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The Impact of Savings Groups on Children's Wellbeing: A Review of the Literature

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This report is produced by the Supporting Transformation by Reducing Insecurity and Vulnerability with Economic Strengthening (STRIVE) Program. Managed by FHI 360, under the FIELD-Support LWA, STRIVE represents a consortium of leading organizations committed to advancing the state-of-the-practice of economic strengthening to improve the well-being of vulnerable children.

For more information, please visit www.seepnetwork.org/strive or www.microlinks.org/strive

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STRIVE

STRIVE (Supporting Transformation by Reducing Insecurity and Vulnerability with Economic Strengthening) was initiated in 2007 by USAID's Displaced Children and Orphans Fund and the USAID Microenterprise Development Office. The project is managed by FHI 360 with partners including ACDI/VOCA, CARE, MEDA, Save the Children, and Action for Enterprise (AFE). STRIVE sought to fill the gap in information that links economic strengthening to the wellbeing of children and youth through the implementation and evaluation of economic advancement interventions designed with the specific intent of benefitting children. STRIVE's monitoring and evaluation system documented both economic and non-economic indicators for children. The project's learning strategy served to capture the results of the interventions and to share successful and unsuccessful strategies with the greater development field. In this way, STRIVE aimed to contribute to the advancement of a knowledge base on how to best generate positive outcomes for children through economic strengthening programs and to develop replicable models (AED, 2008).

STRIVE conducted field activities with implementing partners in four countries: the Philippines, Afghanistan, Liberia, and Mozambique. In the Philippines, AFE implemented a value chain intervention intended to link low-income producers to key market actors. In Afghanistan, MEDA implemented a project to improve the quality of informal apprenticeships in the construction industry and improve linkages between actors in the industry. In Liberia, a value chain intervention led by ACDI/VOCA connected farmers with profitable value chains and promoted local production of staple foods. In Mozambique, Save the Children led an effort to improve nutritional outcomes for children through the introduction of savings groups and a rotating shared labor scheme. The research presented in this report is most relevant to STRIVE's efforts in Mozambique.

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ACRONYMS

ASCA	Accumulating Savings and Credit Association
CBO	Community-Based Organization
CRS	Catholic Relief Services
DCA	Dan Church Aid
FFH	Freedom from Hunger
IGA	Income Generating Activity
IPA	Innovations for Poverty Action
IRC	International Rescue Committee
MFI	Microfinance Institution
OVC	Orphans and Vulnerable Children
RCT	Randomized Control Trial
ROSCA	Rotating Savings and Credit Association
SGs	Savings and Loan Groups
SILC	Savings and Internal Lending Communities
STRIVE	Supporting Transformation by Reducing Insecurity and Vulnerability with Economic Strengthening
TSA	The Salvation Army
UN	United Nations
USAID	United States Agency for International Development
VRG	Valley Research Group
VSLAs	Village Savings and Loan Associations

EXECUTIVE SUMMARY

This review presents a comprehensive overview of the literature on the impact of community-based Savings Group (SG) interventions on children’s wellbeing in resource-poor environments. This topic is of particular interest to FHI 360 as it relates to the organization’s USAID (United States Agency for International Development)-funded project, STRIVE, and is of interest to the greater international development community as savings interventions are increasingly used to reach the world’s rural poor.

Savings Groups (SGs) are self-governed groups that combine regular savings deposits into a fund from which loans are issued to group members. The SG’s distinguishing features include interest-bearing loans and each member’s ability to determine a personal contribution amount. An SG is a low-risk, informal form of microfinance and is recognized for its ability to reach those who lack access to formal financial services and microfinance programs – typically those considered “very poor”.

Literature on the impacts of economic strengthening interventions on children’s wellbeing is lacking. Many of the findings reflected in the review were extracted from sections of longer reports. The works included in this review are primarily from the past decade. One of the main gaps in the literature is the lack of evidence of a direct impact of SGs on children. Most indicators measure outcomes on mediating factors, from which assumptions are made that connect those outcomes to child-level impacts. Some reports are also criticized for drawing conclusions from anecdotal or highly subjective evaluation methods. Overall, and with few recent exceptions, the evaluation methods used in the literature collected were not rigorous, which is to say they often did not compare against a control group, utilize both qualitative and quantitative research, or track change over time.

Often, SGs are used as a platform for additional development interventions such as education in health, literacy, business skills, or financial management. The impacts are expected to be greater when SGs are coupled with these complementary development strategies. There is limited literature that addresses this hypothesis through evidence-driven discussion, but the reports that do generally find results in its favor. On the other hand, some practitioners believe that adding additional programming to SGs can detract from the groups’ economic purpose.

Studies that measure the impacts of SGs on children utilize a variety of evaluation methods and indicators. Yet, despite the lack of a standard evaluation methodology, many commonly used indicators address similar outcome classifications. The most common outcome categories are education, health, food security/nutrition, household assets, and quality of housing. Generally, studies report positive outcomes in each of these categories. However, results are less certain for education and health indicators. While these two categories exhibit primarily positive outcomes, there are studies addressing each that report mixed or unknown outcomes.

Not all impacts on children are positive. One potential negative impact is increased levels of child labor from new household income generating activities (IGAs). Three studies addressed this issue; Boyle (2009) confirmed negative outcomes while Bundervoet et al. (2012) found that participation in VSLAs (Village

Savings and Loans Associations) resulted in increased child wellbeing. Cameron and Ananga (2013) found little evidence of a change in incidence of child labor.

The focus of this review is on SG programs that engage caregivers as opposed to youth directly. However, youth SGs are beginning to grow in number and some impact reports have been published on such groups. A brief overview of youth SGs includes a discussion of Miller et al. (2011) and Mukankusi et al. (2011), two Catholic Relief Services (CRS) programs. Although these programs show positive results, youth SGs seem to encounter more obstacles than adult groups.

Finally, much of the literature includes recommendations for future research and advocating for using SGs to reach scale. One recommendation of particular importance for achieving better outcomes for children is to design SG programs with children in mind and develop indicators from the outset that will directly measure impact on their wellbeing. Furthermore, qualitative methods are recommended to explore intra-household decision making as it relates to SGs participation. A discussion on recommended indicators addresses this gap in the literature: evaluation measures with a clear, defined impact on children. Indicators that are easy to measure and child-specific across outcome categories such as education, health, food security, and child time use are recommended to establish this linkage. Other recommendations include disaggregating data by sex of both child and caregiver, basing program design on a clear causal model, and measuring the dosage required to achieve desired outcomes. Topics for further investigation are also proposed to direct research toward filling current gaps in the literature.

INTRODUCTION

There is a significant amount of research on economic strengthening activities and their impact on various populations, most often women. Few studies, however, explicitly examine the specific impact of these activities on children. This report reviews the literature and summarizes the effects of one economic strengthening activity in particular—Savings Groups (SGs)—on the wellbeing of children and youth. The results of this review are intended to inform the development of future SG interventions focused on benefiting children.

SAVINGS GROUPS (SGs)

Microfinance has become a popular means of providing financial services to poor populations and has received much attention and funding in the development field. Microfinance institutions (MFIs) focus on supplying credit to small businesses and primarily serve moderately poor populations in urban areas. The provision of credit to the very poor presents too great a risk for MFIs and the cost of servicing rural areas is very high (Allen & Panetta, 2010). Furthermore, microfinance loans are often too risky for the very poor and are considered by many to be an inappropriate financial product for this population. Savings programs present less of a risk for participants and a much lower cost for implementing agencies (Allen, 2005). Community savings groups are focused on serving those who are not reached by MFIs and are a good alternative for reaching remote areas where direct, external investment is scarce (CARE, 2011; Odell, 2011). For these reasons, savings groups have grown in popularity over the past decade as an alternative to traditional microfinance services.

SGs are considered a form of informal microfinance and are autonomous in the sense that SG funds consist solely of group members' savings. Each group usually consists of 15 to 30 self-selected members from within a community. The groups are self-governed, meaning they elect their own management committee and establish group rules, including interest rates for loans, meeting schedules, and the conditions of saving. The groups meet regularly and each member contributes to the group fund at every meeting in the amount determined by group contribution standards. The collected savings are used to create a loan fund, from which loans are issued to members of the group. Unlike credit issued from MFIs, these loans may be used for whatever purpose the borrower chooses, whether to support IGAs or to cover household expenses. They must, however, be paid back with interest. SG loan funds consist of the group's regular savings plus the interest earned on loans. Interest rates tend to fall between 5% and 10% and loans are sized in proportion to members' savings; loans usually do not exceed three times the value of a member's current share. The group members keep financial records and all transactions are conducted at group meetings in the presence of all members (Allen & Staehle, 2011; Allen & Panetta, 2010). The physical funds that are not out to the group as loans are kept in a safe box with multiple locks, each with a key assigned to a different group or community member. Savings may not be accessed before the end of the savings cycle. When SGs are formed, they are scheduled to last for a certain period of time—typically one year—after which shares are paid out to members in proportion to their contribution (Goss, 2010). At the conclusion of the savings cycle, groups may choose to continue or disband. More often than not, they decide to continue saving. Some SGs also build social funds from which grants may be issued in the case of an emergency, such as a medical crisis or to finance a funeral.

Many models of SGs currently exist. CARE is recognized as a leader of the SG movement that began in 1990 and their model is known as village savings and loan association (VSLA). This review is limited to savings group projects that use some version of the village savings and loan association (VSLA) methodology.¹ Many other organizations adapted CARE's SG model and implemented the intervention under various names: for example, CRS implemented SGs known as Savings and Internal Lending Communities (SILC); Oxfam and FFH lead an SG program known as Saving for Change (SfC); Plan International's SG program is known as the Village Savings and Loan (VSL) Project; and Pact implemented an SG program known as WORTH. Each organization's variation follows the basic structure of the SG with some organizations incorporating their own programming, such as additional development interventions.

