0.14 points on this particular measure. In contrast, the control group reported slightly decreased results on the same measure: 3.87 at baseline as compared with 3.65 at 12-month follow-up, a reduction of 0.22 points on this measure.

In regard to gender, the results indicate that the intervention had a more significant effect on changing attitudes to abstinence among boys than girls. The results on this measure indicate that boys in the treatment group reported a more significant change in positive attitude toward abstinence as the best method of protection against HIV.

In behavioral science, there is a difference between attitudes and intentions. Usually intentions are regarded as a proxy for behavior, when behaviors are not easily measurable (Ajzen & Fishbein, 2005). Thus, this study aimed to not only establish the children’s attitudes to abstinence, but it also attempted to establish their actual intentions to “abstain from sex until marriage” to avoid HIV. On this measure—actual intentions to abstain from sex until marriage—students in the control group had a mean score of 3.50 points at pretest. At 12-month follow-up, the score had decreased by 0.30 points to 3.20 points. The change is not statistically significant. In contrast, the treatment students’ intentions to abstain from sex increased by 0.46 points (from 3.01 to 3.47). The results are statistically significant.

In regard to gender, the results point to statistically significant gender differences, suggesting that the intervention primarily had an effect on the intentions of boys and not girls. These results are similar to the findings in the SEED study (Ssewamala et al., 2008; Ssewamala, Bannon, Ismayilova, & Alicea, 2008).

### **Savings Outcomes**

As mentioned earlier, savings as an outcome measure was only applied to the 138 children in the treatment condition because these are the children who had verifiable savings. Thus, the comparison group was not included in the analysis for this outcome measure, as children in the control condition did not have CDAs. The savings data indicated that participants in the

treatment condition (with CDAs) could and did save. Children in the treatment group in the SUUBI project saved, on average, US\$6.33 a month or US\$76 a year. There were no statistically significant differences in saving by gender and there were no statistically significant differences in savings by type of orphanhood. After matching individual savings—by a ratio of 2:1—the participants accumulated, on average, US\$228 per year.

Data from the SEED pilot project (N=97) showed slightly better savings outcomes. In the first 6 months following the intervention, the participants saved an average of US\$50.52 per participant or US\$8.42 in average monthly deposits (Ssewamala et al., 2008).

Overall, although the savings amounts in SUUBI (a monthly average of US\$6.33, or an accumulated yearly savings of US\$228, including the match) may seem very modest by the standard of Western countries—these are huge sums in a poor country like Uganda, where annual per capita income is less than US\$300 (World Bank, 2000a). Moreover, that amount of money is almost enough to pay for a student’s postprimary education for at least one year in an ordinary semi-urban public secondary school, which costs an average of US\$200 per year.

### **IMPLICATIONS FOR RESEARCH, POLICY, AND PRACTICE**

The SEED/SUUBI-Uganda intervention serves as an example of a well-planned collaboration between a U.S. academic institution and a religious/faith-based institution in rural Uganda. The results presented here suggest a potential for collaboration between a faith-based organization and a research institution in addressing care and support of a vulnerable group: orphaned and vulnerable children. Specifically, the results suggest that poor families caring for HIV/AIDS orphans in Uganda, if facilitated by trusted organizations, can save for the educational needs of the orphaned children they are caring for.

The results also suggest that savings—used as a measure of economic empowerment—might have an effect on the future of children by improving their expectations about future careers and increasing their motivation to make more careful/responsible choices regarding sexual risk-taking. If the future looks brighter, children may be more inclined to preserve it.

Finally, the qualitative work presented in Appendix A seems to suggest that collaboration with community-based organizations, specifically faith-based institutions that already have grounding and trust within the community, may play a role in the successful implementation of the projects aimed at care and support of orphaned and vulnerable children. It is not clear whether the results

would have been different if the project had been implemented through a governmental or nongovernmental secular organization; that is a question for future research.

Overall, experimenting with collaborations testing economic empowerment as an intervention for care and support of orphaned and vulnerable children in a poor developing country like Uganda may be worth considering and indeed funding.

