

## **USAID-DIV Milestone 1 Report**

Negotiating a Better Future

Grant No. AID-OAA-F-13-00030

May 30, 2013

### **1. Program implementation and data collection**

#### a. Program implementation

The program intervention will begin on June 3. Because of the change in randomization protocol, we have postponed the start of the intervention from the original launch date (May 27), but because we had included a week of buffer time into our schedule, this will not affect any future program dates.

#### b. Data collection.

- Finalized survey instrument to test key hypotheses, including programming to use computer-assisted interviewing (February – May)
- Prepared survey timeline and schedule for all 41 schools (February)
- Finalized curricula, materials, and details of intervention (March)
- Hired and trained coaches (April 1 – May 25)
- Completed initial pilots of survey (April – May)
- Hired and trained survey team (May 1 – May 17)
- Dropped letters at first 4 schools inviting the parents of the grade 8 girls to come to an informal meeting about our project (May 15)
- Began holding parents meetings (May 18)
- Began baseline survey (May 21)
- Completed baseline survey for 318 girls at 4 of the 41 schools in final sample (May 21 – 25)

The primary challenge that we faced was the complex design of randomizing girls into treatment groups upon completion of their baseline survey by letting them draw tokens from a bucket. We had originally chosen this method (over standard computer randomization) so that the girls could physically see that the process was random and that there was no way that they were “chosen” to be in one group over another. Because the integrity of this project hinges on precise and error-proof randomization, we made the decision to switch to a completely computerized randomization process, where we complete all the baseline surveys for a particular school, randomize in Stata, and then notify the girls of their treatment assignment. This new randomization protocol will ensure that the integrity of the research is upheld.

## **2. Update research design and project implementation plan, including a Gantt chart.**

The research design has not been changed. As described above, the intervention component has been shifted back by one week. Again, because we had built in a week of buffer time, this will not affect the overall timeline for the project.

## **3. Evaluation Plan**

Our program will be evaluated through a randomized controlled trial, which is considered the “gold standard” in impact evaluation. Girls in target schools will be randomized via lottery into three arms:

1. Negotiation program
2. Social capital
3. Pure control

The “social capital” group is necessary to control for the other elements of the program that go along with the negotiation training, but are not part of the intervention of interest, such as providing a safe space for girls to spend time with one another, as well as providing a daily lunch. By comparing the impact of groups 1 and 2, we can isolate the impact of the negotiation training only. Then, by comparing groups 1 and 3, Negotiation against Pure Control, we can ascertain the total effect of the program. The Social Capital and Pure Control groups will receive the negotiation training following the completion of the program evaluation.

Our core research question is whether non-cognitive skill programs, specifically negotiation skills can have an impact on older youth. Combining our midline survey measure of trust and our survey data on parental investment in schooling, we will determine if it is possible for communication skills to increase intergenerational investments without decreasing trust or taking away resources from other children in the household. The results of this study, which will quantify the impact of the negotiation curriculum, will inform the debate on whether this information should be included in HIV prevention programs. Finally, we will compare the outcomes of the girls in our control group to the outcomes of girls in “pure” control schools (entire schools that will be surveyed, but not receive the program or safe space until after the study period). Any difference in outcomes between these groups will provide a measurement of the social spillovers present in the treatment schools.

## **4. Updated list of proposed outcome/impact measures and measurement strategies.**

There will be three follow-ups that will be listed on the consent form:

- **Midline survey** with guardians and girls, including lab experimental measure, three months after the intervention.
- Ongoing measurement of **school performance** from administrative data, and participation in school activities, including those offered by partner NGOs, until 18 months from study launch.
- Final **follow-up survey** one year following the intervention, with girls only, to take place at school.

The follow up survey will include questions about mental health measures for parents and siblings, to see if the training had any positive or negative externalities for them, about the program itself, and how much the girls have learned, and about the girls' locus of control, sense of self, empathy with parents, from globally tested metrics. We will also measure sexual and other risky sexual behaviors through audio computer assisted-self interviewing, where the girl listens to the questions and options using a headset, and selects her answers without the surveyor knowing her choices. This ensures a higher degree of privacy and trust so that the girl is more likely to reveal truthful answers. Researchers will also conduct three follow-up activities through which they can identify various behavioral changes including:

- a. Providing an opportunity that measures how able the girl is to take advantage of opportunities presented to her that have a potential value for the family as a whole, such as skills training in math tutoring, basket weaving, or computer skills. While still somewhat controlled, this takes place outside the context of the research study, and should provide a proxy for real-world outcomes.
- b. A lab experimental game ("Trust Game"), played by the girl with her guardian during the midline survey, will be used to ascertain the mechanisms through which negotiations may increase parental investment in children. The guardian will be asked to make a choice of how much (if any) of an amount an endowment of cell phone credit to invest in the daughter, knowing that if the daughter performs a task, this amount will be doubled. The daughter can then use these doubled to choose small prizes for herself and/or give an amount of her choice back to the guardian. The choices made measure both (1) the guardian's trust that the girl is willing to put effort into something with potential benefit for herself and the family, and (2) the guardian's trust that the girl may share some of the benefits of that investment with the household. Both of these have significant implications for understanding a parent's potential increased willingness to invest in the girls' schooling. Girls and guardians will play the games separately with different surveyors and total airtime/prize value per pair will never exceed KR 20 (approximately \$4.25). The trust game from the

parents' perspective will have three steps, which will dis-aggregate the impacts of projected reciprocity, effort, and ability on parental investments.

We will collect data on real outcomes such as attendance measures and exam scores through institutional data from the schools.

#### **5. Personnel requirements for scale-up**

We have hired 30 coaches who either have a bachelor's degree or are currently in college. In addition, they have undergone a 7-week intensive training program to prepare them to be coaches for our negotiation curriculum. They will begin the intervention on June 3, 2013.



## **USAID-DIV Milestone 2 Report**

Negotiating a Better Future

Grant No. AID-OAA-F-13-00030

July 25, 2013

### **1. Detailed plan to assess the intervention's cost-effectiveness.**

The plan should specify how the program will compare the intervention to other ways of improving girls' health and educational outcomes. This should include comparisons of cost (or estimated cost) per development impact. It should also include plans to assess how cost considerations will favor into scaling possibilities (e.g. how much governments or other donors would be willing to pay for the intervention).

We plan to undertake a Cost-Effectiveness Analysis (CEA) and calculate an incremental cost-effectiveness ratio (ICER). This analysis will calculate the incremental effectiveness (and costs) that is, the difference in effectiveness (and costs) between interventions of interest and the control.

The ICER will calculate the incremental cost occurred per change in the outcome indicators for the intervention. Expected educational outcomes include:

- Increased school attendance
- Increased academic effort and performance
- Increased school retention particularly at the transition to upper secondary school
- Increased access to school fees, educational materials and resources

We also expect positive effects on health outcomes, which support the achievement of the educational outcomes:

- Decreases in unwanted/early pregnancies
- Decreases in unwanted/early marriages
- Decreased risk of exposure to HIV infection and other STIs (measured through prevalence of high-risk sexual behavior)
- Improved access to nutrition and other health-related resources

Thus, this cost effectiveness measure will elucidate the cost of decreasing one unwanted/early pregnancy or the cost of retaining one target girl in school.

### **Comparative analysis:**

While researching the competitive landscape for this project, we discovered there are not many programs that would be employing the same methodology, targeting the same outcome indicators and delivering similar results. The most comparable program is led by CAMFED.

The Campaign for Girls' Education (CAMFED) has helped establish community committees for supporting girls' education in rural Zimbabwe, Ghana and Zambia. The work of these committees varies widely depending on the nature of local challenges. Examples of problems identified and overcome at the local level include: negotiating with elders to modify the timing of girls' initiation rites; improving the security of 'bush boarding' conditions for secondary school girls; and systematically exposing rural girls and their families to local role models who have completed secondary school.

In 2012, 58,997 girls were supported at secondary level through their Bursary Program. Bursary support includes school and examination fees, books and stationery, school clothing, as well as boarding school fees and transport costs for those girls who live too far away from school to walk daily<sup>1</sup>.

The growth in the numbers of girls supported through bursaries is being achieved in substantial part through funding from the UK Department for International Development (DFID). Firstly, DFID awarded a grant of £12 million to support education bursaries for 24,000 girls in Zimbabwe in April (**\$295.6 per person /year**). Secondly, DFID followed that award with a £9 million grant in October to deliver bursaries to 20,000 girls in Ghana, and thirdly, provided an £8 million grant in November to deliver 15,000 bursaries to girls in Malawi. All these initiatives will be delivered over the next four years.

CAMFED has been awarded new grants under DFID's Girls' Education Challenge (£23,428,488 over 2013-2016) and the MasterCard Foundation (\$41,719,429 over 2012-2023) to support significant scale up of programs in Zimbabwe, Tanzania and Ghana.

In the absence of perfectly comparable programs, we continue the analysis by segregating the outcome indicators into two broad parts:

- 1) Keeping girls in school
- 2) Prevention of HIV

### **Keeping girls in school:**

Various studies in the past have approached the issue of keeping girls in school. Most of these try to find an optimal solution to the cost-benefit trade-off problem in educating girls beyond a certain class. The costs include the direct costs to obtaining an education plus indirect and opportunity costs. The opportunity cost<sup>2</sup> of having girls in school, in terms of lost chore time and contributions to family income, is a formidable barrier as well. In many African and Asian countries, daughters are the victims of a self-fulfilling prophecy: as they are traditionally expected to do more chores at home than are sons, the opportunity cost of educating them seems higher and so they are kept home.

### **Evidence from past studies<sup>3</sup>:**

#### **1. Reduce Direct Costs: Cutting School Fees Increases Girls' Enrollment**

- Enrollment in Uganda jumped 70 percent after fees were cut as part of major school reforms. In Uganda, total girls' enrollments went from 63 percent to 83 percent, while enrollment amongst the

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<sup>1</sup> For more information, please see-[https://camfed.org/media/uploads/files/Camfed\\_Annual\\_Report\\_2012.pdf](https://camfed.org/media/uploads/files/Camfed_Annual_Report_2012.pdf)

<sup>2</sup> Research in Zambia showed that girls spend more time on productive work than any group of adult men (Allen, 1998 cited in Kane, 2004). Thus the opportunity costs – in terms of lost household labor – of sending girls to school are extremely high.

<sup>3</sup> Please note that these studies do not discuss project costs explicitly.

poorest fifth of girls went from 46 percent to 82 percent (Bruns & Rakotomalala, 2003; Deininger, 2003).

- Attendance doubled in Tanzania after eliminating fees (Bruns & Rakotomalala, 2003).
- Asian countries including China, Korea, and Sri Lanka also boosted enrollments by reducing fees (Hertz, Krogh, & Palmer, 1991).

## 2. Cover Indirect Costs and Compensate for Opportunity Costs: Scholarships, Stipends, and School Health and Nutrition Programs

- The pilot areas in Bangladesh's Female Secondary School Stipend Program saw girls' enrollment rise to double the national average. The stipend covers tuition, books, uniforms, and transportation. The program has been extended nationwide, and now 55%–60% of girls and boys are enrolled in secondary school (Khandker, Pitt, & Fuwa, 2003).
- The Mexican PROGRESA Program helps those who enroll in primary school complete the cycle. The program gives poor families cash awards to cover the opportunity cost of sending kids to school, a feature that has especially helped girls. It has become a model for other such scholarship programs across Latin America (Morley & Coady, 2003; Schultz, 2004).
- Brazil's Bolsa Escola stipend program virtually eliminated dropouts. Preliminary evaluations suggest it will help enroll one-third of all out-of-school children aged 10–15 (Lavinias, 2001; Morley & Coady, 2003).

All of these studies show the positive results to a variety of interventions. But almost all of them are more expensive than the estimated costs of this project. The Girls' Negotiation project will only be incurring an implementation cost, since the development of the curriculum has already been completed. This project also targets outcomes more specifically related to gender and cultural norms, including girls' increased sense of control over their own lives and improved communication skills leading to stronger, more supportive relationships with parents/guardians, siblings, friends, and boys/men.

Thus rather than needing to continually provide girls with resources such as school scholarships to allow them to continue their education, our intervention allows girls to access these resources themselves, securing investments in their future and long-term sustainability. This two-week intervention becomes a source of continued support for girls who are committed to receiving education.

### **Prevention of HIV:**

International organizations and national governments have been financing a lot of programs that would achieve prevent HIV amongst the population. The table on the next page provides a comparison of national response towards HIV prevention and care.

Our study has the potential to inform the Ministry of Education's (MoE) decisions going forward to ensure that its policies promote HIV prevention in a cost-effective way. The results of this study are not only relevant to our partners at the MoE, but also at the Ministry of Health, where we work closely on delivering evidence to support improved family planning and maternal health programs. A more detailed understanding of the impact of negotiation training on girls' health outcomes is highly relevant to this policymaking.