METHODOLOGY

The literature included in this review focuses specifically on SGs (as defined above) as an intervention, and improvements to children's wellbeing as an outcome. Few studies on this topic exist in peer-reviewed journals so it was necessary to identify studies published in the grey literature. To do this we began by conducting searches using keywords related to SGs and children. Google Scholar served as a starting point. Consultation with colleagues at FHI 360 from the Economic Development and Livelihoods (EDL) department unearthed literature and connections to colleagues at other organizations. Additional reports,

¹ This review is limited to community-managed savings-led approaches that incorporate the VSLA methodology. Other similar approaches are excluded from this review, such as the Self-Help groups common in India.

studies, and documents recommended by these leaders in the savings and children’s wellbeing fields proved useful. The websites of organizations implementing SG programs (CARE, International Rescue Committee (IRC), Save the Children, CRS, Plan International), of organizations dedicated to the advancement of the savings movement (SEEP, Microlinks, VSL Associates, various foundations), and of agencies and multilateral entities (USAID, UN, World Bank) were referenced for literature on the impacts of SGs. Bibliographies of identified sources were reviewed for additional literature.

Materials often did not explicitly address SGs and children’s wellbeing, therefore much of the research was extracted from documents covering the broader theme of economic strengthening activities and their impact on issues such as women’s empowerment and household wellbeing. While we did not limit the search to studies from any one country or region of the world, a majority of the research we identified was about programs implemented in Africa. Most of the literature focused on savings programs targeting caregivers, but some evidence from programs targeting youth directly was collected and is presented.

RESEARCH AND QUALITY MEASURES

To ensure we did not miss any studies and to increase the available literature, we broadened the scope of the search to include economic strengthening activities and all possible outcomes. However, literature that did not specifically address the two key research items – SGs and children – to some degree is not included in this report. Most publications are from within the last 5-10 years, a time during which research on savings groups has grown significantly.

Although this literature review aims to focus on child outcomes from savings group participation, few studies include child measurement. Therefore, the review mainly focuses on savings groups and household economic welfare. A number of publications were excluded due to poor quality, including having inadequate research methods or poor study descriptions.

FINDINGS FROM THE LITERATURE

Our search identified approximately one hundred studies, mostly grey literature. Our review of the literature found a dearth of evidence on the direct impact of economic strengthening activities, and SGs in particular, on children. A majority of the evidence for a linkage between SGs and children’s wellbeing relies on assumptions of impact at the child level based on reported outcomes at other levels (e.g., caregiver or household).

Ultimately, we identified 23 reports or papers that met our inclusion criteria: 19 primary research studies and four secondary research reports. Only two of these were published in a peer review journal, and the remainder come from the grey literature. Of the 19 primary research studies and the four secondary research reports, three studies and four reports (Brunie et al., 2014; Bundervoet et al., 2012; Annan et al., 2013; Beck, 2012) intentionally examined how SGs impact children. Most studies looked at SGs in

combination with other development activities, and two studies specifically targeted youth. Each of these three types of SG programs are briefly described below.

Programs targeting caregivers. As these savings interventions do not engage children and youth directly, the outcomes for children and youth are assumed to result from a number of mediating factors. These mediating factors have the potential to explain a linkage between economic outcomes and children's wellbeing, but that linkage should not be taken for granted. Child level indicators still need to be measured to show that the assumed linkage does actually exist. Most studies assume that improved economic circumstances will impact children's wellbeing in a positive way because caregivers are expected to invest new funds toward children's development. This assumption unavoidably relies on resource allocation decisions. Many SG impact studies take for granted that extra household income will be allocated to investments that benefit children, such as the payment of school fees, doctor visits, or food purchases. Two factors related to resource allocation are decision-making and gender dynamics. While factors such as access to services like healthcare and education, as well as the quality of these services, are key mediating factors, they are generally outside the control of the program

Programs with SGs and additional development approaches. Sometimes, SGs are coupled with other development programs in an attempt to generate better outcomes for participants and their households. In these programs, most groups participate in educational classes or training sessions on topics such as literacy, numeracy, health issues, family planning, business development, financial processes, among others. Bundling these programs is thought to provide participants with both the knowledge and financial means to engage in behaviors that can benefit themselves and their families, whether getting tested for HIV/AIDS, promoting their children's education, or successfully engaging in an IGA. Although many studies evaluate SG programs that have been implemented in conjunction with an education or training platform, reports from IRC, TSA, and CARE are included here as these are the only three that attempt specifically to distinguish between each component's resulting outcomes.

Programs targeting youth directly. While most SGs engage caregivers, interest in SGs for youth has grown recently and organizations such as CRS, FFH, and Plan International are implementing youth SGs. Most of these programs are still in the implementation phase and have not yet published results. Youth savings programs working with formal financial institutions are not considered in this report, as their model differs significantly from SGs.

PRESENTATION OF THE LITERATURE

The summaries of the literature are divided into four sections. The first section, Group A, includes the most rigorous studies—that is, only those studies that used an experimental design or quasi-experimental² design. Experimental studies essentially randomize individuals or households to a treatment group (i.e., a group that received the SG program intervention) and others to a control group (which does not receive the same program benefits). These groups are compared on select measures collected during a baseline survey (conducted before implementation of the intervention) and, again, through an endline or posttest survey (conducted after the program has been implemented for a period of time). These experimental

² Brunie et al (2014) is considered a quasi-experimental design.

designs are considered the most robust because the design requires randomly assigning participants to the intervention and control group thereby creating two similar groups. Any differences noted at the time of the posttest can likely be attributed to the intervention. The second and largest section, Group B, includes primary research studies that do not have an experimental design; these are discussed in order of the year published. These studies employ a range of study designs, including descriptive, case studies, qualitative, and mixed method studies. While experimental designs are ideal for assessing program impact, there are several difficulties in using this type of design. For instance, it may be challenging to randomize a particular population and potentially unethical to provide an intervention to only one group and not the other. In addition, the design can be very expensive and time consuming. While the degree of rigor of these studies varies, they were all considered worth presenting and their findings considered meaningful. In Group C, two SG programs that specifically target youth are reviewed, and finally, in Group D, four secondary research reports are summarized.

For each study, we provide a brief description of the study, the research methods used, and the main study results that would impact children. (Annex I outlines, in matrix form, each study's³ evaluation methods, target study population, study site, and main outcomes assessed.). There is no set standard for evaluating the impact of SGs; each study develops its own indicators. In some, children's outcomes are the primary focus of the paper, while for others, impact on children is one of many topics discussed. Additionally, the literature generally does not disaggregate data on children by sex or age, reporting primarily on programs' outcomes for children overall. Despite these variations, there is overlap in the types of indicators used to measure SG success and impact on children. The most common indicators tend to fall under the categories of health, education, and nutrition.

Group A: Experimental and Quasi-Experimental Studies

Final Impact Evaluation of the Saving for Change Program in Mali, 2009-2012 (BARA & IPA, 2013)⁴

The Saving for Change program, Innovations for Poverty Action (IPA), and the Bureau of Applied Research in Anthropology (BARA) at the University of Arizona partnered to evaluate an intervention in Mali combining Saving for Change (SfC) SGs and malaria education. The evaluation used a randomized control trial (RCT) design. Villages in the Segou region of Mali were randomly assigned to either the treatment (intervention) group or the control group. The evaluation period lasted three years, from 2009 to 2012. Quantitative data was collected through household surveys and qualitative data through interviews with village chiefs, elders and other community members, key informant interviews, and focus groups with community members. A baseline survey was conducted in 2009 and included 6,000 households from 500 villages. The endline survey was conducted in 2012. In addition, a subset of 600 households participated in "high-frequency" interim surveys from June 2010 until January 2012. These surveys provided data on health, financial transactions, assets, income generating activities and consumption.

³ The matrix in Annex I focuses on the studies outlined in Groups A and B.

⁴ The Saving for Change program in Mali was the subject of three additional non-experimental studies, which appear in Group B.

Although three years passed between baseline and endline data collection, study participants were members of an SG for an average of 1.68 cycles. At endline, the most commonly reported uses of SG share-outs were the purchase of food (47%), business investments (23%), and investment in livestock (12%). The uses of SG loans varied slightly and respondents reported using loans primarily to pay for business investments (42%), food purchases (38%), health expenses (6%), and ceremonies (6%).

Those villages in which Saving for Change SGs were implemented (treatment villages) were 3% less likely to report that they did not have enough to eat than the control villages ($p < .10$ which the authors defined as significant). In addition, treatment villages were significantly less likely to report chronic food insecurity and food insecurity as measured by the Freedom from Hunger food insecurity index ($p < .05$). There was also a slight difference in housing quality between treatment and control villages, with houses in treatment villages exhibiting higher quality, primarily as measured by having a hard roof. There was no difference in school enrollment between treatment and control villages, but some differences were found for education expenditures per capita. Similarly, instances of households living in poverty were slightly less frequent in treatment villages; however, these differences were minimal and only significant at the $p < .10$ level. Although the impact of SG participation was measured for each of the following, there was no significant impact found for food consumption, health, IGA investment, social capital, malaria practices, household assets, or agricultural assets.

Impact Assessment of Savings Groups: Findings from Three Randomized Evaluations of CARE Village Savings and Loan Associations programs in Ghana, Malawi and Uganda (Karlan et al., 2012) and Evaluation Summary, Impact Assessment of Savings Groups in Ghana, Malawi, and Uganda (IPA, 2012)

CARE contracted IPA to conduct impact assessments of SG programs in Ghana, Malawi, and Uganda. These three randomized control trials (RCTs) compared villages that had access to CARE's SG interventions to villages that did not. Surveys collected data on welfare measures such as health, gender issues, education, and consumption indicators. Specific results for each country are presented below. Overall, for all countries combined, at the time of the endline survey, program implementation averaged two years, one-third of respondents had joined an SG group and members averaged 15 months as group members. Furthermore, 61% of members had gone through a full savings cycle, typically lasting between eight to 12 months. Women who were members of VSLAs were more likely than non-members to take a loan for business purposes. Although the study found an increase in business activity and positive outcomes such as higher business income, these businesses were more likely to fail. There were no changes in agricultural production, livestock holdings or accumulation of household assets. Furthermore, health services and health expenditures remain unaffected, and we see no impacts on housing conditions, food consumption or non-food expenditures. The authors recommend conducting further research to determine the long-term welfare impacts of the SG.