## **ACKNOWLEDGMENTS**

We are grateful to the SUUBI-Uganda Research Staff and volunteers for monitoring the study implementation process, especially Ms. Proscovia Nabunya, Reverend Fr. Kato Bakulu, and Ms. Stacey Alicea. We thank Professors Mary McKay, Jane Waldfogel, Michael Sherraden, and Nabila El-Bassel for helpful comments on the study intervention design, implementation, and data collection. Our thanks also go to all the children and their families or caregivers who agreed to participate in the SUUBI/SEED study. We appreciate the anonymous reviewers for their thoughtful comments. Financial support for the SUUBI-Uganda study came from the National Institute of Mental Health (RFA # R21 MH076475-01). Support for the pilot SEED study came primarily from the Center for Social Development at Washington University in St. Louis, the Social Intervention Group at Columbia University, and the Friedman Family Foundation.

## **NOTES**

1. Because of space limitations, we have presented qualitative findings in the appendix of this paper, describing the role of a religious institution (in this paper also referred to as a faith-based organization) as a key project implementer, highlighting the strengths of the partnership vis-à-vis other available alternatives. The data are in the participants' and local community members' own words.
2. SEED (Savings for Entrepreneurship and Education) was a pilot project implemented in 2004–2006. SUUBI (which means “Hope” in the local language, Luganda) is an extension of the pilot project (2005–present).

## **APPENDIX A**

### **Qualitative Findings: Process Evaluation**

Qualitative responses were used to primarily assess acceptability of the intervention within the broader community. Specifically, in-depth interviews were conducted with four community leaders (two religious leaders and two political/government leaders); seven children and their caregivers from the treatment group and four children and their caregivers from the control group). For the qualitative analysis, children from the treatment group were purposively selected to represent different levels of saving: three children whose savings were above the average,

three children whose savings were at the average level, and one child whose savings were below average. Common themes in regard to the acceptability of the intervention and outcomes of interest were identified and quotes are presented. Overall, the qualitative results indicate the importance of collaboration to the success of the SUUBI/SEED initiative. The key components of the partnership are presented below along with the emerging themes.

### ***Social Networks***

Religious institutions and faith-based organizations often have established and long-standing contacts and networks within communities (Foster, 2004; Kagimu, 2003). The SUUBI project benefited substantially from the social networks and trust that communities have with the Masaka Diocese as a faith-based organization. The leaders of the diocese are familiar with community residents, their needs, and systems of services, such as schools and local (including district) counselors. For example, Masaka Diocese reverend fathers and pastors actively participated in identifying the schools to be included in the study, the potential participants/families from each of the schools, and the overall recruitment of the actual participants for the study. Pastors distributed the recruitment flyers during church services and during their visits to the community, informing willing and able caregivers for orphaned and vulnerable children within the community about the study.

In a study interview, the parish priest from St. Joseph's Catholic Parish emphasized partnership and active involvement of the key stakeholders as important components of the project:

I think for the moment it [the project] is going on well... because we have got involvement of various partners, the main researchers, the coordinators of the project, the communities themselves and the kids are involved because there are general meetings which occur and we participate. And I've seen an interest especially on the part of the parents because now they are more involved. We meet them often...people coming to parish because of the project.

The priest went on to say:

The church we are fully involved in the community...we meet the kids in various spheres, we visit their schools, we visit their villages...we can usually mobilize the people...and that is a very big advantage we have over any other organization or maybe the government because we go deep into the villages...we live with them, we know their problems and we are more involved than maybe any other organization.

### ***Trust and Cultural Integrity***

Stemming from their long-term presence in the community, religious institutions have become integrated into the everyday lives of ordinary citizens. Community members in the study area



reported a feeling of “trust” they have in the religious institutions operating within their community. This is the same feeling SUUBI participants have toward the leadership of Masaka Diocese that introduced the project to the area. As Tyler (1997) rightly observed, if people trust, it means that they consider the person, or organization, they trust to be concerned about their needs and to “have their best interest at heart, to care about their views, to consider those views when decision-making, and to try to be fair” (p.2). In the eyes of the public, religious or faith-based organizations are always trying to look out for the best interest of the disadvantaged groups in communities. Thus, residents of the Masaka Diocese welcomed the intervention that was being offered through SUUBI primarily because they trusted Masaka Diocese, which introduced the intervention to the project area. The situation may have been different if the intervention had been implemented through different means, with no well-established presence or genuine trust from the community members.