Country	Agency	Cost Reported (in \$ unless stated)
Afghanistan	World Bank, UN Agencies, Global Fund, International NGOs, Bilateral and the National Government.	5.5 million
Australia	Australian Government and AusAID	336 million <b>(6037.5 per person)</b>
Bhutan	World Bank, UNDP, UNAIDS, UNICEF, UNFPA and WHO, Ministry of Health	3.5 million <b>(7000 per person)</b>
Brazil	Ministry of Health	R\$ 1.329 billion <b>(R\$ 2185 per person)</b>
Cambodia	UN Agencies International NGOs, the National Government etc.	58 million <b>(1092 per person)</b>

Table 1: Comparison of national response towards HIV prevention and care<sup>4</sup>

Data Source: UNAIDS Country Progress Reports

The table provides basic estimates of the willingness to pay by the national governments, donor agencies and other stakeholders, for programs for HIV prevention. Innovations for Poverty Action (IPA) research in Kenya shows that standard HIV curriculums did not improve outcomes or change behavior. With the support from UNICEF, the Zambian MoE developed a framework for life skills education that includes a curriculum on AIDS education and HIV prevention. The Girls' Negotiation curriculum would be integrated into its life skills and HIV/AIDS education strategy, supplementing information provision with this skills-training to help youth change their behavior.

#### Cost Estimates:

If the negotiation curriculum were to be scaled through the MoE and built into the national grade eight school curriculum, the per girl cost would be just over \$6. Once we complete the initial training of the coaches for the study, who will be trained directly by Harvard negotiation scholars, these coaches can become "trainers of trainers" and themselves act as the trainers on future scale-up. Moreover, we plan to disseminate the curriculum for free, allowing other groups and organizations to implement this program for free. Although the randomized controlled trials add cost to the project, the cost of the intervention itself during the study phase is roughly \$50 per girl, which includes extensive coach training and compensation, lunch for girls, and expenses for curriculum and other supplies. Additional costs accruing only in the study

<sup>4</sup> Please note that more than 51% of the expenditure on HIV treatment, prevention and cure is dedicated to prevention.

phase are due to initial start-up infrastructure, data collection, analysis, and project management. These costs will be compared to the impacts found after the follow-up period to perform the CEA.

## **2. Updated scaling plan. This must include, but need not be limited to:**

- a. How preliminary lessons will be distilled local NGOs. The strategy should list targeted stakeholders and describe how they might act on the results. It should explain what media and fora will be used and how the results will be presented in an appealing and accesible way.
- b. Plans to ensure that the intervention (if succesful is scaled up in Zambia and other countries). The report should include a draft list of targeted stakeholders, and plans to develop and refine the list over time. The strategy should include plans to analyze how study results could inform each targeted stakeholders' policy decisions. It should specify activities and timelines to engage each stakeholder.

### **Dissemination of preliminary lessons**

To disseminate early findings, before we are ready for full scale-up, we will leverage the strong relationships developed during the pilot/curriculum development phase with local NGOs working on issues of girls' well-being and education. These NGOs include Grassroot Soccer and the Anti-AIDS Teacher's Association of Zambia, who contributed to the development of the curriculum, as well as CAMFED, Faweza, Zhect, ZPI, Unicef, and YWCA. We are also building relationships with additional organizations through the Ministry of Education's Policy Coordinating Committee to share the findings of the research. We will develop a stakeholder policy brief that will contain accessible chapters describing the study planning, implementation, methodology, findings, and policy implications. We will couple this with several dissemination meetings that stakeholders will be invited to (when midline results are available), where we will give a brief powerpoint presentation of results, distribute the dissemination document, and provide an opportunity for questions and conversation. Several coaches involved in the intervention will come to this dissemination meeting, in order to demonstrate some of the activities done with the girls and provide more energy and excitement. We will also work with Zhect, the Zambian Health and Education Communication Trust, to distribute the information to their network of smaller NGOs who work on these issues.

In addition to this, as soon as we establish whether the intervention has positive impacts, we will begin to disseminate the curriculum to organizations interested in negotiation skills informally (before formal publication, after the study is completed). One example is that another IPA country office is interested in adapting our curriculum for a separate RCT, which would help provide evidence of external validity, while reaching more girls with our intervention.

Preliminary lessons will also be communicated through a global network via policy briefs and academic presentations. In the long-term, following the endline survey, we also plan to disseminate results of the study back to the schools themselves, holding parent-teacher open-houses, in order to inform the communities that supported this work on the findings and lessons.

### **Long-term scaleup**

There is a highly sustainable model behind the negotiation training. Our initiative supports a strategy already on the agenda of the Ministry of Education (MoE), and has support from both MoE and local NGOs,

who are all continually seeking low-cost ways to increase secondary schooling for girls and curb HIV transmission and early pregnancies. We use gold standard, rigorous randomized methods to measure our impact and cost-effectiveness, enabling us to meaningfully and clearly contribute to national policy formation. Further this rigorous evidence, in the hands of policymakers, enables a scale-up of the program into their existing life skills curriculum.

We can scale to millions of end users in 10 years via our partnership with MoE and relationship with IPA global network. Once we have strong evidence of impact, we will work with MoE to expand the program to all 63,000 girls in 8th grade in Zambia in two years by making negotiation skills a mandatory lesson in their existing life skills curriculum. Local NGO partners can be trained to train the public school system's life skills teachers in the negotiation curriculum. As scale-up in Zambia is being implemented, we will disseminate our curriculum and study results through the IPA network as well as through academic articles and presentations at domestic and international conferences by the Principal Investigators. Additional researchers can initiate small trials of our program and test external validity in other countries, and by 5 years we could reach 1 million children worldwide. If others follow a scaling model like Zambia's we can reach millions of users in 10 years.

This study will be the first to pinpoint the additional benefits of communication skills, which enable leveraging of information, on top of precise information. We will deliver both a rigorous evaluation of the best methods for creating behavior change in girls and improving later life outcomes while providing a model for future low-cost scale-up (within and beyond Zambia) of an intervention to help girls, without any change in their external life conditions, achieve better education and health.

Below we present a list of three key stakeholders for this project. By continuing to work with them, we hope to expand and refine our list of additional stakeholders. We plan to have a draft dissemination list by the conclusion of the midline survey, so that we can finalize that list concurrently with the midline analysis, and therefore be ready to disseminate results. During that dissemination period, we also expect to learn of more key stakeholders to be included in future dissemination rounds.

**Targeted stakeholders:**

**Ministry of Education:** The Ministry of Education in Zambia, who has been working closely with us during the design, pilot, implementation, and evaluation phases, will ensure that our findings are incorporated into the Ministry's life skills curriculum that reaches millions of Zambian girls. This project will deliver both a rigorous evaluation of the best methods for creating behavior change in girls and improving later life outcomes through an innovation in schools to help prevent secondary school dropout. It provides a model for future low-cost scale-up (within and beyond Zambia) of an intervention to help girls, without any change in their external life conditions, achieve better education and health.

**Ministry of Health:** The results of this study are not only relevant to our partners at the MoE, but also at the Ministry of Health, where we work closely on delivering evidence to support improved family planning and maternal health programs.

**Anti-Aids Teachers Association of Zambia:** (AATAZ) is a local community-based partner organization engaged in bringing life skills, HIV/AIDS education, and AIDS clubs to Zambian schools. As a partner, the

organization helped us develop the project curriculum and pilot the intervention in a Zambian school in 2011 and 2012. They will continue to provide such guidance and support, as well as serve as a future implementer for scale up after the study is complete

Many NGOs targeting girls, youth, and/or orphans and vulnerable children in Zambia incorporate life skills programming into their activities, including among others UNICEF, our partner organization AATAZ, Restless Development, Hope Worldwide, Population Council, the Lubuto Library Project, and Grassroots Soccer. While there is widespread acknowledgement that this is a useful strategy, they too admit that there is little rigorous evidence regarding such programs' actual impact. This study incorporates components of the programs that these NGOs engage in, and will thus complement and inform their work.

We hope to make our work useful to these stakeholders by carefully examining three key sets of implications:

- 1) Implications for health-focused NGOs
- 2) Implications for education-focused NGOs
- 3) Implications for public policy toward girls

In other words, rather than delivering “one size fits all” findings, we plan to consider the applications of our study findings to these three key areas, and thus directly inform the work of our partners and stakeholders. For example, for the MoE, we will inform both their public-school policy in terms of what is taught and how teachers are trained (implication 3), but also how they engage with and inform NGOs who aim to promote girls' education (implication 2). For AATAZ, we will focus on how our study informs HIV prevention policy for school-children. For the Ministry of Health, the focus will be interacting with health-focused NGOs and health policy. And for the number of organizations who work on various girls' issues, we will bring insights from both analysis 1 and 2.

### **3. Twenty-four coaches and 4 backup coaches hired and trained**

In total, 24 coaches and 6 backup coaches were hired and trained. The number of hired backup coaches was slightly higher than the originally planned in order to guarantee enough staff in case of dropouts or scheduling conflicts. Some coaches were assigned the task of spot-checking the negotiation and safe space sessions and debriefing with the coaches to provide feedback.

The training took place between April and May 2013 and involved the following activities and topics:

- Classroom training I (two weeks):
  - Introduction to IPA Global
  - Introduction to the “Negotiating a Better Future” project
  - Training on Randomized Controlled Trial (RCT) research design, methodology and experimental control
  - Training on negotiation skills, with focus on interest-based negotiation (involved reading materials: “Getting to Yes” and “Getting Past No”)
  - Introduction to the “Girls Arise Curriculum”, taught by Principal Investigator Corinne Low

- Curriculum teaching training in small and large groups
- Knowledge quizzes on negotiation skills content
- Coaches were provided with training manuals and detailed protocol documents
- Coaching session (one week):
  - Coaches were grouped in pairs and led curriculum sessions at Chazanga Primary School. Trainers (Annika Rigole and April Gilbert) and other coaches observed and provided feedback.
- Classroom training II (four days):
  - Review of the most challenging sections of the curriculum, experimental control issues and program implementation logistics.
- Classroom training III (two days):
  - Final training with by Principals Investigators Corinne Low (in person) and Professor Kathleen McGinn (remotely).
- Pre-launch coaching sessions (two weeks)
  - Coaches were grouped in pairs and taught the entire 6-day curriculum to a group of 17-20 girls at a primary school in Lusaka. Trainers and other coaches observed and provided feedback.

#### **4. All surveyors and survey supervisors hired and training in progress**

The following staff were hired:

- 40 enumerators
- 8 supervisors
- 2 auditors
- 1 editor
- 1 field manager

The training took place in May 2013 with duration variable according to role (seven days for enumerators, ten days for supervisors and editor, and eight days for auditors). The training was primarily conducted by Survey Coordinator Grace Msichilli, Project Associate Aleta Haflett and Principal Investigator Corrinne Low. The following is a list of training contents and activities:

- Introduction to IPA global
- Introduction to the “Negotiating a Better Future” project
- Surveying best practices
- Introduction to IRB and the consent process
- Introduction to modules / Module review and practice
- Introduction to the information session /Information session practice
- Introduction to the parent meeting / Parent meeting practice
- Introduction to netbooks\*
- Practice with Blaise (special attention to Acasi)
- Knowledge quizzes

- One-day field test
- Participants were provided with training manuals

\* As mentioned in the Addendum of the USAID-DIV Milestone 1 Report, surveyors were re-trained on use of the netbooks to capture and save data correctly.

## **5. Signed letters of support from all schools, as documented by submission of Zambian IRB approval letter.**

Letters of support from all schools were obtained and thus Zambian IRB approval. We are attaching the corresponding approval letter.

### **References**

- Bruns, B., & Rakotomalala, R. (2003). *Achieving universal primary education by 2015: A chance for every child*: World Bank.
- Deininger, K. (2003). Does cost of schooling affect enrollment by the poor? Universal primary education in Uganda. *Economics of Education Review*, 22(3), 291-305.
- Hertz, J. A., Krogh, A. S., & Palmer, R. G. (1991). *Introduction to the Theory of Neural Computation*. Boston, MA: Addison-Wesley Longman Publishing Company
- Khandker, S., Pitt, M., & Fuwa, N. (2003). Subsidy to promote girls' secondary education: the female stipend program in Bangladesh. Retrieved from <http://mpa.ub.uni-muenchen.de/id/eprint/23688>.
- Lavinas, L. (2001). *The appeal of minimum income programmes in Latin America*: ILO.
- Morley, S., & Coady, D. (2003). *From social assistance to social development: Targeted education subsidies in developing countries*. Washington, DC: International Food Policy Research Institute and Center for Global Development.
- Schultz, P. (2004). School subsidies for the poor: evaluating the Mexican Progresa poverty program. *Journal of development Economics*, 74(1), 199-250.
- UNAIDS. (2012). Country Progress Reports. Retrieved from <http://www.unaids.org/en/dataanalysis/knowyourresponse/countryprogressreports/2012countries/>.



## **USAID-DIV Milestone 2 Report**

Negotiating a Better Future

Grant No. AID-OAA-F-13-00030

November 1, 2013

### **1. Wave 1 and Wave 2 baseline survey complete (each wave must reach at least 1200 girls).**

A copy of the survey should be provided.

Wave 1 and Wave 2 baseline survey is completed. Details are provided below. We are attaching a copy of the Girls Baseline survey.

### **2. Update on program implementation and data collection activities.**

The report should briefly describe program implementation and data collection. The discussion of data collection should focus on any challenges that have the potential to affect study quality, and plans to mitigate them.

The project has successfully completed its baseline data collection activities and the program implementation phase. We have now moved into the midline data collection phase, wherein we survey the girls in the program and their guardians. The midline activities also include a trust game played to ascertain whether negotiation skills can increase the level of trust within a girl's relationship with her parents and thus lead to more optimal outcomes for both the girl and the household as a whole.