Reported results are organized by country below.

Ghana: A total of 175 villages in five districts of Northern Ghana were part of this study, with 88 assigned to the treatment group and 87 to the control group. Surveys were conducted before and after 30 months of program implementation. At baseline, 30 households from each village were sampled and 4,487

individuals interviewed. The endline sample size was increased to 4,487 to account for low enrollment rates in treatment villages as well as the proximity of some control villages to treatment villages which led some control villages to adopt the VSLA program. At the time of the evaluation, CARE's SG program had been in the area for an average of 20 months. The most commonly reported uses of SG share-outs were for business expenses (19%), agricultural inputs (18%), and education expenses (14%). Primary uses of SG loans were reported to be for business investments (42%) and food consumption (18%). Social fund loans were most commonly spent on healthcare (41%) and funerals (33%). Despite these trends in spending SG funds for members, no significant impact was found at the village level as regards household assets, intra-household indicators, education, housing quality, or food security.

Malawi: Villages in four districts of southern, Central and Northern Malawi, were randomized as clusters (one primary and one secondary). At baseline, 24 households per cluster were selected from 190 clusters (380 villages), a total of 4,529 households were included in the study. At endline, data was collected after 22 months of program implementation and 4,130 households participated. The number of households in each group was not specified.

At endline, SG participants had spent an average of 12 months as members of SGs at the time of the survey. Primary uses of SG share-outs were fertilizer purchases (23%) and spending on housing improvements (19%), while primary uses of SG loans were business investments (40%) and food consumption (20%). As was the case in Ghana, social fund loans were most commonly spent on healthcare (61%) and funerals (26%). There was also a 5% increase in the number of women who reported having a "strong influence on business decisions within the household." No impact was found for food security, household asset ownership, or housing indicators. While primary school enrollment for boys increased in treatment households the change was not statistically significant nor was there any evidence of an increase in education-related expenditures.

Uganda: Using a cluster randomized design, 391 villages from 196 clusters were included in the study from Eastern, Western, and South-western Uganda. At baseline, 23 households per cluster were targeted and a total of 4,539 households were interviewed. At endline, 22 months after program implementation, 4,194 households were interviewed. The number of households in each group was not specified. At the time of the evaluation, participants had been members of an SG for an average of 14 months. SG share-outs were most commonly spent on education expenses (27%), livestock purchases (17%), food consumption (16%), and housing improvements (16%). SG loans were most commonly used to finance education (25%) and to pay for health expenses (18%). Social fund loans were primarily used for health-related expenses. In villages with SGs, there was a 6% increase in the percentage of women with influence over business decisions and a 4% increase in the percentage of women with influence over intra-household decisions for school expenses. Respondents in the treatment villages reported an increase in the total number of meals eaten and a 4% decrease in the likelihood that an adult in the household would have to reduce their daily food consumption, though these findings were not significant. At the village level, no impact was found on household asset accumulation, housing indicators, education, or health.

Urwaruka Rushasha: A Randomized Impact Evaluation of Village Savings and Loans Associations and Family-Based Interventions in Burundi (Bundervoet et al., 2012) and New Generation Final Report (Annan et al., 2013)

The *Urwaruka Rushasha*, or New Generation, program was implemented by IRC in post-conflict Burundi. It was an example of an SG intervention—which they refer to as VSLAs—coupled with educational programming on the protection, wellbeing, and development of children. The evaluation compared three groups, households that participated in an SG only program (VSLA), households that participated in an SG plus education program (VSLA+), and a control group that did not receive any programming. This study design allows one to distinguish between the outcomes of the SG intervention alone and the combined SG and education interventions.

This VSLA program was evaluated using a three-level, multi-site cluster randomized trial design. Community members from eight commune zones self-selected into 77 VSLA groups of 15-25 members each, representing 1,595 households. These 77 groups were randomly assigned to either the first or second 12-month cycle of treatment groups. Half of the 40 selected into the first cycle were assigned to either VSLA training only, or VSLA training plus educational programming (VSLA+). Those in the 37 groups assigned to the second cycle formed the control group for the first 12-month cycle. In year two of the project, the first cycle groups continued VSLA programming with minimal outside technical assistance, while 21 second-cycle groups received VSLA training and 19 second-cycle groups received VSLA+ training.

Data collection methods included a household survey and a children's survey; both surveys were administered prior to the intervention and 12 months later after the first cycle, but only the household survey was administered at 24 months due to time and staff constraints. Qualitative data was also collected using participatory methods with children at baseline and after the first project cycle. In addition, a participatory timeline exercise to collect information regarding communication, significant changes in children's lives, relationships with children and relationship quality, and sense of agency was conducted with 39 caregivers in the first cycle VSLA+ group and with 20 children ages 8-15 who had caregivers in the first cycle VSLA+ group.

While the findings from Bundervoet et al. (2012) focus specifically on the outcomes of the VSLA intervention versus the control group after the first 12-month project cycle, Annan et al. (2013) present data from both midline and endline of controls and those participating in the VSLA+ versus VSLA-only groups.

At midline, consumption expenditure increased with VSLA participation by a net amount of \$7 USD per capita per month. While the percent of the control group living in poverty increased from 64.6% to 74.5%, the percent of VSLA participants living in poverty decreased from 67.7% to 63.5% (the equivalent of a 14.1% percent reduction in poverty). This difference was statistically significant ($p < .01$). Furthermore, VSLA participant group's household asset increases were consistently higher as compared to the controls over the 12 months cycle, and the net impact of increased asset holdings among treatment participants was the equivalent of one head of cattle (as measured by the asset index), and was significant at $p < .01$.

Children and caregivers gave different feedback on children's wellbeing at midline. Bundervoet et al. (2012) suspected response bias because even households that did not participate in the first cycle of the project, those in the control group, were aware that the project targets child wellbeing. Therefore, this may have resulted in participants' responding in ways that they thought would be desirable to the interviewer. Similarly, child labor was measured but conclusions could not be drawn on this indicator due to differences in caregiver and child-level responses. While there was no significant difference found in mosquito net ownership, both VSLA and VSLA+ participants saw an increase in the percent of children under five who slept in a bed underneath a mosquito net the previous night, and VSLA+ participants exhibited a higher increase as compared to the control group. Regarding spending on children, at the midline evaluation, VSLA+ households exhibited a 42% increase in spending on children's clothes compared to a 27% increase for VSLA households and a 16% increase for control group households. At midline, all three groups increased spending on education for children; although not statistically significant, VSLA and VSLA+ groups increased at a higher rate compared to controls.

Of the seven child-level indicators present in the household survey—spending on children, child labor, caregivers' use of and belief in harsh discipline and alternatives to harsh discipline, child wellbeing, child mental health, parent-child communication about material needs, and family wellbeing—the final evaluation only found statistically significant differences between the VSLA and VSLA+ groups for harsh child discipline. VSLA+ respondents reported 30% less use of harsh discipline methods as compared to VSLA only households. Use of harsh discipline were significantly lower for both the VSLA+ survey respondents themselves ($p < .01$) and someone else in their household ($p < .05$) as compared to VSLA only respondents.

Impact of Village Savings and Loans Associations: Evidence from a Cluster Randomized Control Trial (Ksoll et al., 2013)

The authors worked in collaboration with a local NGO, Soldev, to conduct a rigorous impact assessment of VSLAs in northern Malawi. In 2009, 46 villages were selected to participate in this clustered randomized trial; 23 villages were assigned to the treatment group and 23 to a control group. Prior to the initiation of project activities, a baseline household survey was conducted with 1,775 households and this survey was repeated in 2011. With careful tracking of the households, the study team retained all but 49 households from their original sample. The study assessed the impact of introducing VSLAs at the village level on three primary outcomes (with 10 outcome indicators) including food security, income generating activities, and household income. Four of the 10 outcome indicators showed significant reports. Food security was improved through a slight increase in the number of meals per day ($p < .05$). Furthermore, households reported an improvement in income generating activities, through an increase in the amount of savings in VSLAs ($p < .01$), although there are some indications that the total number of income generating activities actually decreased. Consumption increased ($p < .10$), as measured by USAID's Poverty Assessment Tool (PAT) methodology, suggesting that income increased. Finally, the DCA study found an improvement in housing in that there was a slight increase in the numbers of rooms per dwelling ($p < .05$). While only four indicators showed positive effects, the authors believe further improvements were limited by the short time frame of only two years. In addition, because the analysis is at the village level, the impact estimates the average effect of introducing the SG intervention on all households in the treatment villages compared to the control villages, regardless of whether they actually participated.

SILC Innovations Research Brief 5: An Evaluation of Household Impact Among Fee-for-Service Savings Groups (Ferguson, 2012)

This report provides evaluation findings from the Catholic Relief Services Savings and Internal Lending Communities model across Tanzania, Kenya, and Uganda from 2008-2012. This RCT compared the impact of traditional NGO-paid SG group facilitators (called field agents, or FAs) versus “private service providers” (PSP) who are paid to facilitate groups by the SG themselves using a fee-for-service model on program and household outcomes. After undergoing one year of training as an FA paid by Catholic Relief Services, two-thirds of the 333 FAs were assigned to follow the PSP model for income, while one-third remained in the FA model for an additional year. A subset of 240 villages each served by a different group facilitator was selected for the evaluation. Ten randomly selected villagers (both SG participants and non-SG participants) from each village were selected for household surveys at baseline and endline for a total of 2,119 households; 599 lived in villages with FA group facilitators, and 1,520 in villages with PSP facilitators.

When comparing school absences between PSP and FA village households, the authors found no significant difference, although PSP households were significantly more likely to mention lack of funds as a reason their children did not attend school. On two measures of food security – frequency of going to sleep hungry in the last month and frequency of failing to meet food needs in the past year – PSP village households were significantly less food-secure as compared to FA village households ($p < .05$). The authors propose that this difference is related to FA village SG members taking a lower-risk economic strategy, such as agriculture production, as opposed to risking investments on business ventures. PSP households were significantly more likely to purchase their food ($p < .01$) compared to FA households, and the authors also proposed that purchasing food when reliant on irregular income streams may also contribute to higher rates of food insecurity in PSP households. With regards to housing quality, FA village households tended to live in larger homes and FA households were significantly more likely to reside in homes made of cement or fire bricks. Additionally, FA households invested significantly more money into major improvements to the home, such as roofing.