As one of the project staff members explained:

We chose to work with the parish because people have trust in these priests at the parish. Like if they say something to the congregation, they’ll take it genuinely. They have trust in these people and also they reach out to these communities. Some of them know where some people live and they can always talk to them whenever they want. So that’s why we use the parish.

### ***An Established Organizational Structure***

The existing organizational structure within religious organizations allowed for a well-coordinated implementation of project activities involving a significant number of people/personnel across different locations. Masaka Diocese, through its parish priests, played an instrumental role in managing the project and coordinating all 21 project sites/schools located in over 14 different villages. For example, in addition to the recruitment process, the diocese coordinated all the research booster sessions with the children and their caregivers, and constantly reminded participants to use their savings accounts so they could take advantage of the matching funds. Further, the CDAs were monitored by the parish priest with the assistance of the study’s principal investigator at Columbia University and the project coordinator located in Uganda. The three had regular coordination meetings either in person or over the telephone. At the end of the savings period, the program personnel, together with representatives of Masaka Diocese, noted the savings in each participant’s account, subtracted the amount of money so far matched, and then ascertained the balance to be matched, assuring transparency and accountability in the community. Because the Masaka Diocese parish priests, the project coordinator, and the project assistants all were located in the community where the participating

families lived, they could monitor the process while consulting regularly with the principal investigator.

***Mutual Benefits***

Finally, the partnership was successful because the community felt that the project was able to offer something substantial to their community and they would not be exploited only for research purposes. This factor is especially important in the wake of so-called “research fatigue,” where communities are reluctant to be the subjects of research studies without substantial benefits to the community (Kasusse, 2005; Musoke, 2000; Thiessen et al., 2007).

As the Rakai District chairperson reported:

Quite a number of NGOs [nongovernmental organizations] have come since the early ‘90s ... I thought this was an ordinary NGO. In fact, I was reluctant to come because I was busy. But I did come...and I found that SUUBI was slightly different. I liked their approach. They are giving our children support, but at the same time they are tying this support to the child himself participating himself or herself by saying that “if a child raises 2000 shillings, SUUBI will double that in contribution.” I thought this was an innovation that other NGOs could actually emulate... Very many people in Rakai when they look at NGOs they say “oh, they have brought us sugar, they have brought us milk, they will give us clothing” and now SUUBI is saying “no, we are going to help you but you also help yourself” and that is the way to go.

**APPENDIX B**

**Table B-1. Summary Project Description**

<b>SEED/SUUBI-Uganda Project</b>	<b>Description</b>
Project Background	<p>The SEED/SUUBI-Uganda has been implemented since 2004 with the overall aim of testing the feasibility of an asset-based initiative with AIDS-orphaned children in Uganda. The project is a collaboration between Columbia University, New York (USA) and a faith-based organization called Masaka Catholic Diocese in Uganda.</p> <p>The SEED/SUUBI-Uganda projects (a) test the feasibility and safety of conducting an asset-development intervention in developing country like Uganda, and (b) examine the effects of the intervention on children’s educational plans, health, and risk-taking behaviors.</p>
Experiment Details	<p><i>Sample:</i> 386 orphaned and vulnerable children aged 12 to 15 having lost one or both parents and enrolled in primary school (100 children participated in the pilot SEED project and 286 participated in SUUBI project).</p> <p><i>Design:</i> Experimental design with randomization administered at school level</p>

(continued)