#### ***Baseline & Program Implementation***

At the beginning of the full study period, we held a teacher meeting to explain the program and obtain school rosters from the participating school. A letter was sent home with all eligible girls to inform the parents/guardians about the program and request their attendance at a school-based informational meeting about the program. They could return this letter indicating they DO wish to learn more or that they wish not to participate and not to be contacted further<sup>1</sup>. At the parent meeting, the study was explained and the informed consent process was completed.

Girls whose guardians agree to participation then also attended a school meeting where the study process was explained; information was given to a randomly assigned proportion of girls.

A baseline survey with the girls was conducted during these afterschool meetings, in privacy from their peers<sup>2</sup>. Following this baseline survey, girls were randomly assigned to one of three groups:

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<sup>1</sup> See Appendix A for detailed breakdown of numbers by school

<sup>2</sup> See Appendix B for detailed breakdown of surveys by school

- **Group 1:** Social Capital group. Girls will receive a free lunch on their session days, notebook, pens, and any other materials distributed throughout the project. They participated in six after-school sessions over two weeks, during which they could play games, study or do homework, or just discuss with other girls. Trained female Zambian role models supervised these sessions.
- **Group 2:** Negotiation Group: Girls received a free lunch on their session days, notebook, pens, and any other materials distributed throughout the project. They participated in six sessions with female role models covering negotiation training on inter-personal communication.
- **Group 3:** Pure Control Group. Girls assigned to this group did not participate in an afterschool program in 2013, but will receive the negotiation program at the beginning of 2015, after conclusion of the midline and endline follow-up surveys.

Girls in Groups 1 and 2 then met for six 2-hour sessions taking place over a period of two weeks at each school. The intervention was implemented at 4 schools at a time on a rolling basis. Approximately one to two months after the intervention at each school, a 1-day trouble-shooting session was held with the Negotiation Group, to both reinforce the knowledge gained and provide girls with additional support for effectively utilizing the skills gained in their lives. The same trained coaches as in the initial program led these sessions. The girls in the Social Capital group were also invited for a follow-up session with their same coaches for consistency.

The breakdown of treatment group assignments is summarized in the following tables:

<b>Individual Treatment Groups</b>	<b>Number of girls</b>
<i>Negotiation</i>	800
<i>Safe Space</i>	786
<i>Control</i>	780
<i>Pure Control</i>	780
<b><i>Negotiation Treatment Total</i></b>	<b>3146</b>
<i>Information</i>	1595
<i>No Information</i>	1551
<b><i>Information Treatment Total</i></b>	<b>3146</b>

Table 1: Sample by treatment groups

<b>Interaction by Groups</b>	<b>Number of girls</b>
<i>Negotiation + Information</i>	410
<i>Negotiation + No Information</i>	390
<i>Safe Space + Information</i>	399
<i>Safe Space + No Information</i>	387
<i>Control + Information</i>	396
<i>Control + No Information</i>	384
<i>Pure Control + Information</i>	390
<i>Pure Control + No Information</i>	390
<b>Total</b>	<b>3146</b>

Table 2: Sample by interaction of groups

### ***Challenges faced during baseline and program implementation***

The major challenges that we faced at baseline and program implementation affected the time, budget and quality of certain phases of the project. But these challenges guided us towards better decisions and planning for the midline surveys.

**Shifting from paper surveys to CAI:** This was one of the major challenges that we faced during our baseline data collection. The CAI version of surveying requires the survey to be absolutely finalized before the actual surveying begins, for best results. But pretesting parts of the survey to make sure we had perfectly formed questions was going on simultaneously with the programming for the CAI. As a result, the surveyors did not have enough time to be fully trained on the final CAI survey. Due to insufficient training, the surveyors did not know how to save the surveys properly and data for about 300-400 girls was lost in the first couple of rounds of surveying.

**Solution at Baseline:** We conducted additional rounds of mini surveys with the girls whose data had been lost. More information about this challenge and solutions can be found in our Addendum to Milestone 1 Report from June 19, 2013.

**Additional steps taken for Midline:** The midline data collection required two different surveys—one for girls and one for their guardians. Rather than relying on in-house sources for CAI programming of the midline surveys, we outsourced programming to a CAI development firm. The programming was successfully completed by deadline. This translated into surveyors receiving lengthier training sessions and a lot of CAI practice. In addition, the midline data collection includes a girl-guardian trust game activity. The trust game protocols required various rounds of testing and piloting, so this was moved from a CAI program to paper-based activity. This step allowed us to keep fine-tuning the trust game protocols without interfering with the CAI survey development and deadlines.

**Timing and space at the schools:** Not all schools in our sample have the same available space and schedules. This creates a two-fold constraint in the data collection activities. First, the varying schedules of exams and other school activities require us to condense our surveying days or lengthen our survey schedules to match the schools'. Second, the space issue at most schools requires us to operate at lower capacity as the space provided by schools may or may not accommodate all our survey appointments. (For example, during the weekdays, each

team could complete 9 surveys working at full capacity, while on a Saturday each team can complete about 21 surveys at full capacity.)

**Solution at Baseline:** We tried to reach as much of the sample as possible in the first round at each school, and scheduled make-up survey weeks to complete the data collection activities. Our average conversion rate for targeted sample versus participating sample is 68%.

**Steps take at the Midline:** We had anticipated that there would be attrition if we do not have a detailed plan and appointment schedules during the midline. So we call and make appointments with guardians in advance now. This minimizes uncertainty and ad-hoc scheduling. We have also started surveying on Saturdays, when there is more space available in the schools.

**Access to and quality of record keeping at the schools:** We are continuously collecting administrative data from schools (attendance, fees payments, drop-outs due to pregnancy & test performances). Gaining access to the administrative data from the schools is difficult, as they collect and update these records at different times of the year and in various formats. The second issue for this type of data was the quality. There were some schools that did not have any such records or had lost them. To ensure the quality of data was consistent across schools, the monitors in each class were asked to take attendance each day and they were later given tokens of gratitude. We also had this data double entered so as to minimize mistakes during data entry. We will be continuing the same during midline.

**Troubleshooting challenges:** Part of our intervention involves a troubleshooting session, which takes place about one month after the intervention. During piloting, the troubleshooting session proved to be a key component that helped really drive home the points of the intervention and ensure their future application and usefulness. In the full study, the timing of the school year required this piece of the intervention to be wedged right before exams in the schools, and unfortunately, take-up was low at these trouble-shooting sessions, especially in some schools that had exams earlier than planned.

**Solution at Program Implementation:** In order to make sure our participants get the full intervention, and we're thus able to carry out our evaluation as planned; we decided to offer make-up trouble-shooting sessions at all schools, after the August break.

### ***Midline Data Collection Activities***

We have just completed the third week of our midline data collection. Since we simultaneously survey girls and guardians and conduct the trust game, the size of the field team is more than double what it was at baseline. The scale and scope of this phase is very big, and we have detailed plans for each step.

The survey completion statistics for the first three weeks is as follows:

Group	Total Completed*			Remaining**			Percentage Completed***		
	Girl Surveys Completed	Guardian Surveys Completed	Trust Games Completed	Girl Surveys	Guardian Surveys	Trust Games	Girl Surveys	Guardian Surveys	Trust Games
<i>Info</i>	292	289	285	203	206	210	58.99%	58.38%	57.58%
<i>No Info</i>	289	289	285	184	184	188	61.10%	61.10%	60.25%
<b>Information Treatment Total</b>	<b>581</b>	<b>578</b>	<b>570</b>	<b>387</b>	<b>390</b>	<b>398</b>	<b>60.02%</b>	<b>59.71%</b>	<b>58.88%</b>
<i>Nego</i>	167	167	164	91	91	93	64.73%	64.73%	63.81%
<i>Safe Space</i>	144	144	143	92	92	94	61.02%	61.02%	60.34%
<i>Control</i>	270	267	263	204	207	211	56.96%	56.33%	55.49%
<b>Negotiation Treatment Total</b>	<b>581</b>	<b>578</b>	<b>570</b>	<b>387</b>	<b>390</b>	<b>398</b>	<b>60.02%</b>	<b>59.71%</b>	<b>58.88%</b>
<i>Nego-Info</i>	80	80	79	55	55	56	59.26%	59.26%	58.52%
<i>Nego-No Info</i>	87	87	85	36	36	38	70.73%	70.73%	69.11%
<i>Safe Space-Info</i>	63	63	62	51	51	52	55.26%	55.26%	54.39%
<i>Safe Space-No Info</i>	81	81	81	41	41	41	66.39%	66.39%	66.39%
<i>Control-Info</i>	75	73	72	47	49	50	61.48%	59.84%	59.02%
<i>Control-No Info</i>	63	63	62	52	52	53	54.78%	54.78%	53.91%
<i>Pure Control-Info</i>	74	73	72	50	51	52	59.68%	58.87%	58.06%
<i>Pure Control-No Info</i>	58	58	57	55	55	56	51.33%	51.33%	50.44%
<b>Total</b>	<b>581</b>	<b>578</b>	<b>570</b>	<b>387</b>	<b>390</b>	<b>398</b>			

**Please Note:** This table gives information about survey completion rates in the first 3 weeks of surveying in 13 schools only.

\* Total completed tab shows **only** the surveys completed in the first three weeks of midline data collection at 13 schools.

\*\* Remaining tab shows the surveys that are yet to be conducted at the same 13 schools.

\*\*\* Percentage completed shows the relative completion rates for 13 schools

**Expected challenges at midline:** Differential attrition at midline is a key threat to our study validity, as it is possible that the girls who have already received the program will be more motivated to participate in the midline, and thus the group surveyed at midline may give a biased picture of the difference between treatment and control. Moreover, since the parents' participation at the midline is key for our outcome measures, it is also a concern that girls who have received negotiation training may be more able to encourage their parents to participate in the midline survey. Thus, we are taking a number of measures to attempt to increase take-up during the midline phase, which will limit the potential impact of differential attrition. We are also taking measures to ensure we actually reach the parent, and are not only communicating through the girl, as this helps to avoid the issue of the negotiation-trained girls being better able to encourage their parent to come.

**Appendix A**  
**Conversion to program participation**

School Name	Number of girls in program	Number of letters dropped	Conversion Rate
<i>Arthur Wina Primary School</i>	29	64	45%
<i>Burma Primary School</i>	51	95	54%
<i>Chainda Primary School</i>	72	111	65%
<i>Chaisa Primary School</i>	59	81	73%
<i>Chakunkula Primary School</i>	69	107	64%
<i>Chawama Primary School</i>	67	112	60%
<i>Chazanga Primary School</i>	64	74	86%
<i>Chibolya Primary School</i>	63	95	66%
<i>Chimwemwe Primary School</i>	53	107	50%
<i>Chingwele Primary School</i>	64	76	84%
<i>Chunga Primary School</i>	70	99	71%
<i>Daina Kaimba Primary School</i>	93	131	71%
<i>Emmasdale Primary School</i>	57	60	95%
<i>Jacaranda Primary School</i>	95	124	77%
<i>John Laing Primary School</i>	124	164	76%
<i>Kabulonga Primary School</i>	64	117	55%
<i>Kamwala Primary School</i>	90	130	69%
<i>Kamwala South Primary School</i>	79	106	75%
<i>Kanyama Central Primary School</i>	50	68	74%
<i>Libala Stage III Primary School</i>	104	142	73%
<i>Lotus Primary School</i>	50	103	49%
<i>Mahatma Gandhi Primary School</i>	68	92	74%
<i>Muchinga Primary School</i>	68	115	59%
<i>Mumana Primary School</i>	93	150	62%
<i>Nelson Mandela Primary School</i>	60	77	78%
<i>New Kabanana Primary School</i>	59	100	59%
<i>New Kamulanga Primary School</i>	63	81	78%
<i>New Kanyama Primary School</i>	102	148	69%
<i>New Mandevu Primary School</i>	78	126	62%
<i>New Mtendere Primary School</i>	93	124	75%
<i>Northmead Secondary School</i>	139	224	62%
<i>Nyumba Yanga Primary School</i>	55	82	67%
<i>Simon Mwansa Kapwepwe Primary School</i>	67	83	81%
<i>Thornpark Primary School</i>	60	100	60%
<i>Tunduya Primary School</i>	87	109	80%
<i>Twalumba Primary School</i>	105	126	83%
<i>Twashuka Primary School</i>	137	176	78%
<i>Twatasha Primary School</i>	56	127	44%
<i>Vera Chiluba Primary School</i>	118	183	64%
<i>Woodlands 'A' Primary School</i>	73	145	50%
<i>Yotam Muleya Primary School</i>	98	124	79%
<b>Total</b>	<b>3,146</b>	<b>4658</b>	<b>68%</b>

**Appendix B:****Conversion to full surveys during baseline**

Please note: this does not include the schools for which we conducted mini surveys.