Can Village Savings and Loan Groups Be a Potential Tool in the Malnutrition Fight? Mixed Method Findings from Mozambique (Brunie et al., 2014)⁵

The STRIVE program implemented by Save the Children from 2008-2012 sought to evaluate the impact of SGs alone or combined with a rotating labor scheme, called *Ajuda Mútua* (AM) on child nutritional outcomes in the Nampula Province of Mozambique.

Six of Nampula’s 18 districts were purposively selected and arranged in three pairs so that, once paired, they formed three groups that were comparable with respect to distance from the capital, economic activity, rainfall, and market activity. Each pair was then randomly assigned to receive either SG only, SG+AM, or no intervention. Corresponding program activities were offered in a subset of communities

⁵ Brunie et al. (2014) utilized a quasi-experimental design because of the lack of random assignment of participant to intervention or control.

in each district; households self-selected into groups within these communities. STRIVE activities were implemented alongside a food security through nutrition and agriculture program that included programming around good nutrition practices and educational activities with pregnant women and caregivers in mothers' groups to prevent malnutrition in young children. However, implementation of that program was uneven.

The impact evaluation used a prospective longitudinal design: baseline and endline survey data were collected from the same 1,276 households in August 2009 and August 2012. Survey participants were selected using a two-stage sampling approach; in intervention arms the primary sampling unit was the SG group, while in the control arms enumeration areas from the Mozambique census were used. The analysis approach used difference-in-difference propensity score matching models to estimate program impacts on months of food sufficiency and household dietary diversity scores at the household level, and on individual dietary diversity scores and weight-for-age at the child level. To better explain results from the impact evaluation, 72 in-depth interviews (IDIs) were conducted in November and December of 2012 with program participants from one district of the SG only arm and one of the SG+AM arm.

The impact evaluation found that participation in both SG only and SG+AM had a significant positive effect on months of food sufficiency in the household. Household Dietary Diversity Scores (HDDS) increased for the SG+AM households and their matched controls; the difference in increase between both groups was statistically significant, with a greater increase being measured in the control group. Child individual dietary diversity scores were significantly higher among the SG only group as compared to matched controls ($p < .01$). There was no statistically significant impact of program participation on child weight-for-age z-scores. While the results from the IDIs indicated that there were improvements in seasonal (hunger season) and transitory (shocks) food security, lack of money remains a challenge for supplementing home-grown food supplies or catering to the specific nutritional needs of children. Gender dynamics in the control of resources were also highlighted as a potential challenge. While the authors believe the findings illustrate the potential of savings groups to improve food security, they note that additional interventions are needed to alleviate chronic nutritional challenges.

Group B: Other Studies

Saving for Change Impact Stories Follow-Up Research Report (Gash et al., 2013)

Gash et al. present results of the Saving for Change program in the Koulikoro region of Mali from 2010-2012. In addition to forming self-managed SGs, female Saving for Change participants received training sessions in health, business, and financial management. Baseline surveys ($n=41$) were collected in 2010 from women who belonged to a random selection of 20 mature and 20 new Savings for Change groups. At endline, 31 of the same participants were surveyed (10 were lost to follow up), representing 30 SGs from 30 villages in 11 communes. Utilizing the FFH's Food Security Survey, the Progress out of Poverty Index and an impact story questionnaire, 90% of female participants reported that their children were "better off", with 89% of those women crediting education as the reason for the improvement at endline. From 2010 to 2012, there was a significant increase in food-secure households from 7% to 20% ($p < .05$). Seventy-six percent of all respondents in 2010 and 79% of all respondents in 2012 reported using loans for health expenses. Fewer than half of the respondents thought their children ate worse than they did as

a child (47%), while 20% felt their children ate the same. The rest of the mothers thought their children ate better than they did as a child.

Exploring Impacts of Multi-Year, Community-Based Care Programs for Orphans and Vulnerable Children: A Case Study from Kenya (Larson et al., 2013)

The Community-Based Care for Orphans and Vulnerable Children (CBCO) program operated in Eastern Province, Kenya from 2006-2010. The primary aim of the program was to support savings and loan associations (SLAs) for caregivers of Orphans and Vulnerable Children (OVC). A retrospective cohort study was conducted to measure the impact of the program on household food security and educational attainment. A cross-sectional survey was conducted in 2011 which included three study groups: households with program participants (n=486), households in the same villages without program participants (n=284), and households in nearby villages where the program did not operate (n=659). The two comparison groups were further subdivided into two subgroups based on whether or not the household met CBCO eligibility requirements (i.e., contained orphaned children at the time of the survey). The study found that over 50% of households in all the study groups (ranging from 54%-61%) were classified as severely food insecure (as measured by the household food insecurity access scale (HFIA), with the exception of the group of nearby villages that did not contain OVCs (46% were severely food insecure). The HFIA scores of the CBCO households and nearby households containing OVCs were similar. No educational outcome differences existed among the three groups for 7- to 13-year-olds. According to the authors, the findings suggest that a low-cost SG model may not be sufficient to impact education and household food security for OVCs, and that additional poverty alleviation activities would still be needed.

Impact of Accumulating Savings and Credit Associations on Child Wellbeing: Evidence from World Vision Groups in Mozambique (Beck, 2013)

Beck conducted research in February through April in 2012 in Nampula, Mozambique using a convenience sample of World Vision savings group members. Research consisted of focus group discussions with 30 groups composed of 448 individuals, 150 of which were interviewed individually. The research findings are limited because the study lacks baseline data and does not have control or comparison groups. The study sought to measure the impact of savings groups on household economic welfare and child wellbeing.

Beck argues that although there are methodological weaknesses and inaccuracies in measurement, findings strongly suggest that savings and loans have a substantial positive impact on income. Loans were reportedly more frequently used for productive purposes than share-outs. The overwhelming majority of participants that purchased valuable assets indicated that they would not have been able to purchase the assets if they had not been a member of an SG. Data shows substantial investments in housing improvements and anecdotal evidence suggests that SG participation enabled these investments. A number of respondents reported starting a new IGA through their SG participation.

It is unclear whether participants were better able to pay for school expenditures after joining the SG. Since the question was not formulated clearly, responses were not consistent. However, it is clear that

there are other non-monetary reasons why children do not go to school, such as having to travel a long distance to school.

The majority (56%) of respondents reported that there was no reported change in their children's workload. The remaining responses were mixed: 31% reported that their children's workload had increased since they began participating in an SG, while 13% reported that their children worked less after they began participating in an SG. Beck suggests that it would require further research to determine whether the amount of work done by children is to be considered "child labor".

The majority (61%) of participants reported an increase in food consumption since joining the SG, with more reporting eating greater amounts of protein, vegetables, and fruit. An overwhelming majority (94%) reported that they were better able to cover health expenses after joining the SG. However, access to health care remains problematic.

Baseline Study of Saving for Change in Mali: Results from the Segou Expansion Zone and Existing SfC Sites (BARA & IPA, 2010)

BARA and IPA present the baseline data for an expansion of the Saving for Change (SfC) program into the Segou region of Mali, the results of which were presented in Group A. This study also examines the impacts of SfC SGs that had already been in operation for two to four years at the time of the study in five villages in Mali in 2009. To maximize variability between the villages, a pool of villages were selected to represent a variety of characteristics: size; location; distance from roads and markets; rainfall; demographics; IGA strategies and processes; overseeing NGOs, the gender of technical agents and distance from the village; and duration of the SfC group's existence. While the number of villages in the sampling frame is not provided, researchers randomly selected five villages for community interviews with the village chief and other leaders, informal observations, focus group discussions with women in the community who were either part of an SfC group or an alternate group who had not yet joined the SfC group, or who had left the SfC group, and two to three in-depth interviews with technical agents and replicating agents. Three household surveys were also conducted at each village site to provide a more detailed understanding of socioeconomic conditions and IGAs that existed in the village.

In their analysis, the authors noted that in the villages in the expansion locations, the perceived-greatest benefits from participation were the ability to pay for household needs, children's educational needs, and for special occasions and ceremonies. The most common uses of loan funds were IGA investment, payment of medical costs, purchase of agricultural inputs, and purchase of food for the household. The most commonly reported uses of increased profits from IGA activities were payment of educational expenses and purchases for household consumption, including cooking utensils, roofing materials, and healthier food. Furthermore, men in SfC households also appreciated the ability of women to manage their finances and care for their children, and did not view women's increased economic contributions as a potential threat to their own roles as primary earners within the household.

Ensuring Continued Success: Saving for Change in Older Program Areas of Mali (Bermudez & Matuszeski, 2010)

The 19 Saving for Change SGs evaluated in this qualitative study had a program in operation for at least 2-3 years. One or more focus group discussions (FGDs), comprised of up to six women who had been part of an SG for at least two years, was conducted in each village. Several themes emerged from these discussions. First, women perceived that they had an increased investment and return on household IGAs and an increased investment in agricultural inputs. Within the household, women reported improved relationships with their spouses and more control over finances. Finally, participants reported a greater ability to pay for household expenses including child education costs, clothing, basic food consumption, more nutritious foods, and medical fees, visits, and treatments.

Livelihood-Based Social Protection for Orphans and Vulnerable Children: Success Stories from Malawi (Bota, 2010)

This report highlights three community-based organizations (CBOs) in Malawi, two of whom had SG as one component of larger interventions to address the needs of OVC and their caregivers. Using a database of economic development programs that target OVC, 10 were identified for potential inclusion in this report and three were ultimately selected to write up as case studies based on perceptions of their successes and potential for dissemination elsewhere in Malawi. Information on these programs was collected through a combination of site visits, FGDs and IDIs with various people, including OVC, OVC household heads, government agents and staff directly involved in the projects. The two SG programs that were selected were implemented in conjunction with a number of additional development interventions in two regions of Malawi: Ntcheu and Thawilo.