**Table B-1. Summary Project Description (continued)**

<b>SEED/SUUBI- Uganda Project</b>	<b>Description</b>
Experiment Details (continued)	<p><i>Project Sites:</i> 21 semi-urban schools across 14 different villages around Rakai District in the South of Uganda.</p> <p><i>Partner:</i> Project is implemented through partnership with Masaka Diocese and St. Joseph’s Matala Parish.</p> <p><i>Asset Intervention:</i> In addition to the traditional care services provided to orphan children, an experimental arm, children received a family economic intervention, which included a Child Development Account (CDA) and six 2-hour classes on career planning, short-term and long-term career goals, microfinance, and financial well-being.</p> <p><i>Accounts:</i> Held in the adolescent’s name in a designated private financial institution— Centenary Rural Development Bank (a regulated MFI)—the CDA is funded by contributions from the adolescent’s family members or friends, with 2:1 matching funds from the intervention. Matching funds are provided by the project funders.</p> <p><i>Uses:</i> Account holders may use their personal savings in their CDA as they choose. However, they can only use the matched portion of the CDA to pay their educational expenses or to invest in such income-generating activities as raising livestock or starting a small business. Also, when they withdraw any savings for any reason other than these designated uses, they lose that relative portion of the match.</p>
Impacts	<p><i>Health Outcomes:</i> Children in the CDA experiment group had improved HIV prevention attitudes, whereas children in the control group showed decreased scores relative to baseline measurement on this variable. Boys demonstrated a more significant change compared with girls.</p> <p><i>Savings:</i> The CDA group could and did save. On average, participants saved US\$75 per participant per year or US\$6.33 per family in average monthly deposit. With a match rate of 2:1, the average participant accumulated an average of US\$19 per month or US\$228 per year. This is a huge amount in Uganda, where annual per capita income is less than US\$300 and postprimary education costs about USD\$200 per year.</p> <p><i>Future Orientation:</i> Data indicate that in addition to having money saved for their postprimary education, students in the CDAs group had a greater ability to identify specific future goals and aspirations, such as continuing their education.</p>
Summary	<p>Preliminary results of both studies suggest that in a time when the HIV/AIDS epidemic in sub-Saharan Africa is destroying family and community networks, collaborations between various academic institutions like Columbia University and faith-based institutions in Rakai, Uganda, could result in successful partnerships to provide alternative care for orphan and vulnerable children while maintaining the cohesiveness of families and entire communities. The findings demonstrate promising outcomes in improving children’s educational aspirations, health outcomes, and social capital using an economic strengthening intervention.</p>

## REFERENCES

- Ankrah E. M. (1993). The impact of HIV/AIDS on the family and other significant relationships: the African clan revisited. *AIDS Care*, 5(1), 5–22.
- Auslander, W. F., Slonim-Nevo, V., Ozawa, M., Shepard, S. and Gehlert, S. (1992). Comparison of skills training, discussion, and control groups to prevent AIDS among abused and delinquent youth. VIII International Conference on AIDS/III STD World Congress, Amsterdam, The Netherlands, July 19–24.
- Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. In D. Albarracin, B. T. Johnson & M. P. Zanna (Eds.), *The handbook of attitudes*. Mahwah, N.J.: Lawrence Erlbaum Associates Publishers.
- Barr, A., Fafchamps, M., & Owens, T. (2005). The governance of non-governmental organizations in Uganda. *World Development*, 33(4), 657–679.
- Bhana, A., Petersen, I., Mason, A., Mahintsho, Z., Bell, & C., McKay, M. (2004). Children and youth at risk: Adaptation and pilot study of the CHAMP (Amaqhawé) programme in South Africa. *African Journal of AIDS Research*, 3(1), 33–41.
- Booyesen, F., & Van Der Berg, S. (2005). The role of social grants in mitigating the socio-economic impact of HIV/AIDS in two free state communities. *South African Journal of Economics*, 73, 545–63.
- Cheng, S.Y., Hite, S. J., Jacob, W. J. & Smith, T. D. (2004). Helping Uganda's street children: An analysis of the Model for Orphan Resettlement and Education (MORE). *Journal of Children & Poverty*, 10, 3–22.
- Cnaan, R. A., Wineburg, R. J., & Boddie, S. C. (1999). *The newer deal: Social work and religion in partnership*. New York: Columbia University Press.
- Foster, G. (2002). *Understanding community responses to the situation of children affected by AIDS: Lessons for external agencies*. Geneva: United Nations Research Institute in Social Development.
- Foster, G. (2004). Study of the response by faith-based organizations to orphans and vulnerable children. UNICEF and World Conference of Religions for Peace.
- Foster, G. (2005). Religion and responses to orphans in Africa. In Foster, G., Levine C., & Williamson, J. (Eds.), *A generation at risk: The global impact of HIV/AIDS on orphans and vulnerable children*. Cambridge: Cambridge University Press.
- Green, E. C. (2001). The impact of religious organizations in promoting HIV/AIDS prevention. In *Challenges for the church: AIDS, malaria & TB*. Arlington, VA: Christian Connections for International Health.