School Name	Number of letters dropped	Full Surveys Completed	Conversion rate
<i>Arthur Wina Basic School</i>	64	29	45%
<i>Burma Basic School</i>	95	43	45%
<i>Chainda Basic School</i>	111	69	62%
<i>Chaisa Primary School</i>	81	56	69%
<i>Chankukula Basic School</i>	107	66	62%
<i>Chawama Basic School</i>	112	68	61%
<i>Chazanga Basic School</i>	74	61	82%
<i>Chibolya Basic School</i>	95	60	63%
<i>Chingwele Basic School</i>	76	62	82%
<i>Chunga Basic School</i>	99	72	73%
<i>Daina Kaimba Basic School</i>	131	90	69%
<i>Emmasdale Basic School</i>	60	54	90%
<i>Jacaranda Basic School</i>	124	92	74%
<i>John Laing Basic School</i>	164	106	65%
<i>Kabulonga Basic School</i>	117	55	47%
<i>Kamwala Basic School</i>	130	78	60%
<i>Kamwala South Basic School</i>	106	73	69%
<i>Kanyama Central Basic School</i>	68	47	69%
<i>Libala Stage III School</i>	142	101	71%
<i>Mahatma Gandhi Basic School</i>	92	67	73%
<i>Muchinga Basic School</i>	115	67	58%
<i>Muleya Basic School</i>	124	100	81%
<i>Nelson Mandela Basic School</i>	77	57	74%
<i>New Kabanana Basic School</i>	100	58	58%
<i>New Kambulanga Basic School</i>	81	59	73%
<i>New Kanyama Basic School</i>	148	95	64%
<i>New Mandevu Basic School</i>	126	78	62%
<i>New Mtendere Basic School</i>	124	90	73%
<i>Northmead Secondary School</i>	224	132	59%
<i>Nyumba Yanga Basic School</i>	82	54	66%
<i>Simon Mwansa Kapwepwe Basic School</i>	83	65	78%
<i>Thornpark Basic School</i>	100	59	59%
<i>Tunduya Basic School</i>	109	81	74%
<i>Twalumba Basic School</i>	126	103	82%
<i>Twashuka Basic School</i>	176	127	72%
<i>Twatasha Basic School</i>	127	51	40%
<i>Woodlands A Basic School</i>	145	73	50%
<b>Total</b>	<b>4115</b>	<b>2698</b>	<b>66%</b>

## USAID Milestone 4

***Update on program implementation and data collection activities. The report should briefly describe program implementation and data collection, focusing on the challenges that have the potential to affect study quality, and plans to mitigate them***

We have successfully completed our program implementation and midline data collection activities. The midline activities included surveys of the girls in the program and their guardians, and a trust game between the girls and their guardians to ascertain whether negotiation skills can increase the level of trust within a girl’s relationship with her parents and thus lead to more optimal outcomes for both the girl and the household as a whole.

### **Update on program implementation**

We have completed the Wave 1 and Wave 2 of program implementation. The 3146 program girls across 41 schools were randomly assigned treatment groups.

As mentioned in milestone #3, the breakdown of treatment group assignments is summarized in the following tables:

<b>Individual Treatment Groups</b>	<b>Number of girls</b>
<i>Negotiation (Randomized @individual level x 29 schools)</i>	800
<i>Safe Space (Randomized @individual level x 29 schools)</i>	786
<i>Control (Randomized @individual level x 29 schools)</i>	780
<i>Pure Control (12 schools)</i>	780
<b><i>Negotiation Treatment Total</i></b>	<b>3146</b>
<i>Information (Randomized @individual level x 41 schools)</i>	1595
<i>No Information (Randomized @individual level x 41 schools)</i>	1551
<b><i>Information Treatment Total</i></b>	<b>3146</b>

Table 1: Sample by treatment groups

<b>Interaction by Groups</b>	<b>Number of girls</b>
<i>Negotiation + Information</i>	410
<i>Negotiation + No Information</i>	390
<i>Safe Space + Information</i>	399
<i>Safe Space + No Information</i>	387
<i>Control + Information</i>	396
<i>Control + No Information</i>	384
<i>Pure Control + Information</i>	390
<i>Pure Control + No Information</i>	390
<b><i>Total</i></b>	<b>3146</b>

Table 2: Sample by interaction of groups

In the negotiation and safe space treatments, the girls met at the girls’ schools with trained coaches for six 2-hour sessions over a period of two weeks. The intervention was implemented at 4 schools at a time on a rolling basis. Approximately one to two months after the intervention at each school, a 1-day trouble-shooting session was held with the Negotiation Group, to both reinforce the knowledge gained and provide girls with additional support for effectively utilizing the skills gained in their lives. The same trained coaches as in the initial program led these sessions. The girls in the Social Capital group were also invited for a follow-up session with their same coaches for consistency.

**Attendance at the intervention sessions**

Of the 1586 girls in the negotiation and safe space groups, 1360 girls across 29 schools attended at least one session. The distribution of attendance, by treatment is summarized in the table below:

Treatment Group	Attended	Attended	Attended	Attended	Attended	Attended
	1 Day	2 days	3 days	4 days	5 days	6 days
<i>Negotiation</i>	2%	1%	3%	8%	21%	58%
<i>Safe Space</i>	2%	1%	2%	4%	16%	70%
<b>Total</b>	2%	1%	3%	6%	19%	68%

Table 3: Percentage distribution of intervention session attendance by treatment

**Update on trouble-shooting sessions**

Part of our intervention involves a trouble-shooting session, which takes place about one month after the intervention. We have completed the Wave 1 and Wave 2 of trouble shooting implementation. The following table gives the attendance rates at the trouble-shooting sessions. The attendance rates are approximately 64%.

Treatment Groups	Did Not Attend	Attended	Total
<i>Negotiation</i>	259	419	678
<i>Safe Space</i>	227	430	657
<b>Total</b>	<b>486</b>	<b>849</b>	<b>1,335</b>

Table 4: Trouble-shooting attendance by treatment groups

**Challenges faced during implementation of the trouble-shooting**

During piloting, the trouble-shooting sessions proved to be a key component that helped enhance the intervention and increase the probability that the girls will be able to implement the negotiation skills in the future. Due to the timing constraints of the school year, the trouble-shooting sessions were conducted right before school exams began, and unfortunately, take-up was low, especially in some schools that had exams earlier than planned.

**Solution at intervention:** In order to ensure that our participants receive the full intervention, we offered a make-up trouble-shooting session at schools where the take up was very low. This unplanned change in the study design has increased the study costs and affected the budget.

**Update on additional opportunity**

One of our key outcome measures is a behavioral measure of take-up of educational opportunities. The additional opportunity is designed to serve as an early-indicator of girls in the negotiation program’s increased ability to take advantage of and secure resources for educational opportunities. This behavioral measure includes offering an opportunity to participate in subsidized computer lessons, requiring a small fee and parental permission.

We had planned to offer the opportunity for **subsidized computer lessons** to all boys and girls at all the program schools in the 8<sup>th</sup> grade, and measure take-up in the treatment versus control groups. A small fee is required to partake in these lessons and allows us to measure how our intervention may allow girls to negotiate for resources for educational opportunities that have future benefits. The exact timing of offering this opportunity at each school depended on the capacity of our implementing partners, as well as the schools' individual programs. These constraints resulted in the program being offered at 19 of the schools in our program, during the August 2013 school holiday. The holiday term break was chosen as the optimal time period based on feedback from our school partners. We are now planning to offer this to the remaining 22 schools in the program.

The additional opportunity is carried out separately from the negotiation program, and offered in partnership with the Asikana Network & BongoHive. The computer skills training was implemented by the partners, who included this in their program offerings and have according resources and curricula. Our program staff kept track of take-up and attendance.

The exact timing of offering this opportunity at each school depended on the capacity of our implementing partners, as well as the schools' individual programs. Girls and boys at 19 of the schools in our program were offered this opportunity during the August 2013 school holiday. The holiday term break was chosen as the optimal time period based on feedback from our school partners.

Unfortunately the take up of this opportunity was very low due to the challenges outlined below. Out of the 1383 girls in the 19 program schools, 168 took it up.

	<b>Info</b>	<b>No Info</b>	<b>Total</b>
<b><i>Negotiation</i></b>	27	21	48
<b><i>Safe Space</i></b>	20	24	44
<b><i>Control</i></b>	21	19	40
<b><i>Pure Control</i></b>	20	16	36
<b>Total</b>	<b>88</b>	<b>80</b>	<b>168</b>

Table 5: Additional opportunity take-up, by treatments

### **Challenges faced during additional opportunity implementation**

The take-up of this opportunity heavily depends on the marketing efforts of our implementing partners. In the previous round, we saw positive results for the additional opportunity, but the marketing efforts were carried out with a time constraint. This was for two key reasons. First, because study survey activities were still ongoing, the additional opportunity sessions required to be slotted between the intervention and the midline survey, limiting our team's capacity. The opportunity was offered during the school holiday, to ensure it would not compete with school activities, which presented the second challenge: the Zambian Ministry of Education stipulated just before the launch that all activities in schools, during holidays would require permission from the district, and obtaining permission for 19 schools was not only labor intensive, but also time consuming.

**Solution planned for future round of additional opportunity:** Due to the challenges described above, and the resulting low take-up of the additional opportunity, we are offering a second round additional opportunity, designed to address the learning from challenges in the initial round. For the upcoming round of additional opportunity, we are working very closely with our implementing partners, Asikana Network, to plan the marketing of the opportunity as well as apply for Ministry of Education permission well ahead of time. Also, because survey efforts are

not currently ongoing, we are able to devote a greater share of project management resources to ensure the successful implementation of this measure.

**Negotiating a better future: The impact of teaching negotiation  
skills on girls' health and educational outcomes**

**Principal Investigators**

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**USAID FIXED OBLIGATED GRANT  
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**MILESTONE #5  
June, 2014**

*Update on program implementation and data collection activities. The report should briefly describe program implementation and data collection, focusing on the challenges that have the potential to affect study quality, and plans to mitigate them.*

#### MIDLINE DATA COLLECTION ACTIVITIES

We have successfully completed our midline data collection activities. The midline activities included surveys of the girls in the program and their guardians, and a trust game between the girls and their guardians to ascertain whether negotiation skills can increase the level of trust within a girl's relationship with her parents and thus lead to more optimal outcomes for both the girl and the household as a whole. The survey completion summarized<sup>1</sup> statistics of the midline are as follows:

	<b>Girl Surveys</b>	<b>%</b>	<b>Guardian Surveys</b>	<b>%</b>	<b>Trust Games</b>	<b>%</b>	<b>Total</b>
<b>Later</b>	573	71%	565	70%	551	68%	807
<b>Info</b>	286	70%	279	68%	273	67%	408
<b>No Info</b>	287	72%	286	72%	278	70%	399
<b>Negotiation</b>	612	74%	605	73%	590	72%	825
<b>Info</b>	311	74%	309	73%	301	71%	422
<b>No Info</b>	301	75%	296	73%	289	72%	403
<b>Pure Control</b>	506	72%	493	70%	480	68%	702
<b>Info</b>	251	72%	244	70%	239	68%	350
<b>No Info</b>	255	72%	249	71%	241	68%	352
<b>Safe Space</b>	610	75%	590.5	73%	581	72%	812
<b>Info</b>	300	73%	285	69%	281	68%	412
<b>No Info</b>	310	78%	305.5	76%	300	75%	400
<b>Grand Total</b>	<b>2301</b>	<b>73%</b>	<b>2253.5</b>	<b>72%</b>	<b>2202</b>	<b>70%</b>	<b>3146</b>

Table 1: Midline Surveys Completion Statistics

Differential attrition at midline was a key threat to our study validity, as it is possible that the girls who have already received the program would have been more motivated to participate in the midline. In this case, the group surveyed at midline may give a biased picture of the difference between treatment and control. Moreover, since the parent's participation at the midline is key for our outcome measures, it was also a concern that girls who have received negotiation training may be more able to encourage their parents to participate in the midline survey.

To mitigate all these concerns, we undertook a number of measures to attempt to increase take-up during the midline phase, which limited the potential impact of differential attrition. We took measures to ensure we actually reach the guardian, and were not only communicating through the

<sup>1</sup> For detailed break down of the surveys and trust games by schools, please refer to Appendix I, Table A

girl, avoiding the issue of the negotiation-trained girls being better able to encourage their parent to come.

Guardians were first notified by a letter, distributed at the school about the upcoming midline survey dates (sealed and addressed to the guardian him or herself, to avoid the influence of the girl on the guardian’s response), and asked to update their contact information, if applicable. They were then contacted by phone to schedule an appointment to come to the school to participate in the survey. These individual appointments were desirable so that we could plan survey staff accordingly and avoid inconveniencing parents with a long waiting time if many came all at once. Parents at each school had 6 days of survey time slots available to them, as well as two make-up days the following week. For those parents and girls that we were unable to reach during this time period, we will attempt to complete a participant exit survey to track why they were not reached, reasons for withdrawal if applicable, and what follow-up attempts that were made at the end of the initial survey period. Tracking respondents this way was important, because differential attrition is a particular threat to our research design, and as we can see from the table above, we do not have any differential attrition.

But subsequent to the initial intervention, some of the participants either dropped out of school or changed schools, so we could not survey them. Another set of participants withdrew after their parents did not give the consent for the midline survey. This round of data collection, required the participation from the guardians, the girls and coordinating the survey so that both could participate at the same time, which posed to be a challenge. Due to the busy schedules of the guardians, it was difficult to follow-up and reschedule survey dates with them very often.

**BOOSTER SESSION**

In order to maximize the impact of the intervention on the girls’ abilities to take-up the additional opportunity program, it was important to offer the participants a booster session to refresh the negotiation and communication skills that they learned during the full intervention in May-July 2013.

The Booster Session was a 1-day session held with the Negotiation Group, to both reinforce the knowledge gained and provide girls with additional support for effectively utilizing the skills gained, in their lives. The same trained coaches as in the initial program led these sessions. The girls in the Social Capital group are also invited for a follow-up session with their same coaches, for consistency.