In Ntcheu, a CBO initiated SGs in 2008 alongside a number of other, primarily agricultural, interventions. By 2009, membership had grown to 44 members across four different groups. It was reported that loans were used to pay for farming products and assets, children's school uniforms and fees and food for the household. Perceived benefits of the SG in Ntcheu was increased income-earning opportunities by using money borrowed from the SG. In one example of the program's success provided by the authors, "A widowed woman reported using her loan to buy maize, beans and other crop produce for resale at higher prices, earning a gross profit of about K2000 per sale. Last year she managed to pay school fees and pocket money to her secondary school child, in addition to meeting her household's basic necessities. Some people reported borrowing money from the VSL to buy fertilizer which boosted their crop production tremendously."

In Thawilo, as part of a larger intervention with multiple components, a CBO began SGs alongside agricultural and education-focused interventions. Within a year, over 75 individuals formed three SG groups in the area. Participants believed that their food and nutrition security had increased as they invested in farm inputs and began growing their own food.

Evaluation of Economic Strengthening for OVC: Using the WORTH Model in Uganda (Swarts et al., 2010)⁶

The WORTH model is an SG program combined with trainings in literacy, math, health, children's rights, OVC care, and gender issues that was implemented by the Salvation Army (TSA) in Uganda from 2005-2010. This project added SGs to an existing orphans and vulnerable children welfare program with the goal of building community and caregiver capacity to provide for the needs of OVC. Participation in the SG portion of the program was voluntary and encouraged by Community Action Teams that recruited participants. To evaluate the project, TSA conducted 685 household surveys with four different populations: caregivers of OVC who received WORTH (n=197), OVC of caregivers who received WORTH (n=152), caregivers who did not receive WORTH but participated in the general TSA OVC program (n=196), and OVC of caregivers who did not receive WORTH but participated in the general OVC program (n=140). Participants were randomly selected from a list of all OVC project beneficiaries in eastern Uganda across three districts. Based on the authors' description, it is unclear whether some or all of the caregivers were from the same households as the OVC. In addition, an unspecified number of FGDs with OVC, caregivers, community action team members, WORTH members, Kids and Youth Club organizers, community counselors, community leaders, and TSA officers were conducted. Information was also collected from a number of other sources: official project documents and reports; partner agreements; project evaluations; memos; meeting minutes and randomly selected site visits.

The difference in economic outcomes for SG households versus non-SG households is very apparent. While the differences in OVC welfare measures between the two groups are not large, they are consistently higher for SG households, though no significant tests were presented. Additionally, in terms of support networks that provide emotional and material support, the SG households' networks were more extensive. Regarding nutrition measures, TSA's SG households were more likely than non-SG households to eat three meals per day and to include fruit and protein in their diet. They were also more likely to grow their own food. There was no difference in school attendance, but evaluations showed that SG households were 10% more likely to invest in academic enrichment, such as in extra school supplies, tutoring sessions, and homework help. In terms of health measures, a higher percentage of SG households used treated water, were tested for HIV (both OVC and caregivers), sought medicine and health care when sick, owned hygiene items such as a toothbrush and soap, and used a bed and a latrine. SG households were also more likely to have made recent home repairs and to have homes in "good" rather than "poor" condition. Few of these measures are specific to children, but all are assumed to have an impact on children's wellbeing. Although the differences are reported to be small in scale, it is clear that caregivers participating in both the SG and OVC care programs exhibited slightly better outcomes in terms of nutrition, food security, investment in education, health, housing quality, support networks and economic indicators than did the caregivers that only participated in the OVC care program.

⁶ The WORTH program was the subject of two additional studies included in this section.

Report on Impact Evaluation of WORTH Literacy-led Saving and Credit Program (Abebe & H/selassie, 2009)

This quantitative and qualitative evaluation was completed by interviewing 926 WORTH participants from 12 different SGs in Ethiopia. The program also included training in HIV/AIDS, family planning, and gender issues. The evaluation included a survey, focus group discussions, and in-depth interviews with relevant stakeholders. Women were randomly selected from the population of 9,000 WORTH participants in Ethiopia utilizing a multistage sampling technique. After separating villages by accessibility for surveying, women in accessible villages were stratified based on rural-urban characteristics, time period since the group they belonged to was formed, and past performance of group. These strata were randomly sampled in proportions to ensure heterogeneity and to be reflective of the overall population. Focus group discussions were also held with *kebele* administrators, religious leaders, elders, community association representatives, husbands of WORTH women, WORTH group representatives, and health extension workers in groups of at least 10 participants.

Although individual women reported using SG loans to send their children to private schools or send more children to school, there did not seem to be a group-wide change in spending on education. However, an increased awareness of the importance of educating children was reported. A majority of the individual respondents reported having increased decision-making power in the household. Nearly half of the women (46.7%) reported a small increase in income from the past year while 20% reported a large increase.

Evaluation of Impact of the Tougouri Pilot Project and Establishment of Baseline Data for Phase II (Boyle, 2009)

This assessment evaluates a pilot program of SGs, referred to as VSLs, implemented by Plan in Burkina Faso utilizing both a household survey with 180 VSL members and non-members and six FGDs with VSL members. Researchers randomly selected 60 households who joined VSLs during 2006-2007 (VSL 1) from the six villages that began the program during that time period; 60 randomly selected households who joined VSLs during 2007-2008 (VSL 2) from the 11 villages who began the program during that time period; and 60 randomly selected non-participant households (non-VSL) for a household survey with a woman member of the VSL or a comparable non-member. These 120 VSL member households represent about 4.5% of the 2,684 VSL members who participated in the pilot program. Focus groups were held in six of the same villages included in the household survey, with three FGDs held with VSL group 1 and three with VSL group 2. Each focus group included between 15-22 participants; a total of 104 women from 30 VSL associations split evenly between VSL 1 and VSL 2 participated in the focus groups.

The study presented results for the two VSL groups combined (VSL 1 and VSL 2) compared to the control group. The study found mixed results for household assets, with greater asset growth among SG participants (VSL 1 and VSL 2) for some non-productive and productive assets such as poultry, compared to non-VSL members, but no growth or a decline in other assets. Only minimal changes are found for home improvement or school attendance among SG participants. SG participants consume a greater quantity of food than do non-participants overall and in the categories of meat, fish and vegetables. SG

participants invested resources in existing IGAs more than non-participants, but did not seem to begin new IGAs. Related to this increase in IGA activity, household child labor levels were higher among SG households than non-SG households. Women in SGs, as compared to female non-participants, experienced greater gains in decision-making power within the household, especially over resources and women's incomes. There were multiple reports of a shift from male decision making to joint decision-making and, in some cases, female decision making. SG participants also reported a greater increase in the affordability of health care for their households. The primary use for loans and savings were investment in IGAs or productive assets (poultry), but spending of loans was also reported on school fees, food, and festive occasions.

Those outcomes that exhibited increasing trends over time (meaning greater gains among the 2-3 year participants (VSL 1) than for the 1-2 year participants (VSL 2) included better intra-household dynamics and increased decision-making power, poultry possession, general food consumption, and investment in livestock fattening and restaurant operation IGAs.

Increasing Savings and Solidarity among Households with Orphans and Vulnerable Children in Rwanda (Dills et al., 2008)

CRS implemented their SG model, SILC (Savings and Internal Lending Communities), in Rwanda with a specific focus on orphans and vulnerable children (OVC). Complementing Rwanda's OVC programming, the SILC program serves as an outlet to provide participants with additional services, such as a basic financial education. In this program the savings groups were linked to OVC programming which included health insurance, nutrition education, psychosocial support, temporary funding for school materials, and assistance with school fees for secondary school or vocational training. This program differs from most others in that it provides monetary support in addition to educational opportunities and savings groups, which can be expected to influence the outcomes associated with this program. Another unique characteristic of the intervention was the inclusion of households with no OVC, households with adult caregivers of OVC, and child-headed households with OVC (10,768 households' total, 6,000 of which included OVC either as dependents or heads-of-households).

An evaluation was conducted using a pre-test/post-test design to measure changes among program recipients. A baseline survey was conducted in June 2007 and an endline survey was conducted 12 months later in June 2008. The data was collected from SG participants only and lacked a comparison group, therefore, the results cannot indicate SG correlation or impact. A number of positive changes were noted in comparing the results from the two surveys. CRS found that the percentage of participants able to pay for health insurance for OVC under the age of six increased from 13.6% to 44.6%. There was an increase from 2% to 7% in the proportion of households saving for children's education and an increase from 60.9% to 80.6% in the proportion of participants who ate at least two meals per day. Meanwhile, there was a decrease from 20.7% to 14.8% in the percentage of households with a child who dropped out of primary school. In their discussion the authors noted that a household approach was critical to the program's effectiveness at addressing the needs of OVC and their caregivers; rarely are the issues these groups face limited to only those individuals within the household.

Women Ending Poverty: The WORTH Program in Nepal: Empowerment through Literacy, Banking, and Business 1999-2007 (VRG & Mayoux, 2008)

Seven of 21 WORTH SG program regions in Nepal were sampled and evaluated with the purpose of determining whether or not any of the 1,500 SGs operated by WORTH were still in existence post-civil war in 2006, and if still operating, what impact they were having on the community. Pact began implementing the WORTH program in 1999, and within two years trained over 35,000 women in 1,500 SGs (called village banks) across southern Nepal with business, banking, and literacy skills as part of a women's empowerment and development program. In 2001, a Maoist insurgency brought on intense fighting and civil war, ending Pact's support of the WORTH program.

To identify the study sample, each district was ranked according to the number of WORTH groups. Districts were randomly selected using a random number generator. From there, the study sample was selected at the group level—a random sample of 450 village bank groups were selected out of 933 in the selected districts that existed in 2001. From this random sample 288 bank groups were identified as still existing and included in the study sample. In addition to these 288 bank groups, 45 out of 120 replicated groups (village banks that went out and trained other groups, but were not trained by WORTH TAs) were included. A total of 4,486 members of the Village Bank groups and 658 members of replicated groups were interviewed. Analysis was conducted at both the group and individual level.