- Kagimu, M. (2003). Faith-based community mobilisation and education for antiretroviral therapy in Uganda. *Sexual Health Exchange*, 3, 12–14.
- Kasuse, M. (2005). Bridging the digital divide in Sub-Saharan Africa: The rural challenge in Uganda. *The International Information & Library Review*, 37(3), 147–158.
- Kuchmen, A. (2002, February 18). When it comes to AIDS, Africa's Christian church leaders have been whistling past the graveyard: Time to get religion. *Newsweek*. (International ed.).
- Lee, T., Foster, G., Makufa, C., & Hinton, S. (2002). Families, orphans and children under stress in Zimbabwe. *Evaluation and Program Planning*, 25(4), 459–470.
- Levy, S.R., Lampman, C., Handle, A., Flay, B.R., & Weeks, K. (1993). Young adolescent attitudes towards sex and substance abuse: Implications for AIDS prevention. *AIDS Education and Prevention*, 5, 340–351.
- Lewis, B. M. (2003). Issues and dilemmas in faith-based social service delivery: The case of the Salvation Army of Greater Philadelphia. *Administration in Social Work*, 27(3), 87–106.
- Liebowitz, J. (2002). The impact of faith-based organizations on HIV/AIDS prevention and mitigation in Africa. Health Economics and HIV/AIDS Research Division [HEARD], Durban, South Africa, University of Natal.
- Matshalaga, N. R., & Powell, G. (2002). Mass orphanhood in the era of HIV/AIDS. *British Medical Journal*, 324(7331), 185–186.
- Musoke, M. G. N. (2000). Information and its value to health workers in rural Uganda: A qualitative perspective. *Health Libraries Review*, 17(4), 194–202.
- Office of the United States Global AIDS Coordinator (OGAC). (2004). *The President's Emergency Plan for AIDS Relief: U.S. five-year global HIV/AIDS strategy*. Washington, DC: Office of the United States Global AIDS Coordinator. Retrieved from <http://purl.access.gpo.gov/GPO/LPS51485>
- Paikoff, R.L. (1995). Early heterosexual debut: Situations of sexual possibility during the transition to adolescence. *American Journal of Orthopsychiatry*, 65(3), 389–401
- Parry, S. (2004). Responses of the faith-based organizations to HIV/AIDS in Sub-Saharan Africa. Unpublished. Retrieved February 20, 2008, from [http://www.synergyaids.com/documents/FBO\\_Responses\\_SSAfrica.pdf](http://www.synergyaids.com/documents/FBO_Responses_SSAfrica.pdf)
- Raj, A. (1996). Identification of social cognitive variables as predictors of safer sex behavior and intent in heterosexual college students. *Journal of Sex and Marital Therapy*, 22(4), 247–258.