We hypothesized that these sessions will allow us to do the following:

- Look at dose-response
- Measure ability for long-term outcomes with shorter, cheaper ongoing interventions
- Be able to observe the effect of the additional opportunity, a key outcome measure

In addition, these sessions were meant to help the negotiation-treatment girls review the material again after having had time to apply these skills in real life and better absorb the information with this experience. We gave the participants an opportunity to share successes but also challenges and receive constructive advice from the coaches on how to overcome those barriers and hone their negotiation skills. We have completed the booster session in April 2014.

The booster session was very successful. We saw very high take-up rates across all schools and treatment groups. The take up rates are summarized in the following table:

<b>Treatment Group</b>	<b>Attendance Rate</b>
<i>Information</i>	75.43%
<i>No Information</i>	74.94%

<i>Safe Space</i>	77.26%
<i>Negotiation</i>	73.16%
<i>Overall attendance rate<sup>2</sup></i>	75.00%

Table 2: Booster session attendance rates by treatment groups

### ADDITIONAL OPPORTUNITY

As mentioned in Milestone 4, one of our key outcome measures is the take up of educational opportunities by the program girls. Two months following the program, the entire 8<sup>th</sup> grade at 19 of the program schools were offered an opportunity to participate in subsidized computer lessons, requiring a small fee and parental permission.

For this behavioral measure, the additional opportunity was carried out separately from the negotiation program and was simply an opportunity that our partner organizations, Asikana Network & BongoHive, in collaboration with the basic school, offered to students at the school. The computer skills training or extra lessons was implemented by the partners, who included this in their program offerings and have according resources and curricula, with the only difference being that we kept track of which girls enroll in this program.

By tracking which girls take up the opportunity, we will be able to measure how able the girl is to take advantage of opportunities presented to her that have a potential value for her future and the family as a whole. While still somewhat controlled, this takes place outside the context of the research study, and should provide a proxy for real-world outcomes and insight into whether the negotiation curriculum affected the girls' ability to negotiate for her interests.

The additional opportunity is designed to serve as an early-indicator of girls in the negotiation program's increased ability to take advantage of and secure resources for educational opportunities. This behavioral measure includes offering an opportunity to participate in subsidized computer lessons, requiring a small fee and parental permission.

The exact timing of offering this opportunity at each school depended on the capacity of our implementing partners, as well as the schools' individual programs. The take-up of this opportunity heavily depends on the marketing efforts of our implementing partners. In the previous round, we saw positive results for the additional opportunity in the first round of 19 schools, but the marketing efforts were carried out with a time constraint. This was for two key reasons. First, because study survey activities were still ongoing, the additional opportunity sessions required to be between the intervention and the midline survey, limiting our team's capacity. The opportunity was offered during the school holiday, to ensure it would not compete with school activities, which presented the second challenge: the Zambian Ministry of Education stipulated just before the launch that all activities in schools, during holidays would require permission from the district, and obtaining permission for 19 schools was not only labor intensive, but also time consuming.

Due to these challenges, and the resulting low take-up of the additional opportunity, we offered a second round additional opportunity in April-May, 2014, designed to address the learning from challenges in the initial round. The additional opportunity was offered the students of 24 schools,

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<sup>2</sup> We reached 1202 girls, out of 1603 in the booster sessions.

during the second round. The take up rates for the different groups is summarized in the following table:

<b>Groups</b>	<b>Take Up</b>
<i>Average take up among all GN girls across all schools</i>	18.15%
<i>Take up among all GN girls from all schools</i>	17.92%
<i>Take up among Negotiation girls from all intervention schools</i>	15.96%
<i>Take up among Safe Space girls from all intervention schools</i>	18.40%
<i>Take up among Control/Later girls from all intervention schools</i>	18.04%
<i>Take up among Pure Control girls from all pure control schools</i>	19.04%

Table 3: Additional opportunity take-up rates

By the figures mentioned in Table 3, it is clear that the take up rates were low, even though the activity's marketing and implementation phase was planned with a lot of effort. But this led to the development of an interesting insight for the low take up, and helped us understand the decision-making processes surrounding the activity that was being offered. The attendance figures during the booster session, signals a high propensity for take up of this program, but this may have led to the program girls' negotiating with their parents and guardians for attending competing activities. It is also important to note that the girls are now in the 9<sup>th</sup> grade, which is an important examination year for them, this means they have a lot of extra classes and schoolwork, that they would be prioritizing over the computer classes.

**Appendix I:**

Table A: Midline Survey Completion Statistics by school

School Name	Girl	Girl%	Guardian	Guardian %	TG	TG%	Total
<i>Arthur Wina Primary School</i>	22	76%	21	72%	19	66%	29
<i>Burma Primary School</i>	29	57%	29	57%	29	57%	51
<i>Chainda Primary School</i>	50	69%	51	71%	49	68%	72
<i>Chaisa Primary School</i>	45	76%	44	75%	42	71%	59
<i>Chakunkula Primary School</i>	57	83%	54	78%	53	77%	69
<i>Chawama Primary School</i>	45	67%	44	66%	42	63%	67
<i>Chazanga Primary School</i>	49	77%	49	77%	49	77%	64
<i>Chibolya Primary School</i>	37	59%	38	60%	36	57%	63
<i>Chimwemwe Primary School</i>	42	79%	41	77%	41	77%	53
<i>Chingwele Primary School</i>	38	59%	39	61%	36	56%	64
<i>Chunga Primary School</i>	62	89%	60.5	86%	60	86%	70
<i>Daina Kaimba Primary School</i>	78	84%	77	83%	75	81%	93
<i>Emmasdale Primary School</i>	40	70%	40	70%	40	70%	57
<i>Jacaranda Primary School</i>	62	65%	60	63%	60	63%	95
<i>John Laing Primary School</i>	86	69%	91	73%	86	69%	124
<i>Kabulonga Primary School</i>	39	61%	38	59%	37	58%	64
<i>Kamwala Primary School</i>	74	82%	73	81%	73	81%	90
<i>Kamwala South Primary School</i>	53	67%	51	65%	48	61%	79
<i>Kanyama Central Primary School</i>	37	74%	37	74%	37	74%	50
<i>Libala Stage III Primary School</i>	68	65%	67	64%	66	63%	104
<i>Lotus Primary School</i>	33	66%	32	64%	32	64%	50
<i>Mahatma Gandhi Primary School</i>	53	78%	51	75%	50	74%	68
<i>Muchinga Primary School</i>	54	79%	47	69%	47	69%	68
<i>Mumana Primary School</i>	65	70%	65	70%	64	69%	93

<i>Nelson Mandela Primary School</i>	42	70%	40	67%	38	63%	60
<i>New Kabanana Primary School</i>	51	86%	51	86%	49	83%	59
<i>New Kamulanga Primary School</i>	51	81%	48	76%	48	76%	63
<i>New Kanyama Primary School</i>	79	77%	77	75%	77	75%	102
<i>New Mandevu Primary School</i>	63	81%	64	82%	62	79%	78
<i>New Mtendere Primary School</i>	70	75%	66	71%	65	70%	93
<i>Northmead Secondary School</i>	83	60%	78	56%	78	56%	139
<i>Nyumba Yanga Primary School</i>	46	84%	45	82%	45	82%	55
<i>Simon Mwansa Primary School</i>	58	87%	59	88%	56	84%	67
<i>Thornpark Primary School</i>	48	80%	46	77%	46	77%	60
<i>Tunduya Primary School</i>	60	69%	58	67%	54	62%	87
<i>Twalumba Primary School</i>	82	78%	81	77%	80	76%	105
<i>Twashuka Primary School</i>	90	66%	84	61%	82	60%	137
<i>Twatasha Primary School</i>	37	66%	37	66%	37	66%	56
<i>Vera Chiluba Primary School</i>	97	82%	96	81%	96	81%	118
<i>Woodlands 'A' Primary School</i>	49	67%	48	66%	46	63%	73
<i>Yotam Muleya Primary School</i>	77	79%	76	78%	72	73%	98
<b>Grand Total</b>	<b>2301</b>	<b>73%</b>	<b>2253.5</b>	<b>72%</b>	<b>2202</b>	<b>70%</b>	<b>3146</b>



**USAID Milestone 6**  
Negotiating a Better Future  
Grant No. AID-OAA-F-13-00030  
June 30, 2014

This Milestone 6 report is divided into three sections. The first section includes detailed information on the refresher training for coaches and booster session for participants. In the second section, we present a one-year progress report, with an overview of data collection activities and preliminary findings. The third section includes a project design amendment.

## Section 1

### Refresher training for coaches and booster session for participants

In February and March 2014, we offered study participants a booster session to refresh the negotiation and communication skills that they learned during the full intervention in May-July 2013. Prior to the booster session, we provided refresher training for the coaches who would lead the booster sessions.

Eight of the coaches who led the Negotiation and Social Capital sessions during the full intervention participated in the refresher training. The refresher course included a reminder of essential background information about the research design and project goals, tips for teaching in the classroom, a review of key negotiation concepts, and instructions in how to lead the booster sessions. It offered information on coaching in both Social Capital and Negotiation treatments and how coach roles and responsibilities differ between the two. The refresher training also offered the coaches help on coaching consistently and connecting with the girls through varied facilitation methods.

The booster session was a one-day session designed to reinforce the knowledge gained through the initial intervention and provide girls with additional support for effectively applying the skills in their lives. The booster session was provided only to the girls in the Negotiation and Social Capital groups and not to any of the girls in the Control Group within Treatment Schools or in the Pure Control Group. The coaches who participated in the refresher training led the booster sessions.

During the Negotiation treatment booster sessions, the coaches helped the girls review the negotiation skills again after having had time to apply these skills in real life. We hoped that the girls would better absorb the information with this reinforcement. We gave the participants an opportunity to share successes and challenges and receive constructive advice from the coaches on how to overcome those barriers and hone their negotiation skills.

In total, 85 booster sessions were offered in February and March 2014. We saw very high take-up rates across all schools and treatment groups. 1589 girls from 29 schools were invited to participate in the booster session; 1203 participated. The take up rates are summarized in the following table:

<b>Treatment Group</b>	<b>Attendance Rate</b>
<i>Information</i>	75.93%
<i>No Information</i>	75.48%
<i>Social Capital</i>	77.59%
<i>Negotiation</i>	73.90%
<i>Overall attendance rate</i>	75.71%

Table 1: Booster session attendance rates by treatment groups

## Section 2

### One-year progress report

May 2013 - May 2014

Our intervention addresses a root cause of Zambian girls' poor health and educational outcomes: the need for communication skills to negotiate health and education decisions with power figures in their lives. The goal of our study is to test whether training in negotiation and communication skills allows Zambian girls in the 8<sup>th</sup> and 9<sup>th</sup> grade to better represent their own interests in joint decision-making, increase their agency and power in key relationships, and ultimately have more control over their own health and educational outcomes.

Below, we present a chronological overview of the data collection activities completed between May 2013 and May 2014. At the end of this section, we report preliminary findings indicating positive effects for the intervention. Please note that the preliminary findings presented in this report are *truly preliminary*; we are still in the process of cleaning and analyzing data. We request that the findings be treated as preliminary only, and not disseminated in any way.

### Data Collection Activities

#### Baseline & Program Implementation

*May-July 2013*

**Obtaining Consent:** We held teacher meetings in each of the participating schools at the beginning of the full study period to explain the program and obtain school rosters. A letter was sent home with each eligible girl to inform her guardian(s) about the program and request guardian attendance at a school-based informational meeting about the program. The guardians could choose to return this letter indicating either: 1) that they wish to learn more about the study or 2) that they wish not to participate and do not want to be contacted further. Guardians who indicated that they wished to learn more were provided dates and times for attending an informational meeting at the girl's school. At the guardian meetings, the study was explained in detail and the informed consent process was completed.

**Randomization and Intervention:** Girls with guardian consent attended an afterschool meeting at their respective schools, in which the study process was explained further. A baseline survey with the participating girls, completed privately away from peers, was conducted during these afterschool meetings.

During the initial meeting with participating girls, half of the girls were randomly assigned to participate in an Information Session that took place that day. The Information Sessions were informed by previous discussions with teachers and girls, and developed through pilots in Lusaka. Each Information Session

contained a section on the benefits of continued education for girls and a section on HIV. The education section provided data and examples about the benefits girls could realize by staying in school, and offered information about organizations that sponsor girls who cannot otherwise afford to stay in school. The HIV section provided information about HIV and AIDS, including the prevalence of HIV in Zambia, how HIV is transmitted, testing for HIV, risky behaviors that increase the likelihood of transmitting HIV, and steps girls can take to reduce their exposure.

Following the baseline survey and the Information Sessions, girls were randomly assigned to one of three groups:

- **Negotiation Group.** Girls assigned to the Negotiation Group participated in six afterschool Negotiation training sessions. We designed the negotiation curriculum in pilot studies with Zambian girls of similar age and background. Trained female Zambian role models, whom we call “Coaches,” taught the Negotiation sessions. Thirty Zambian women were hired and trained as coaches in April and May 2013. During the Negotiation training sessions, girls received a free lunch, a notebook, pens, and other materials as needed for the training.
- **Social Capital Group.** Girls assigned to the Social Capital Group participated in six afterschool sessions over two weeks, during which they could play games, study or do homework, or just converse with other girls. The same coaches who taught the Negotiation training sessions oversaw the Social Capital sessions. During the Social Capital sessions, girls received a free lunch, a notebook, pens, and other materials, mirroring the resources provided to girls in the Negotiation Group.
- **Control Group in Treatment Schools.** Girls assigned to the Control Group within the treatment schools did not participate in an afterschool program in 2013. Girls in the Control Group will receive the negotiation training after conclusion of the administrative data collection at the treatment schools.