According to survey results, women reported that they felt they were better able to obtain access to health services for their family, to send their children to school, to provide sufficient food for their family, to begin new and expand existing IGAs, and to improve their quality of housing and household assets. Eighty-nine percent reported an overall improvement in their economic wellbeing. Regarding loan use, 48% of women reported using loan funds for education expenses, 40% for health payments, 14% for food purchases, and 8% for home improvement, among other uses. Groups were also involved in social efforts to discourage harmful social practices, some of which pertained to children's wellbeing such as child marriage and labor, girls' education, and the trafficking and rape of underage girls. After five years of SG activity, one community's average age of marriage for young girls rose from thirteen years to sixteen years of age. Although the findings are positive, the study design limits the ability to attribute the results to participation in SGs.

Group C: Youth Programs

Catholic Relief Services reported the results of two SG programs for youth in Zimbabwe and Rwanda. Each program implements additional development interventions in combination with the youth savings groups.

My Skills, My Money, My Brighter Future in Zimbabwe: An Assessment of Economic Strengthening Interventions for Adolescent Girls (Miller et al., 2011)

In Zimbabwe, in addition to the SG program, male and female youth participate in life skills education and psychosocial support activities such as conflict resolution, goal-setting, effective communication, HIV awareness and prevention, healthy planning for pregnancy, and decision-making. Data was collected

through semi-structured interviews and focus group discussions with youth participants and caregivers invited by the NGOs. One hundred and fourteen participants were spread across 11 FGDs with adolescent girls who participated in the program, with adolescent boys who participated in the program, with male and female caregivers, and with a group of adolescent girls who were not yet involved with the SG program. Following the focus groups, a selection of adolescent girls in the program who participated in the FGDs participated in key informant interviews. The girls reported that they often used their income or savings for their school fees or those of their siblings and to purchase food or other household items. They felt that they were less likely than their peers to engage in transactional sex and reported higher levels of self-esteem and self-efficacy.

Empowering Rwandan Youth through Savings-led Microfinance (Mukankusi, et al., 2009)

CRS's SGs for youth and OVC in Rwanda included vocational training and a "starter kit," such as a sewing machine. Qualitative data was collected through 13 FGDs with CRS staff, partner Caritas staff, mixed gender groups of program participants between the ages of 16-20 years, graduates of the program, caregivers, and community leaders. In addition, the evaluation utilized the OVC wellbeing tool (OWT) created by CRS to solicit feedback from OVC though the details of this tool were not included in CRS's report. Participating child heads-of-household reported investing in productive household assets such as animals or small land plots, purchasing clothing and school materials for themselves or their siblings (also OVC), or spending on small home repairs. They also reported experiencing more social cohesion and a stronger connection with community networks. Ninety percent of OVC in the program were able to pay into the required national health insurance program—a higher percentage than OVC not participating in the program (Mukankusi et al., 2009).

Group D: Secondary Research Reports

Savings Groups and Educational Investments (Cameron & Ananga, 2013)

Cameron and Ananga present the evidence of savings groups and their direct and indirect impact on education. Many sources provide suggestive evidence and the authors were unable to find articles that specifically focused on the effects of SGs on education in peer reviewed journals. Overall, the studies find somewhat mixed results for direct impacts on education. SGs appear to have a positive impact on educational expenditure in some contexts, while in other countries any impact has been hard to find. There is no evidence of a negative effect, but there are some cases of no significant effect being found. The household's socioeconomic status and livelihood capacity are likely to improve education by increasing educational expenses, as well as more indirect channels, such as improving health, food security and nutrition, and reducing child labor. The studies that focused on use of child work and health and nutrition found mixed results. The review concludes that SGs appear to shift decision making towards female household members, but recognizes that we need to be careful in calling this empowerment since it also increases the female household member's burden of responsibility.

The second half of this report presents primary research in Ghana that took place in two villages, comprised of interviews with 52 adult savings group members, 27 adult non-members, 19 children (9-17) in school and 5 out-of-school, 8 teachers, and 2 community volunteers. The study revealed that parents valued education and perceived it as a way to reduce dependence on agricultural work. Education was also among the main reasons given for taking loans. Several participants reported using share outs to pay for educational expenses and participants also reported that educational attendance and results had improved as a result of savings groups. The study found that a gradual improvement in income, especially from small businesses operated by women, and better ability to pay fees on time, results in children being sent to school and less likely to be taken out of school. Participants reported using loans for healthcare and food. There was little evidence of a change in the incidence of child labor, but some evidence that women had increased power over expenditure decisions. In the wealthier of the two communities, parents were using their income, increased income from businesses, and loans to withdraw children from the local government school and send them to private school. Cameron and Ananga conclude that while SGs won't necessarily allow for an increase in household spending on education, a positive effect on attendance is an important outcome.

The Evidence-Based Story of Savings Groups: A Synthesis of Seven Randomized Control Trials (Gash & Odell, 2013)

Gash and Odell summarize the results from recent RCT studies of the following programs:

- 1) CARE USA's Save Up VSLA program in Malawi,
- 2) CARE USA's Save Up VSLA program in Uganda,
- 3) CARE Ghana's ESCAPE VSLA program,
- 4) DanChurchAid's VSLA program in Malawi,
- 5) Oxfam America, Freedom from Hunger, and the Strømme Foundation's (OA/FFH) Saving for Change (SfC) program in Mali,
- 6) Catholic Relief Services' (CRS) Private Service Provider (PSP) program within its Savings and Internal Lending Communities (SILC) programs in Kenya, Tanzania, and Uganda, and
- 7) International Rescue Committee's (IRC) New Generation VSLA program in Burundi.⁷

The summary of evidence related to household economic impacts suggests that while the availability of SGs increase both savings and use of credit in treatment areas, there were mixed results showing SGs positively affect asset ownership. However, negative effects were not observed. While some evidence suggests that SGs availability/participation increases expenditure, the evidence is not consistent across all seven studies. While the majority of the evidence suggests little impact on health or education outcomes or expenditures, positive effects were identified in limited contexts, including increased primary enrollment in Ghana and increased spending on children's education in Burundi. Positive impacts were observed in food security in several different locations across a variety of measures, although outcomes are mixed. There is a reasonable body of evidence suggesting that SG participation supports food security.

⁷ Section A presents the findings of each of the RCTs presented in Gash & Odell (2013).

Pathways to Change: The Impact of Group Participation (Gash, 2013)

Gash reviews fifteen studies on SG programs (including some of the programs discussed in this review), summarizing her findings on their reported impacts. She assigns potential outcomes a high likelihood, medium likelihood, or low likelihood based on evidence from the studies. It is possible that her ranking reflects the number of studies that measure a specific outcome, especially in the case where not many studies address the outcome (e.g., impact on household income is ranked as low, which may be somewhat attributable to the fact that only a few studies reported on this outcome). Outcomes with high likelihoods include asset accumulation, consumption smoothing, IGA investment, and group solidarity. Outcomes with medium likelihoods include member-led collective activities, assumption of community leadership roles by members, increased self-confidence, increased decision-making power for women in the household, and greater food security. Outcomes with low likelihoods include increased household income and increased school enrollment rates. Risk management is assigned a speculative ranking of medium to high likelihood and increased school absenteeism among girls is considered a potential negative outcome.

Microfinance in Africa: State-of-the-Sector Report (Helmore, 2009)

CARE's Microfinance in Africa: State-of-the-Sector Report synthesizes general findings from their SG programs in various countries in Africa. Evaluation methods were different in each country, varying from a desk review of previous evaluations in Niger to a quasi-experimental design with a comparison group in Malawi. In Tanzania, Uganda, and Malawi, evaluations of CARE SGs showed that women who were able to contribute more to household expenses as a result of participating in an SG gained more power within the household, especially over spending decisions. In Uganda, the percentage of participants' children regularly attending school increased from 75% to 87% and the percentage of households eating three meals per day increased from 41% to 53%. In Malawi, 64% of SG participants could contribute financially to their children's education compared to only 36% of non-participants. An evaluation of SGs in South Africa revealed a strong linkage between participation and improved housing, higher food security, and improved diets, as measured by higher consumption levels of meat and vegetables. In Niger, female participants reported that they were able to contribute to household expenses and to their children's school fees; something they could not previously do. However, CARE staff in Tanzania expressed some concern that children, especially young girls, would be required to work to help with household IGAs. Additionally, the report postulates that SGs may also impact the level of government investment in a community to the extent that the community is able to contribute financially to such investments. For example, in some instances in Niger the government accepts free labor to work on local infrastructure projects instead of relying on monetary contribution. However, in VSLA villages where people can contribute funds to a project, local workers are paid to do the work.

DISCUSSION

A review of the literature on savings groups and their impact on child welfare indicators shows that there is little evidence that these types of programs are effective at positively impacting child-level outcomes. Most of the programs examined were aimed at caregivers or other adult members of the community with the assumption that benefits to the household would translate to benefits to children. Only three programs (two in Mozambique and one in Burundi) were specifically designed to target children while two programs (one in Rwanda and one in Zimbabwe) were aimed at youth. Regardless of the aim of the program, the evidence is limited by the lack of well-designed rigorous evaluations, and only eight of the studies included were experimental or quasi-experimental designs. In addition, while other studies appeared to have used reasonably strong methodologies even if they were not experimental designs, often the summary of the methods used was incomplete, making it difficult to assess the strength of the findings.

While some of the RCTs showed positive outcomes in the intervention groups, there were few that showed a significant impact on outcomes related to child welfare. For instance, while Karlan et al. (2012) found increased spending on education in Ghana and Uganda, the difference between the control and intervention groups was not significant. Even the Bundervoet et al. (2012) study that was designed to specifically target child wellbeing found only one significant indicator (reduction in harsh discipline) out of seven measured. Other studies that were not experimental reported positive results, though they cannot be attributed to the SG programs. For instance the Dills et al. (2008) study in Rwanda found an increase between the pre-and post- test surveys in health insurance payments for OVCs, an increase in eating at least two meals a day and a decrease in children dropping out of primary school. Qualitative studies such as in Mali (Bermudez and Matuszeski, 2010) and Malawi (Bota, 2010) reported perceptions of education and/or nutritional benefits. The two programs that specifically targeted youth found that the youth in these programs perceived that there were benefits in terms of life skills, vocational training, and education.