- Serwadda D., Mugerwa R. D., Sewankambo N. K., Lwegaba A., Carswell J. W., Kirya G. B., et al. (1985). Slim disease: A new disease in Uganda and its association with HTLV-III infection. *Lancet*, *19*(2), 849–852.
- Sherer, R. D., Jr, Bronson, J. D, Teter C. J, et al. (2004). Microeconomic loans and health education to families in impoverished communities: Implications for the HIV pandemic. *Journal of the International Association of Physicians in AIDS Care*, *3*(4), 110–114.
- Sherraden, M. (1986). School dropouts in perspective. *Educational Forum*, *51*(1), 15–31.
- Sherraden, M. (1990). Stakeholding: Notes in a theory of welfare based on assets. *Social Service Review*, *64*(4), 580–601.
- Sherraden, M. (1991). *Assets and the Poor: A new American welfare policy*. New York: M.E. Sharpe.
- Slonim-Nevo, V., Auslander, W. F., Munro, J., & Ozawa, M. N. (1994). Knowledge and attitudes related to AIDS among African-American women: Results of an exploratory study. *Ethnicity and Disease*, *4*, 68–76
- Slonim-Nevo, V., Auslander, W.F., & Ozawa, M.N. (1995). Educational options and AIDS-related behaviors among troubled adolescents. *Journal of Pediatric Psychology*, *20*, 41–60.
- Ssewamala, F. M. (2005). Children Development Accounts in Africa: A pilot study. (Working paper No. 05-05). St. Louis: Washington University, Center for Social Development.
- Ssewamala, F. M., & Curley, J. (2006). Asset ownership and school attendance of orphaned children in Sub-Saharan Africa. *Social Development Issues*, *28*(2), 84–105.
- Ssewamala, F. M., Alicea, S., Bannon, W. M., Jr., & Ismayilova, L. (2008). A novel economic intervention to reduce HIV risks among school-going AIDS orphans in rural Uganda. *Journal of Adolescent Health*, *42*(1), 102–104.
- Ssewamala, F. M., Bannon, W. M., Jr., Ismayilova, L., & Alicea, S. (2008). Promoting health and educational opportunities for orphaned children through Children Development Accounts: Does gender matter? Manuscript submitted for publication.
- Tangenberg, K. M. (2005). Faith-based human services initiatives: Considerations for social work practice and theory. *Social Work*, *50*(3), 197–206.
- Thiessen, C. Ssekubugu, R. Wagman, J. Kiddugavu, M. Wawer, M.J. Emanuel, E. Gray, R. Serwadda, D., & Grady, C. (2007). Personal and community benefits and harms of research: Views from Rakai, Uganda. *AIDS*, *21*(18), 2493–2501.
- Tierney, J. P., Grossman, J. B., Resch, N. L. (1995). *Making a difference: An impact study of Big Brothers Big Sisters*. Retrieved December 1, 2006, from [http://www.ppv.org/ppv/publications/assets/111\\_publication.pdf](http://www.ppv.org/ppv/publications/assets/111_publication.pdf)

- Tyler, T. (1997). Why do people rely upon others? Social identity and the social aspect of trust. Paper presented to the Russell-Sage workshop on trust. New York, April 26, 1997 (Unpublished).
- United Nations Children's Fund [UNICEF]. (2003). *Africa's orphaned generations*. New York: UNICEF.
- United Nations Children's Fund [UNICEF]. (2008). *State of the World's Children 2008*. New York: UNICEF.
- United Nations Programme on HIV/AIDS [UNAIDS] (2006). Report on the Global AIDS Epidemic. Geneva: UNAIDS.
- United Nations Programme on HIV/AIDS [UNAIDS], United Nations Children's Fund [UNICEF], and United States Agency for International Development [USAID] (2004). *Children on the brink: A joint report of new orphan estimates and a framework for action*. New York: UNICEF/USAID.
- World Bank. (2000a). Entering the 21st century: World development report 2000/2001. Attacking poverty, New York: Oxford University Press.
- World Bank. (2000b). *Helping the children: World Bank directory of HIV/AIDS interventions in Africa*: Washington, DC: World Bank.
- White, K. M., Terry, D. J., & Hogg, M. A. (1994). Safer sex behavior: The role of attitudes, norms, and control factors. *Journal of Applied Social Psychology*, 24(24), 2164–2192.
- Zhan, M., & Sherraden, M. (2003). Assets, expectations, and children's educational achievement in female-headed households. *Social Service Review*, 77(2)191–211.