Girls in the Negotiation and Social Capital Groups met for six 2-hour sessions over a period of two weeks at their respective schools. The intervention was implemented at four schools at a time on a rolling basis.

Approximately one to two months after the intervention at each school, a one-day troubleshooting session was held with girls in the Negotiation Group to both reinforce the knowledge gained and provide girls with additional support for effectively utilizing the skills gained through the program. The same trained coaches as in the initial program led these sessions. The girls in the Social Capital Group were also invited for a follow-up session with their coaches for consistency. As in the initial intervention, girls in the Social Capital Group played games, studied, or just conversed with other girls.

In addition to the randomized assignments for girls within the treatment schools, 12 schools were selected as a matched subsample for a Pure Control Group. In the 12 Pure Control schools, girls with guardian consent completed the baseline survey and half were randomly assigned to participate in the Information Session, but none of the girls in the Pure Control schools received any intervention. This subsample of

Pure Control schools allows us to assess spillover effects within the treatment schools. As noted below, the girls and their guardians in the Pure Control Group also completed the midline survey and participated in the Trust Game at midline. Girls in the Pure Control Group will receive the negotiation training in 2014.

The following tables summarize the breakdown of treatment group assignments<sup>1</sup>:

<b>Intervention</b>	<b>Number of Girls</b>	
	<b>Information</b>	<b>No Information</b>
<i>Negotiation</i>	410	391
<i>Social Capital</i>	399	386
<i>Control within Treatment Schools</i>	396	384
<i>Pure Control</i>	390	390
<b>Total</b>	<b>1595</b>	<b>1551</b>

Table 2: Sample by Information and Intervention Treatments

**Attendance at the intervention sessions:** Of the 1586 girls in the Negotiation and Social Capital Groups, 1489 girls across 29 schools attended at least one session. The average attendance for the Negotiation and Social Capital Groups was 5.0 and 5.19 days, respectively. The following table shows the distribution of attendance by treatment:

<b>Treatment Group</b>	<b>Attended</b>						
	<b>0 Days</b>	<b>1 Day</b>	<b>2 days</b>	<b>3 days</b>	<b>4 days</b>	<b>5 days</b>	<b>6 days</b>
<i>Negotiation</i>	6.62%	2.00%	1.37%	2.75%	7.62%	21.72%	57.93%
<i>Social Capital</i>	5.61%	1.91%	1.02%	2.04%	5.10%	17.96%	66.36%
<b>Total</b>	<b>6.12%</b>	<b>1.95%</b>	<b>1.20%</b>	<b>2.40%</b>	<b>6.37%</b>	<b>19.86%</b>	<b>62.10%</b>

Table 3: Percentage distribution of intervention session attendance by treatment

**Troubleshooting sessions:** An hour-long troubleshooting session took place at each of the treatment schools about one month after the intervention.<sup>2</sup> The troubleshooting sessions, led by the original coaches, helped the girls identify challenges that they may be facing while practicing their negotiation and communication skills in their everyday lives. During piloting, the troubleshooting sessions proved to be a key component that helped enhance the intervention, increasing the probability that the girls will be able to implement the negotiation skills in the future.

<sup>1</sup> Please note that because of recently-caught errors in treatment assigned, numbers in the tables provided in this report may differ from those presented in earlier Milestone reports.

<sup>2</sup> We also provided a booster session in February-March 2014 (details can be found below).

Due to the timing constraints of the school year, the first round of troubleshooting sessions was conducted right before school exams began. Unfortunately, take-up was low at these sessions, especially in some schools that had exams earlier than planned. In order to ensure that our participants received the full intervention, we offered a make-up troubleshooting session at schools where the take up was very low. The following table gives the attendance rates at the troubleshooting sessions in the full study, by treatment groups. The numbers in the table include both rounds of troubleshooting sessions.

<b>Treatment Groups</b>	<b>Did Attend</b>	<b>Not Attended</b>	<b>Total</b>
<i>Negotiation</i>	237	564	801
<i>Social Capital</i>	206	579	785
<b>Total</b>	<b>443</b>	<b>1143</b>	<b>1,586</b>

Table 4: Troubleshooting attendance by treatment groups

### Midline Data Collection Activities

*October – December 2013*

The Midline Data Collection involved two separate activities: surveys for the girls and their guardians; and a Trust Game played between the girls and their guardians. The Midline activities were designed to provide data regarding whether or not Negotiation training had affected girls’ self-reported beliefs and behavior, whether any differences in beliefs and behavior were evident to the girls’ guardians, and whether the intervention could increase the level of trust between the girls and their guardians and thus lead to more optimal outcomes for both the girl and the household as a whole.

During the planning for the implementation of the midline data collection, we discovered that some of the girls who had participated in the initial intervention had either dropped out of school or changed schools, so we could not survey them. This implied that ensuring high participation rates for the endline survey a year later would present an even more problematic challenge to data collection. This led us to expand the scope of the midline survey to include all the mechanisms we were planning to cover in the endline survey. Adding endline questions to the midline survey provided the project with a greater number of participants than expected at the follow-up endline survey. We discuss this change in the data collection approach in detail in Section 3 of this Milestone report.

The Trust Game referenced above is an adaptation of an experimental game used widely in experimental economics. We developed the Trust Game used in our study through pilots with girls similar to those in our study but outside our study population. In the study, each participating girl played the Trust Game with her guardian during the midline survey period. Each guardian was given an initial endowment at the beginning of the Game and asked to make a choice of how many points (if any) to invest in the daughter; guardians were told that any points given to the daughter would be doubled. The daughter could use these

doubled points to choose small prizes for herself and/or give points back to the guardian. For the guardian, all points held at the end of the game were redeemable for cell phone credit. Total airtime/prize value per pair never exceeded KR 20 (approximately \$4.25). Girls and guardians made their decisions separately with different surveyors. Half of the Trust Games were played with no communication between the girls and their guardians; the other half of the games involved a communication period in which the girl and guardian were given an opportunity to talk together after learning the rules of the game. Fully crossed with communication, half of the Trust Games involved a word search task that the girls needed to complete correctly in order to have their points doubled; the other half were not given the word search task and the points were doubled automatically.

The choices guardians made in the Trust Game measure: (1) the guardian’s trust that the girl would be willing to put effort into something with potential benefit for herself and the family (in the word search condition), and (2) the guardian’s trust that the girl would share some of the benefits of that investment with the household (with and without the word search). Both of these facets of trust have significant implications for understanding a guardian’s potential willingness to invest in the girl’s schooling. The results from the Trust Game can be used to ascertain the mechanisms through which negotiations may increase parental investment in children.

The midline activity completion statistics, broken down by the number and percentage of girls completing midline surveys in each treatment, the number and percentage of guardians completing midline surveys in each treatment, and the number and percentage of girl-guardian pairs completing the Trust Game in each treatment, are presented in the table below. We provide preliminary findings from the Trust Game in the preliminary results section of this report.

	<b>Girl Surveys</b>	<b>Girl %</b>	<b>Guardian Surveys</b>	<b>Guardian %</b>	<b>Trust Game</b>	<b>Trust Game %</b>
<b>Negotiation</b>	593	74%	561	70%	574	72%
<i>Info</i>	304	74%	287	70%	296	72%
<i>No Info</i>	289	74%	274	70%	278	71%
<b>Social Capital</b>	582	74%	548	70%	560	71%
<i>Info</i>	282	71%	265	66%	269	67%
<i>No Info</i>	300	78%	283	73%	291	75%
<b>Control within Treatment Schools</b>	546	70%	517	66%	529	68%
<i>Info</i>	272	69%	250	63%	262	66%
<i>No Info</i>	274	71%	267	70%	267	70%
<b>Pure Control</b>	560	72%	543	70%	544	70%

<b>Info</b>	279	72%	274	70%	275	71%
<b>No Info</b>	281	72%	269	69%	269	69%
<b>Grand Total</b>	<b>2,281</b>	<b>73%</b>	<b>2,169</b>	<b>69%</b>	<b>2,207</b>	<b>70%</b>

Table 5: Midline Activity Completion Statistics

## Refresher training for coaches & booster session for participants

*February-March 2014*

In February and March 2014, we offered study participants a booster session to refresh the negotiation and communication skills that they learned during the full intervention in May-July 2013. Prior to the booster session, we provided refresher training for the coaches who would lead the booster sessions.

Eight of the coaches who led the Negotiation and Social Capital sessions during the full intervention participated in the refresher training. The refresher course included a reminder of essential background information about the research design and project goals, tips for teaching in the classroom, a review of key negotiation concepts, and instructions in how to lead the booster sessions. It offered information on coaching in both Social Capital and Negotiation treatments and how coach roles and responsibilities differ between the two. The refresher training also offered the coaches help on coaching consistently and connecting with the girls through varied facilitation methods.

The booster session was a one-day session designed to reinforce the knowledge gained through the initial intervention and provide girls with additional support for effectively applying the skills in their lives. The booster session was provided only to the girls in the Negotiation and Social Capital groups and not to any of the girls in the Control Group within Treatment Schools or in the Pure Control Group. The coaches who participated in the refresher training led the booster sessions.

During the Negotiation treatment booster sessions, the coaches helped the girls review the negotiation skills again after having had time to apply these skills in real life. We hoped that the girls would better absorb the information with this reinforcement. We gave the participants an opportunity to share successes and challenges and receive constructive advice from the coaches on how to overcome those barriers and hone their negotiation skills.

In total, 85 booster sessions were offered in February and March 2014. We saw very high take-up rates across all schools and treatment groups. 1589 girls from 29 schools were invited to participate in the booster session<sup>3</sup>; 1203 participated. The take up rates are summarized in the following table:

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<sup>3</sup> Please note that because of recently-caught errors in treatment assigned, 3 more girls were invited to the booster session compared to intervention.

<b>Treatment Group</b>	<b>Attendance Rate</b>
<i>Information</i>	75.93%
<i>No Information</i>	75.48%
<i>Social Capital</i>	77.59%
<i>Negotiation</i>	73.90%
<b><i>Overall attendance rate</i></b>	<b>75.71%</b>

Table 6: Booster session attendance rates by treatment groups

### **Additional Opportunity**

*First round: Aug-Sept 2013*

*Second round: Apr-May 2014*

One of our key outcome measures is the take-up of educational opportunities. An additional opportunity—subsidized computer lessons requiring a small fee and a guardian’s permission—was designed to serve as an early indicator of increases in the girls’ ability to take advantage of and secure resources for educational opportunities. The additional opportunity program was carried out separately from the Negotiation program and offered to students (both boys and girls) by our partner organizations, Asikana Network & BongoHive, in collaboration with the basic school.

While still somewhat controlled, the additional opportunity was offered outside the context of the research study, and should provide a proxy for real-world outcomes. By tracking which girls secured resources for and participated in this outside, additional opportunity, we were able to measure how negotiation training affected girls’ likelihood of pursuing available educational opportunities. This offers potential insight into whether the negotiation curriculum affected the girls’ ability to negotiate for resources that could be applied to education.

The additional opportunity was offered at two different times in order to ensure higher take-up. Take-up in the first round, offered to girls and boys in 19 program schools approximately two months following the initial intervention, was lower than expected due to school holidays and incomplete advertising. The second round was offered to girls and boys in 24 schools, including all schools that did not receive the additional opportunity in August of 2013, plus two schools (one pure control school and one intervention school) whose matched pair hadn’t received the additional opportunity in the previous round. This second round was advertised more effectively and offered at a time more convenient to the girls and their guardians.

### **Administrative data collection**

*Ongoing*

In addition to the outcome measures provided by surveys, the guardian-girl lab experimental Trust Game, and take-up of the Additional Opportunity, we continue to collect long-term administrative data from the

schools in our sample. This administrative data provides measures of the program's effects on educational outcomes such as grade advancement and dropout rates, as well as on related health outcomes such as pregnancy and HIV risk.

The bullets below list the types and sources of administrative data being collected:

- Class attendance (attendance registers filled out by selected and trained pupil “class monitors”)
- Fee payment information (provided by school administration)
- Exam results (provided by school administration)
- Tracking information, including school advancement, drop outs, transfer, and pregnancy (provided by school administration and, beginning in 2014, also being collected separately by class monitors)

## Preliminary findings

In this section, we present summary statistics for the baseline sample, results from qualitative data assessing whether the negotiation training effectively taught negotiation skills, and preliminary results from the Trust Game played by the girls and their guardians at midline.

Table 8 shows null effects in the summary statistics across Groups at baseline, as expected with randomization. We then describe the qualitative data used to assess whether the negotiation training increased girls’ understanding of negotiation skills and when to apply them. Table 9 presents differences in girls’ responses to negotiation scenarios, by treatment, suggesting that the negotiation training effectively taught negotiation skills. Table 10 provides early preliminary findings from the Trust Game suggesting the efficacy of the Negotiation intervention on the girls’ ability to obtain valuable resources from parents/guardians.

We emphasize that these are *truly preliminary* findings. We are still in the process of cleaning and analyzing data. We request that these preliminary findings not be disseminated or released in any form.