The current literature, nonetheless, provide several lessons for future work in this area. First and foremost is the need for well-designed studies that are sufficiently described in the literature and preferably submitted to peer-reviewed journals. Another is a need for longer term studies. Most of the evaluations reviewed had only a one to three year timeframe which is likely not sufficient to achieve impact, particularly at the child-level. Overall a reasonable body of evidence finds improvement in household food security. This should not be surprising since a household that is suffering from food shortages would likely prioritize this domain. Conversely, there was generally no impact on school enrollment as a result of participating in an SG, which likely would not have the same priority as food security. Furthermore, most of the studies were not aimed specifically at children and it may be unrealistic to expect results at their level, especially in relatively short timeframes.

This literature review also demonstrates that research design is important in deciphering the strengths of the findings as well as interpreting the results themselves. While experimental and quasi-experimental designs provide more robust findings, coupling the quantitative methods with qualitative methods allow the researcher to address the “why.” For example, the results from IDIs in Brunie et al. (2014) indicated that although there were improvements in seasonal (hunger season) and transitory (shocks) food security,

lack of money remains a challenge for supplementing home-grown food supplies or catering to the specific nutritional needs of children. The IDIs also uncovered gender dynamics in the control of resources as a potential challenge.

The overall findings from the non-experimental designs suggest positive impacts on both household and child wellbeing. However, some reports draw these conclusions from anecdotal or highly subjective evaluation methods. Although the experimental and quasi-experimental designs find mixed results, many impacts are trending in a positive direction. For example, IPA (2012) and Karlan et al. (2012) found that SG share-outs and loans were reportedly used for business expenses and investments, agricultural inputs, food consumption, and education expenses. Despite these trends in spending, no significant impact was found at the village level regarding household assets, intra-household indicators, education, housing quality, or food security.

Finally, a few of the authors pointed out that SGs on their own may not be sufficient to impact child wellbeing and that there is a need for a broader range of interventions. Brunie et al. (2014) for instance found that even with improvements in income, the gains were not sufficient to transform livelihoods and move households out of poverty. Larson et al. (2013) agreed and stated that a low cost SG model may not be sufficient to impact household food security and OVC education and that additional poverty alleviation activities were still needed.

COST ANALYSIS

Understanding the costs of SGs in relation to their benefits informs program planning and encourages smart investments. A cost analysis contributes to the discussion of the value of observed or anticipated effects. Below is a review of what we know so far about SG costs and benefits.

SGs are generally considered to be a cost-effective investment, especially for reaching rural, remote populations. Allen (2005) references an average cost of \$40 USD per SG participant, an amount recognized as 10% or 15% of the cost per client of most MFIs in Africa. Allen and Hobane (2004) report that CARE's worldwide average cost per SG client in 2004 fell within the range of \$18 to \$50. This compares favorably to costs of various MFIs in Africa. Several MFIs operating in Ethiopia, Mozambique, Ghana, South Africa and Togo report a per client cost ranging from \$73 to \$218, while CARE reports a per-client cost of \$37 (after 3 years) and \$7 (after 10 years) for their SG programs. As these calculations demonstrate, SG costs are expected to decrease with time as groups begin to operate autonomously. In fact, groups are expected to support their own costs entirely once their training period is complete (Goss, 2010; Helmore, 2009). As Gash (2013) points out, cost calculations vary greatly depending on a number of variables, including scale, geography, program maturity, project infrastructure, additional development services offered, and self-reporting by facilitating agencies.

There are some SG programs that have significantly higher costs, such as CARE's program in Zanzibar at \$240 per client, which later fell to \$93 per client as the SG program grew. The CARE program in Zanzibar was more expansive and did not have enough time to grow and reach scale (Anyango et al., 2007). IRC's SG program in Burundi appears to report the highest cost at \$1,490 per participant (also calculated as

\$257 per individual impacted, with all members of each participant’s household considered to be impacted individuals), largely due to the high-quality, high-cost research design. This program is also one of the few studies (reviewed below) that was evaluated using a strong experimental design—a randomized controlled trial (RCT). Bundervoet et al. (2012) attribute the high cost to great expenses associated with the design of a new intervention, start-up processes, and rigorous evaluation methods.

As Bundervoet et al. (2012) point out, a cost analysis of SGs can be difficult given that the benefits are largely social and challenging to enumerate. One way in which SG evaluations attempt to demonstrate success and tackle the cost-benefit question is by reporting return on investment, or return on savings. Oxfam SGs in Mali show an annual return on savings of 30-40% (Goss, 2010); IRC’s groups in Burundi show an average return of 46% on savings at the endline (Annan et al., 2013); CARE reports 53% dividend rates for SG members in Zanzibar (Anyango et al., 2007); and the Bill and Melinda Gates Foundation reports average returns of 40% in Africa and of 18.3% in East Asia and the Pacific (Goss, 2010).

POTENTIAL FOR SCALE

The SG model’s proposed group autonomy after one year of operation and its minimal requirement for external capital are two characteristics that keep costs down, creating potential to reach scale. The SG model is also adaptable to different contexts and effective in a variety of locales, further encouraging expansion (Helmore, 2009). Additionally, there is high demand for SG expansion, especially in communities where groups have already successfully completed one savings and loan cycle (Anyango et al., 2007). Demand is generated when non-participants witness the benefits afforded their neighbors through group participation. CARE witnessed this demand with the creation of new groups in communities where they had started SG programs and then pulled out. New groups may be started after the implementing organization has left—or even before—by trained community members, SG graduates, or current SG members. On occasion, an apex organization has been created upon an NGO’s exit to take on the responsibility of creating and training new groups (Helmore, 2009). CARE saw an increase in the number of SGs in Zimbabwe by 19,000 in just two years after their departure (Allen & Hobane, 2004). Fourteen percent of WORTH SGs in Nepal were reported to have helped form at least one other savings group in their community unaided by the facilitating agency, Pact (VRG & Mayoux, 2008). After CARE left Zanzibar, the number of SGs grew from 1,272 in 2002 to 4,552 in 2006—an annual growth rate of 37.5%. This certainly illustrates a strong demand for SGs across regions (Anyango et al., 2007).

Bundervoet et al. (2012) recommend bringing SGs to scale. The potential for growth, however, requires donor commitment to, and support of, the SG movement. Raising the level of awareness about community savings groups will be required to realize their potential for scale. This, in turn, requires clear evaluation methods and valuable impact reports that can demonstrate the costs and benefits of investing in the savings movement.

TOPICS FOR FURTHER RESEARCH

The existing literature on SG impacts on children’s wellbeing lacks sufficient depth and has many gaps. Use of more rigorous and consistent evaluation methods and indicators would yield valuable findings across contexts that could easily be compared. The following topics for further research are included as suggestions for the continued development of the evidence base on this topic.

INDICATORS

As the research illustrates, there is no common, established approach to link economic strengthening interventions to children’s wellbeing outcomes. Yet shared measures do appear across studies—usually relating to education, health, and nutrition indicators. Some studies lack strong, child-specific indicators while other studies with strong indicators lack a rigorous evaluation methodology. One obstacle to developing effective measurements and evaluation methodologies is often the high cost required to do so (AED, 2008). The establishment of indicators that both demonstrate clear impacts at the child-level and are cost-effective, has proven to be a challenge thus far. Nevertheless, there is a great need for such measures moving forward.

Below is a list of suggested indicators, organized by category, which can be used when evaluating economic strengthening interventions’ specific impact on children. These indicators have been proposed because they are considered to be well-specified, cost-effective, and consistent (Gammage & Williams, 2007). Some of the indicators are already in use, while others are not. Chaffin (2011) laments, for example, that many studies lack a time-use indicator.

Suggested Indicators

Education Indicators:

- Number of children enrolled in primary and secondary school,
- Attendance rates of children enrolled in primary and secondary schools,
- Percentage of children who successfully complete primary and secondary education,
- Number of children who receive assistance with school-related expenses,
- Number of children who receive education-related assistance from an adult mentor on a regular basis,
- Number of days a child has been absent from school in the past week or month,
- The educational deficit of children
 - (Uganda Ministry of Gender, 2005; Gammage & Williams, 2007).

Health Indicators:

- Number of children who receive medical assistance when they are sick,
- Reported number of days that a child has been sick in the past month,
- Number of households that report an improvement in the overall health of family members,
- Number of children receiving HIV/AIDS education and counseling,
- Number of children who have been tested for HIV/AIDS,
- Percentage of children covered by health insurance
 - (Uganda Ministry of Gender, 2005; Gammage & Williams, 2007; AED, 2008).

Nutrition & Food Security Indicators:

- Number of children eating three meals per day,
- Number of times a child has eaten each food group,
- Degree of wasting and stunting exhibited by children,
- Children's height and weight (proportionally)
 - (Uganda Ministry of Gender, 2005; Gammage & Williams, 2007; and AED, 2008).

Time Use / Child Labor Indicators:

- Number of children in a household who spend time working on an IGA for their household,
- Number of hours spent by each child working on an IGA for their household in the past week,
- Number of hours children have spent in the past week playing or socializing, free from school and household work
 - (Uganda Ministry of Gender, 2005; Gammage & Williams, 2007).

It is also critical to maintain indicators for mediating factors with strong linkages to child wellbeing. Housing condition is an example of such a mediating factor, and one that is measured across many studies. The literature collected for this review contains several reports that reference housing condition indicators, but some are recorded based on interviewer observations or interviewee feedback. One way to quantify improvements in housing conditions is to record the amount of money spent on home improvement projects in the past year. Although this measure does not directly address children's wellbeing, there is a presumed linkage between housing condition and children's wellbeing. There is a need for further research to understand such linkages, whether that understanding can be accomplished through additional measures or new indicators.