### *Summary Statistics at Baseline*

**Table 8: Summary statistics for the baseline sample, Treatment Schools only**

	Control Group in Treatment Schools			Social Capital			Negotiation			P-values	
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Negotiation vs. Control	Negotiation vs. Social Capital
Age at baseline	14.4	1.45	744	14.41	1.47	746	14.45	1.47	764	0.47	0.60
Can read Nyanja well	0.65	0.48	744	0.63	0.48	746	0.63	0.48	764	0.27	0.78
Can read English well	0.9	0.3	744	0.9	0.3	746	0.9	0.3	764	0.67	0.92

Can speak Nyanja well	0.88	0.32	744	0.89	0.32	746	0.88	0.32	764	0.89	0.75
Can speak English well	0.79	0.41	744	0.8	0.4	746	0.78	0.42	764	0.43	0.28
Both parents are alive	0.74	0.44	744	0.75	0.44	746	0.72	0.45	764	0.39	0.34
Lives with biological father	0.56	0.5	744	0.55	0.5	746	0.54	0.5	764	0.47	0.51
Lives with biological mother	0.69	0.46	744	0.71	0.46	746	0.7	0.46	764	0.69	0.92
Was ever kept home from school	0.83	0.37	742	0.81	0.39	744	0.84	0.36	762	0.61	0.15
Wants to complete schooling at least to diploma level	0.77	0.42	622	0.79	0.41	606	0.77	0.42	627	0.90	0.40
Believes she will reach at least diploma level	0.27	0.44	622	0.26	0.44	606	0.26	0.44	627	0.93	0.72

Notes: P-values are from the two-sided T-tests of the means.

### ***Qualitative data used to assess negotiation skills training***

In one section of the girls' midline survey, girls were given a scenario and asked to imagine themselves in that situation. In the scenario, the girl has a big test to study for and needs to find a way to take care of their little brother. She wants her middle sister to take care of the brother, but the middle sister says that she wants to go visit a friend. The girls were asked a series of questions about what they would do if they were in this situation.

Our main goal was to find out if girls' responses reflected some understanding of the negotiation skills taught in the intervention, and how extensive that understanding might be. The negotiation skills include discovering the other person's interests, making sure their own interests are met, working together to solve the problem, dealing positively with emotions, and brainstorming solutions. We iteratively developed a 7-point coding scheme that gave the highest scores to girls who answered that they would engage their sister in a conversation, attend to emotions, and pay attention to everyone's interests in designing a solution, and lower scores to girls who answered that they would do nothing, just give in, or make decisions unilaterally without taking their own and others' interests into account. A more complete description of our coding scheme can be found in Appendix B.

The simple means tests of the responses across treatment groups are presented in Table 9, below. The tests revealed, as predicted, that girls in the Negotiation group expressed significantly greater understanding of negotiation skills than girls in the Social Capital and Control groups. This is not evidence that the girls in the Negotiation group are using these concepts in their everyday lives, but it does show that they acquired knowledge of negotiation skills and when to apply them, and they therefore have the potential to apply these skills to difficult situations in their own lives.

**Table 9: Means Tests of Girls Responses to Negotiation Scenario Questions. Score scales span from 1 to 7, where higher values reflect greater understanding of the negotiation skills taught in the intervention. Details on the definition of these scales are provided in Appendix B.**

Question 1: What would be the first thing you would do in this situation?

	Control	Safe Space	Negotiation
Mean score (1-7)	3.72	3.73	4.46***
SE of mean	0.06	0.06	0.07

*Surveyor read: Let's say when you try to talk to the middle sister about staying home tonight, she gets very mad. She says "You only even talk to me when you want me to do something. You never play with me! You don't care about me at all, so why should I help you?"*

Question 3: What would you do now?

	Control	Safe Space	Negotiation
Mean score (1-7)	4.2	4.08	4.98***
SE of mean	0.08	0.08	0.08

*Surveyor read: Let's say you get the middle sister to calm down and talk to you nicely. She explains that she doesn't want to stay home because she has a friend visiting town that she hasn't seen in months. The friend will only be here until the end of the week. She also explains that she feels left out when she is around her other siblings and thinks her younger brother enjoys spending time with you more than her anyway.*

Question 4: Do you have any ideas for solutions? What are they?

	Control	Safe Space	Negotiation
Mean score (1-7)	3.75	3.79	4.52***
SE of mean	0.09	0.09	0.09

Notes: Stars (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1) correspond to the p-values from the two-sided t-test of the means, compared to the mean of the pure control group.

### *Preliminary Results from Trust Game Played by Girls and their Guardians*

As noted in the chronological overview in Section 2, the Trust Game in our study was designed to provide behavioral measures of the girls' ability to secure valuable resources from her guardians or parents. As described above, the Trust Game is widely used in experimental economics and has been shown to predict repayment of microfinance loans, for example (Karlan (2005)) and trustworthiness of individuals (Glaeser et al, 2000). It has also been referred to as an Investment Game, whereby trust facilitates efficient investment (since the money is tripled and can then be re-shared). The experimental design innovation we used to adapt the standard Trust Game allows us to pin down the mechanisms through which efficient investment can be more or less likely to occur.

The allocations of points guardians made to girls in the Trust Game measure: (1) the guardian's trust that the girl would be willing to put effort into something with potential benefit for herself and the family (in the word search condition), and (2) the guardian's trust that the girl would share some of the benefits of that investment with the household (with and without the word search). Both of these facets of trust have significant implications for understanding a guardian's potential willingness to invest in the girl's schooling. We also exogenously vary the opportunity to communicate, and how that impacts investment. Preliminary findings from the Trust Game are presented in Table 10.

Column 1 describes the results from the Trust Game with and without communication, for the three treatment groups. In particular, the coefficient on the interaction of the communication version of the trust game and negotiation training is 0.765, meaning girls who received negotiations training receive 5.61 tokens when given the opportunity to communicate with their guardian, compared to 5.26 tokens received by girls in the control group, a difference that is significant at the 1% level. Indeed, the opportunity to communicate *only* benefits girls when they have had exposure to either the safe space group or the negotiations training (and more with the negotiations training), an important finding given that previous trust game studies have found that communication almost always improves outcomes. *Training thus allows girls to take advantage of any opportunities for communication to improve investment.* These results hold when controlling for requiring the girl child to do a word search task in order to triple the investment (Column 2) and get even stronger when controlling for school fixed effects (column 4) and individual controls (column 5). Relative

to girls in the Control Group within the Treatment Schools, the girls in the Negotiation Group secured significantly more resources from their guardians when given the opportunity to talk with the guardian before the allocation decision was made.

**Table 10: Effect of Negotiation Treatment on Trust Game Outcomes. Standard errors in parentheses. Predicted effects in bold.**

	Number of tokens sent by the guardian to the girl				
	(1)	(2)	(3)	(4)	(5)
Negotiation treatment	-0.418** (0.170)	-0.431** (0.207)	-0.428* (0.238)	-0.471** (0.207)	-0.437** (0.210)
Social Capital treatment	-0.423** (0.173)	-0.287 (0.210)	-0.312 (0.241)	-0.323 (0.210)	-0.320 (0.212)
1 if game with communication	-0.142 (0.177)	-0.142 (0.177)	-0.0558 (0.248)	-0.151 (0.176)	-0.154 (0.178)
<b>Communication X Negotiation</b>	<b>0.765*** (0.244)</b>	<b>0.764*** (0.244)</b>	<b>0.764** (0.345)</b>	<b>0.794*** (0.243)</b>	<b>0.788*** (0.246)</b>
Communication X Social Capital	0.521** (0.247)	0.521** (0.247)	0.575* (0.345)	0.538** (0.246)	0.587** (0.249)
1 if game with word search		-0.00792 (0.177)	0.0804 (0.251)	-0.0193 (0.176)	0.00738 (0.178)
Word search X Negotiation		0.0264 (0.244)	0.0180 (0.341)	0.0499 (0.243)	0.00634 (0.246)
Word search X Social Capital		-0.281 (0.247)	-0.230 (0.347)	-0.270 (0.246)	-0.293 (0.249)
Communication X word search			-0.176 (0.353)		
Communication X word search X Social Capital			-0.115 (0.494)		
Communication X word search X Negotiation			0.00677 (0.488)		
School FE	No	No	No	Yes	Yes
Controls	No	No	No	No	Yes
Observations	1,321	1,321	1,321	1,321	1,288

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R-squared	0.016	0.018	0.019	0.051	0.061
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\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Notes: Comparison group is the control group in treatment schools. Randomization occurred at the individual level, so the error is not clustered.

Controls include the following variables collected during the baseline survey: a) age, b) reads English well, b) speaks English well, c) both parents are alive, d) lives with biological father, e) lives with biological mother, f) was ever kept home from school, and g) parents pay the school fees.

## **Section 3**

### **Project design amendment**

The “Negotiating a Better Future” project is an ongoing 30-month project, started in January 2013. The study has successfully reached over 3,000 grade eight girls, across 41 schools in Lusaka, Zambia. As our preceding milestone reports have communicated, the project has been intensifying in scope and this has affected data collection plans and the project budget. In this section, we explain two changes in the data collection plan, the reason the changes were made, and the potential implications of the changes.

#### **Plan stated in original proposal**

Our study design features multiple types of data collection that will allow this project to shed light on not just the health and education effects of the intervention, but also on the mechanisms driving these outcomes. The original plan for the collection of outcome measures included a midline survey conducted with girls and their guardians approximately 4 months following the intervention, and an endline follow-up survey conducted approximately 16 months after the initial intervention. At midline, the girls and their guardians also participated in a Trust Game, providing behavioral measures of trust between the girls and their guardians (as reported in Section 2 above). Girls in all of the participating schools were offered the opportunity to participate in a computer skills course outside school, providing data on take-up of additional educational opportunities (as reported in Section 2 above). Administrative data was to be collected from the school, tracking attendance, performance, dropouts, and pregnancy throughout the 16 months between baseline and endline. At the end of the Grade 9, data on exam performance, fee payment, and promotion to high school will also be collected and recorded. This plan provides a clear demarcation in the measurement of outcomes and the mechanisms driving the outcomes. The survey data focuses on the mechanisms, while the trust game results, administrative data and the additional opportunity provide measures of the behavioral outcomes that we are interested in affecting through the intervention.

#### **Changes made to the proposed evaluation plan**

We made two major changes to the evaluation plan described above.

1. Expanded the midline survey to replace endline survey
2. Improved the intensity and quality of administrative data collection

##### ***Expanded the midline survey to replace endline survey***

During the planning for the implementation of the midline data collection, we discovered that some of the program participants had either dropped out of school or changed schools subsequent to the initial intervention, so we could not survey them at midline. This implied that ensuring high participation rates for the endline survey a year later would present an even more problematic challenge to data collection.

Due to exams and the passage of time, girls would have a greater propensity to drop out or change schools by the time the endline survey was scheduled. This led us to expand the scope of the midline survey to include all the mechanisms that we were planning to cover in the endline survey. Eliminating the endline survey thus does not negatively impact the scope or scale of the project and neither has it affected our ability to collect the outcome measures proposed. Adding endline questions to the midline survey did, however, guarantee the project a greater number of participants than expected at the follow-up survey. The expansion of the midline survey increased costs for surveyors and data entry at midline, effectively moving expenses from endline to midline. We expand on these implications below.

### ***Improved the intensity and quality of administrative data collection***

In addition to the outcome measures provided by surveys, the guardian-girl lab experimental Trust Game, and take-up of the Additional Opportunity, we continue to collect long-term administrative data from the schools in our sample. The administrative data collection process has been ongoing since May 2013. Beginning in September 2013, we increased the amount and quality of the administrative data we are collecting from participating schools, beyond that described in our original proposal. Administrative data is of key importance, because it will allow us to test the effects of the intervention on actual health and education outcomes. This administrative data provides measures of the program's effects on educational outcomes such as grade advancement and dropout rates, as well as on related health outcomes such as pregnancy and HIV risk.

In the initial months of collecting administrative data across 41 schools in Lusaka, we encountered several challenges that required additional attention to ensure the quality of the data. Schools in Lusaka do not use any form of automated data entry, and thus each outcome measure must be collected from record books on site at each individual school. In some cases, data such as fee payment records or test scores may be missing or lost, requiring additional attention of field personnel. In addition, each school has a different schedule for collecting and recording this information. As a result, this project requires significant transportation and personnel resources to ensure that complete, clean, and usable data is collected on key schooling outcomes. The transition to upper secondary schooling occurring at the end of 2014 will present additional challenges, as girls will at this point move to different schools, and must be tracked across multiple new school locations. Some girls are also likely to move or drop out, which can only be ascertained by gathering detailed records across schools.

School visits specifically dedicated to administrative data collection were put into place in September 2013. 'Admin data collectors' (usually former coaches from intervention) were hired on a per-day basis and trained to visit the schools and collect the administrative data. In addition, we trained a pupil in each class to collect daily classroom attendance information on pre-printed attendance sheets. We have been working closely with the school monitors, the guidance teachers and other school officials to keep the quality of data in check; this entails multiple visits to schools, incentivizing the various responsible persons, retraining monitors as and when required etc.

The bullets below list the types and source of administrative data being collecting:

- Class attendance (attendance registers filled out by selected and trained pupil “class monitors”)
- Fee payment information (provided by school administration)
- Exam results (provided by school administration)
- Tracking information, including school advancement, drop outs, transfer, and pregnancy (provided by school administration and, separately, by class monitors beginning in 2014)

We will continue to collect the administrative data detailed above through 2015. This long-term data allows us to look at the impact of our intervention, and the heterogeneity and mechanisms of that impact will allow us to shed light on this crucial "hot spot" in girls' secondary school dropout rates.