Additional criteria for indicators include that data be disaggregated by sex and age, that indicators are tracked regularly instead of at a single point in time, and that selected indicators cover multiple categories to ensure that projects are generating positive outcomes across a range of impact areas (Gammage & Williams, 2007; AED, 2008).

DOSAGE

References to dosage—meaning how many SG cycles are required to produce specified results—do not often appear in the literature. However, the research does include some differentiation between the expected timeline of different impacts. For example, several studies have shown that significant housing quality impacts take longer because they require a relatively large investment, which explains why most housing impacts uncovered in the research are reported as “small” improvements. Still, only a few of the studies in the review discuss dosage directly. Brannen (2010) accounts for dosage in her statistical analysis of each outcome measured, but time spent in SGs failed to explain most outcomes at a statistically significant level. Boyle (2009) also accounts for dosage in his evaluation and determines that outcomes for overall food consumption and intra-household dynamics and decision-making are time sensitive. However, he only evaluates groups of one to three years; this short timeframe may influence his findings. Gash (2013), in her review of fifteen studies on SG impact, concludes that most impacts show an increased likelihood of occurrence and increased depth with longer participation. Some of the outcomes that she speculates can be expected with a one to two year participation period include small asset accumulation, IGA investment, solidarity among members, food security, and risk management. Gash suggests that in a timeframe of three or more years, in addition to a deeper impact for each of the previously listed outcomes, further changes include greater decision-making power among women in the household, increased income, and a decrease in poverty levels (although this final outcome should only be expected in the five- to ten-year timeframe).

One explanation for the lack of focus on dosage could be the difficulty in measuring, at the individual level, the cross section of time spent in a savings group and the amount saved during that time. Part of the SG design is each group member's ability to set their own contribution amount, resulting in some members depositing much larger amounts into the SG fund than others. Of course, those who contribute more also receive more at pay out, but this variance makes it difficult to measure dosage. Some studies have attempted to deal with this by reporting the group's average percent return on investment. Although a good compromise, this measure still fails to directly address children's wellbeing and the magnitude of its

impact depends on each individual's financial situation prior to SG participation.

Further research should include an investigation of how many savings cycles are required to produce specific outcomes for children; this information is essential for designing purposeful SG interventions in the future.

SEX

Most of the existing evidence does not disaggregate data by the sex of the child. It is important to find out whether or not the outcomes measured, such as spending on food or increased child labor, affect male and female children in the same way. Additionally, results should be disaggregated according to the sex of the SG participant (male vs. female caregiver). Although savings programs tend to target women and a majority of the participants are female, men *are* involved. Yet, few reports actually distinguish between the outcomes generated by female participants and those of male participants. Finally, decision-making power and intra-household dynamics between men and women affect household spending which, in turn, affects children's wellbeing. As the impacts of SG participation may depend on these variables, more studies should address gender dynamics or decision-making power within the household.

ANNEX 1: MATRIX OF STUDIES REVIEWED

Publication Title	Study Years	Intervention(s)	Location	Study Sample (N)	Outcome/Impact Areas Assessed	Study Design & Methods
Group A: Experimental and Quasi-Experimental Designs						
Final Impact Evaluation of the Saving for Change Program in Mali, 2009-2012; Bara and IPA (2013)	2009-2012	SLG, malaria education	Mali	n=5094; Female only	Food security, Education, Housing quality, Intra-HH decision-making, Poverty reduction	Randomized Control Trial (RCT); Household (HH) survey, focus group discussions (FGDs), in-depth interviews (IDIs)
Impact Assessment of Savings Groups in Ghana, Malawi, and Uganda (Final Report and Evaluation Summary Report); Karlan et al. (2012), IPA (2012), IPA (2012), IPA (2012)	2008-2011	SLG	Ghana, Malawi, Uganda	Ghana: n=4487, Malawi: n=4130, Uganda: n=4194; Female only	<i>Malawi</i> : Intra-HH decision-making, Food security, Asset accumulation, Housing, Education, Health; <i>Uganda</i> : Intra-HH decision-making, Food consumption, Asset accumulation, Education, Health, Housing; <i>Ghana</i> : Asset accumulation, Intra-HH decision-making, Food security, Housing	RCT; HH survey, FGDs
"Urwaruka Rushasha": A Randomized Impact Evaluation of Village Savings and Loans Associations and Family-Based Interventions in Burundi; Bundervoet et al. (2012), Annan et al. (2013)	2010-2012	SLG, discussion modules addressing children's protection, well-being, and development, entrepreneurship and financial literacy training	Burundi	HH surveys: n=7905 individuals (including children), Qualitative: n=39 caregivers, n= 29 children; Both male and female (approx. 50/50 among HHs evaluated at mid-term)	Poverty reduction, Consumption expenditures, Household assets, Harsh child discipline, Children's well-being, Children's mental health, Family well-being, Spending on children, Child labor, Healthcare seeking behavior, Mosquito net use	RCT; HH and child survey; participatory timeline interviews
Impact of Village Savings and Loans Associations: Evidence from a Cluster Randomized Control Trial; Ksoll et al. (2013)	2009-2011	SLG	Malawi	HH survey n=1726; gender not specified	Housing Quality, Food security, Asset Accumulation, HH income	RCT; HH survey
SILC Innovations Research Brief 5: An Evaluation of Household Impact Among Fee-for-Service Savings Groups; Ferguson (2012)	2008-2012	SLG	Tanzania, Kenya, Uganda	HH survey n=2119, (599 FA model, 1520 PSP model); gender not specified	School absences, Food security, Housing quality	RCT; HH survey
Can village savings and loan groups be a potential tool in the malnutrition fight? Mixed method findings from Mozambique; Brunie et al. (2014)	2009-2012	SLG, food security, child nutrition, and shared labor intervention	Mozambique	HH survey: n=1276, IDIs: n=72; Gender not specified	Food sufficiency, child and adult Dietary Diversity Scores child weight-for-age z scores	RCT; HH surveys and IDIs

Publication Title	Study	Intervention(s)	Location	Study Sample (N)	Outcome/Impact Areas Assessed	Methods
Group B: Other Designs						
Saving for Change Impact Stories Follow-Up Research Report; Gash et al. (2013)	2010-2012	SLG, training in health, business, and financial management	Mali	n=31; Female only	Food security, Well-being, Poverty	Longitudinal pre-post test intervention group only; Individual surveys
Exploring impacts of multi-year, community-based care programs for orphans and vulnerable children: A case study from Kenya; Larson et al. (2013)	2011	SLG, direct and indirect support to OVC caretakers	Kenya	Program HH: n=284, non-program HH (intervention villages: n=284, non-program HH (control villages) n=659; Predominantly female	Food security, Education	Cross-sectional retrospective cohort; HH surveys
Impact of Accumulating Savings and Credit Associations on Child Well-Being: Evidence from World Vision Groups in Mozambique; Beck (2012)	2012	SLG (since World Vision has been active in the area, most members received additional non-financial activities)	Mozambique	FGDs with 30 groups (448 members); IDIs with 150 individuals	HH assets, Health, Education, Nutrition/food access, Children's Workload	FGDs, IDIs
Baseline Study of Saving for Change in Mali: Results from the Segou Expansion Zone and Existing SFC Sites; BARA and IPA (2010)	2009	SLG, malaria and hygiene training	Mali	Sample size not provided. Mostly female (with few exceptions)	Health, Education	Qualitative study; IDIs, FGDs. Included three HH surveys in each village to collect data on socioeconomic conditions.
Ensuring Continued Success: Saving for Change in Older Program Areas of Mali; Bermudez and Matuszeski (2010)	2009	SLG, malaria and hygiene training	Mali	6 FGDs; Mostly female (with few exceptions)	HH assets, Intra-HH dynamics, Health, Education, Nutrition/food access	Qualitative study; Focus group discussions
Livelihood-Based Social Protection for Orphans and Vulnerable Children: Success Stories from Malawi; Bota (2010)	2009	SLG, agriculture support interventions, education funding interventions	Malawi	Information on sample not provided	Food access, Income/resource allocation, Education, Health	Case study/report; Site visits and secondary data analysis
Evaluation of Economic Strengthening for OVC: Using the WORTH Model in Uganda; Swarts et al. (2010)	2010	SLG, financial education, literacy, numeracy, OVC care training program	Uganda	n=685 HH surveys, 195 WORTH participants, 152 OVC of Worth caregivers, 196 control participants, 140 OVC of control participants; Female caregivers only	Nutrition, Education, Health, Shelter, Finance	Quantitative and qualitative study; Household surveys, in-depth interviews, focus group discussions, document review
Report on Impact Evaluation of WORTH Literacy-led Saving and Credit Program; Abebe and H/selassie (2009)	2008	SLG, training in literacy, numeracy, business, health, and gender issues	Ethiopia	n= 926 WORTH participants. Number of FGD not specified. Female only	Education, Decision-making in the HH, Income	Cross-sectional posttest only and qualitative study; individual surveys, focus group discussions, document review
Evaluation of Impact of the Tougouri Pilot Project and Establishment of Baseline Data for Phase II; Boyle (2009)	2009	SLG	Burkina Faso	HH surveys: n=120 6 FGD; Female only	Quality of housing, Education, HH assets, Nutrition/food access, Child labor, Intra-HH dynamics/decision-making, Health	Cross-sectional posttest only and qualitative study; HH survey, FGDs
Increasing Savings and Solidarity among Households with Orphans and Vulnerable Children in Rwanda; Dills et al. (2008)	2008	SLG, financial education, OVC programming with monetary support (health insurance, nutrition education, psychosocial support, school materials, fees for secondary school and vocational training)	Rwanda	Information on sample not provided	Food access, Health, Education	Longitudinal pre-posttest design with intervention participants only; Individual surveys
Women Ending Poverty: The WORTH Program in Nepal: Empowerment Through Literacy, Banking, and Business 1999-2007; VARG and Mayoux (2008)	2007	SLG, training in literacy, numeracy, business, health, and gender issues	Nepal	n=486 village bank group members and 658 replicated group members; Female only	Health, Education, Food access, Housing, HH assets, Child marriage age	Cross-sectional study; individual surveys, in-depth interviews, document review

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