### ***Implications of the change in data collection plan***

The changes made in the project’s data collection plan improve the scope and the scale of the project and enhance our ability to collect the desired outcome measures from the largest possible sample of girls. Data from the project will still include the impact of the Negotiation training on the uptake of the Additional Opportunity and long-term health and education outcomes. Data will also include baseline and midline surveys with participating girls and guardians, as well as resource exchange between girls and their guardians as measured in the Trust Game. Taken together, these changes in data collection allow us to gather a rich longitudinal dataset with multiple outcome measures.

Due to the additional steps needed for administrative data collection and the additional costs involved in the expanded midline survey, the costs are higher than what we initially budgeted. Please see Appendix A for a detailed report.

## Appendix A

### **Additional Expenses Incurred and Going Forward due to Expanded Midline and Administrative Data Collection**

**Midline Data Collection:** The midline data collection activities were previously estimated to cost \$61,198 in Year 1. \$39,158.97 was requested from this grant. The previous projections were based on the following assumptions:

- We expected to run the midline survey with a team of 30 surveyors, 6 supervisors, 1 editor and 1 back checker (Projected team size: 38).
- We expected the surveyors to conduct the Trust Game.

After consulting the IRB, we concluded that it would be best for the respondents and the data quality if there were a greater separation in the surveying and the Trust Game activities. Greater separation would provide better privacy for the respondents and would allow greater quality control for both the survey and the Trust Game. This change made in response to the IRB was a significant expansion in the scope of the study. To adhere to the IRB stipulation, the study had to expand its team at midline. The team that participated in the midline data collection activities was over double of what was anticipated (Actual team size: 80). The final midline data collection costs are approximately \$104,677. This cost is inclusive of the training costs of both surveyors and trust game experimenters.

**Survey Programming:** As mentioned in the milestone-3 report to DIV, one of the major challenges that the project faced during baseline data collection activities was moving from paper-based surveys to digital data collection. The CAI version of surveying requires that the survey be absolutely finalized before the actual surveying begins, for best results. Because of problems with the in-house programming services we used at baseline, we outsourced the programming of the midline surveys. The midline data collection required two different surveys (for girls and their guardians) and an additional trust game activity. Outsourcing the programming allowed us to complete the program within our deadline and gave surveyors lengthier training sessions and a lot of CAI practice, ensuring that midline survey collection progressed without problems. Outsourcing the midline surveys to a programming firm resulted in the following costs:

- 90 hours of programming time at \$100 per hour totaled \$9000.

#### **Administrative Data Collection:**

- Per-day wages for the admin data collectors (described above) were not included in the budget narrative. The total cost for these additional expenses is approximately \$300 per school term (with approximately 15 admin data collection days at \$20 per day).
- **Transport costs.** There has been a 25% hike in fuel costs in Zambia since the project launch. This has led to an unanticipated rise in project expenses. Monthly transport to field-sites was budgeted at a negotiated \$1,032 monthly rate for car hire and driver for 12 months in Year 1 and 9 months in Year 2, for a total of \$21,672. The current field transport cost is estimated to be 25% higher than

what was originally proposed, at \$27,090. The non-field travel cost has also increased proportionately. Previously budgeted at \$959.00, is currently estimated at \$1,198.75. Since September 2013, we have conducted two to three visits per term per school on average (one at the start of the term, one at the end, and some schools require an additional visit). With three visits per term per school at \$25/visit, current cost estimates for admin-data-related transportation costs are \$3,075 per term.

- Data entry costs for the administrative data are approximately \$1,188 per month.

***Incentives:***

***a) Respondent Incentives:*** The project proposal mentioned that the respondents would be incentivized for participation in the study. To ensure high levels of participation in subsequent rounds of data collection and other activities, we decided to provide the respondents with greater incentives for participation. The respondents received a chance to win refrigerators as a part of the raffle prizes. This resulted in the following cost:

- 3 refrigerators at \$180 each = \$540.

***b) School Administrator and Teacher Incentives:*** The budget narrative included incentives for teachers and administrators to help facilitate the program and accurate administrative data collection. They were estimated in the last submitted GN budget narrative at \$4,130 (\$50/ school for approximately 40 schools in Y1 and Y2, adjusted for inflation at 6.5%/year). Teachers were given gifts in May of 2014 at the start-of-term-2 visits. This resulted in the following costs:

- Gifts at \$7 per teacher and 2 teachers per school at 41 schools = \$574.

***c) Class Monitor Incentives:*** To motivate pupils to collect accurate and regular data on attendance, gifts were given to class monitors on three occasions. These gifts resulted in the following costs:

- September 2013: \$148.98 (rulers for class monitors)
- December 2013: \$684 (~ \$2/monitor, 2 monitors per class, 171 classes)
- April 2014: \$684 (~ \$2/monitor, 2 monitors per class, 171 classes)

## Appendix B

### Coding Scheme for Girls' Responses to Negotiation Scenarios (in order of weakest to strongest negotiation application):

1. **Do nothing/don't know:** Applied when the girl is not able to come up with any solution or sees no solution other than to miss the test.
2. **Give in:** Applied when the respondent says she would let her sister go do what she wants without commenting on the sister's interest or motives and without mention of her own interests.
3. **One-sided without dealing with emotions:** Applied when the girl says she would make a decision independently without thinking about sister's interests.
4. **Hand over the situation to an outsider:** Applied when the girl says she would bring the brother or the argument (including tattling) to a neighbor, parent or other relative.
5. **Two-sided without dealing with emotions:** Applied when the girl says she would do something that rests on a response from her sister, without taking her sister's desires or needs into account.
6. **One-sided dealing with emotions:** Applied when the girl says she would make a decision independently while taking her sister's interests into account.
7. **Two-sided dealing with emotions:** Applied when the girl says she would create a two-sided interaction in which interests come into play or there is evidence of considering each other's needs. This often involves explicit mention of negotiating or working together to form a solution.

Notes: When in doubt between two options, we chose to give the respondent the benefit of the doubt and applied the higher score.



## **USAID-DIV Milestone 7 Report**

Negotiating a better future: The impact of teaching negotiation skills on girls' health and educational outcomes

Grant No. AID-OAA-F-13-00030

August 31st, 2014

This Milestone 7 Report is divided into three sections. The first section includes a description of program implementation and data collection to date. In the second section, we present baseline and midline data cleaning and analysis. The third section includes information on dissemination of preliminary results to local stakeholders.



## **Section 1: Update on program implementation and data collection activities.**

### **Program Implementation**

Expansion of the Negotiation Training to girls in the Pure Control Schools is underway.

To prepare for the expansion, we revised the curriculum so that it can be taught in five days. This shortened curriculum allows the field team to deliver training to the Pure Control schools within a single week during the school vacation. We are offering the expansion during the school vacation so as not to interfere with the examination year that is Grade 9. The revised curriculum also incorporates changes suggested by the coaches after the initial intervention. The revised curriculum was finalized after review and edits by the field team. A copy of the revised curriculum is included under separate cover.<sup>1</sup>

Coaches who had been part of the initial intervention participated in a four-day training session from August 5 through August 8 to familiarize themselves with the new curriculum and prepare for the expansion.

The field team collected registration slips for the expansion at all 12 of the Pure Control schools. Each school was visited three times: once to introduce the program, once to drop invitation letters, and one last time to collect registration slips. A coach was present during each visit at each school, and that coach was the main contact person with the school regarding the expansion invitation and registration process. Pupils were given two weeks to register for the expansion by bringing the registration slips included in the invitation letters to the contact teacher at the school before a set deadline. Registration required written permission from the pupil's guardian.

The curriculum is being taught in the 12 Pure Control schools over five sessions from Monday-Friday. We provide a snack of biscuits and drinks on the first four days and a bigger meal of chicken and chips or meat pies on the last day, in order to encourage participation and help girls maintain focus.

The take-up figures for the expansion of the Negotiation training to girls in the Pure Control schools are presented in Table 1.<sup>2</sup>

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<sup>1</sup> Sent separately in the email containing this report.

<sup>2</sup> These numbers may be subject to minor changes. In some cases, coaches found upon going to the schools for the session that the contact teacher had forgotten to give them some of the girls' slips; therefore, there may be a few pupils missing from these numbers for some schools.

**Table 1. Take up numbers and rates for Negotiation Training Scale-up in the 12 Pure Control Schools**

School	# of eligible pupils	# of pupils registered	Take-up rate
Chakunkula	69	24	34.78%
Chawama	67	13	19.40%
Chazanga	64	48	75.00%
Chimwemwe	53	26	49.06%
Chingwele	64	41	64.06%
Kabulonga	64	23	35.94%
Nelson Mandela	60	35	58.33%
New Kamulanga	63	30	47.62%
New Mandevu	78	51	65.38%
Nyumba Yanga	55	32	58.18%
Tunduya	87	19	21.84%
Twatasha	55	39	70.91%
<i>All eligible girls</i>	779	381	48.91%

*Average take up across schools*

**50.04%**

It is difficult to explain the variance in the take up rate across schools, especially since these are Pure Control schools where pupils have had very little exposure to the project. The only Girls Arise project activities conducted at these schools were the baseline and midline survey, and the administrative data collection visits, which do not entail much interaction with the pupils except for the class monitors in charge of taking attendance. While the computer camp was also offered at all Pure Control schools, it was presented as a separate program from the Girls Arise project. The registration process for this expansion was less closely controlled by project staff than at intervention, and thus relied heavily on a different contact teacher at each school. Therefore, one potential factor affecting take up may be the contact teacher's behavior and attitude (e.g. how enthusiastic she or he is about the program, how often she or he reminds the pupils about the program and the registration deadline).



## **Data Collection Activities and Challenges**

The project collects four different types of administrative data on girls in our sample at each school: Attendance data, Performance data, Fee Payment data, and Schooling Status data. We will continue collecting the same administrative data from Pure Control schools and from Intervention schools after the expansion.

Each type of data is collected in a different way and presents unique challenges. Descriptions of these data and the accompanying challenges are provided in the text below. Table 2 provides summary information on collection to date for each data type.

### *Attendance Data*

These are data on girls' class attendance during the course of each term. Class monitors, who are also pupils, fill out these data in pre-prepared registers provided by the field team. The monitors are instructed to take attendance every morning to record who is present on any given day. The field team is currently in the process of collecting Grade 9, Term 2 Attendance data.

There are several challenges in collecting this data, including timing and register storage. The challenge with timing is that we have a choice to either take the pre-prepared registers to the schools at the beginning of the term or at the end of the previous term. The challenge of taking the registers at the beginning of the term is that we cannot reach all the schools within the first two weeks, as the start of term is usually a busy period for schools; hence, we would miss out on attendance in the first few weeks of the term. If we take the registers at the end of the previous term, sometimes the teacher will forget to give pupils the registers in the first week of school; thus, we have to call schools to find out if registers have been distributed. The field team has opted for dropping the registers at the end of the previous term. The field team then calls the school at the start of term to confirm that the registers have been given out. If the registers have been lost, the field team brings new ones during their start-of-term visit.

Other challenges are specific to the monitors. Monitors may take the registers home and sometimes lose them, and they may forget to mark attendance if not constantly reminded by the teacher. We address the first challenge by meeting with the monitors at the beginning of each term and instructing them (and reminding the teachers) that they should leave the registers at the school before leaving each day. In response to the second challenge, a



member of the field team calls each contact teacher periodically during the term to inquire about whether the registers are being filled in.

### *Performance Data*

This is the girls' performance on end-of-term tests, recorded as percentages. The teachers at the school administer these tests at the end of each term (except in a few cases), and optional subjects may vary by school. The Performance Data is a compilation of each pupil's test results in each subject for each class. The contact teacher fills out this information after relevant teachers have compiled end-of-term test results.

There is one minor and one major challenge in obtaining this data. The minor challenge is that teachers are often too busy to compile the Performance Data on each pupil. To overcome this challenge, members of our field team will offer teachers who are busy to photocopy their exam results sheet for the class, and use this copy to record the data onto our data sheets. The more significant challenge is poor record keeping at participating schools. For some schools, all Performance Data is missing, and from others only certain subjects are missing. Some schools may not even compile students' test scores, making obtaining the data very difficult. In a few cases, schools did not administer exams at the end of a particular term. While not much can be done if the information was never recorded at the school, we have started to discuss this issue with our contact at District Education Board Secretariat (DEBS) and the Ministry of Education (MoE), and considered having one of them accompany us on school visits in order to ascertain that this information is not available and attempt to improve record-keeping by the school in the future. We have made one such visit so far and are planning on conducting more if necessary in the coming months. When conducting these visits, we are cautious to approach the school in a collaborative, rather than punitive way, in order to maintain a productive relationship with the schools.

### *Fee Payment Data*

Fee payment data includes information on the girls' school fee payment, i.e. the dates of payment, amounts paid and balance due for each girl in our sample. We also ask each school for the tuition amount and the fee payment deadline at the school, as both of these can vary by school. The accountant or bursar at the school, as the party with access to student payment receipts, usually supplies Fee Payment Data on a pre-printed data sheet provided by the field team. In some schools, the accountant or bursar gives the records to the contact teacher or project staff to copy onto our data sheets.



Challenges in obtaining this data include school concerns over confidentiality, school concerns over extra work, limited record keeping regarding dates of payment, and expectations around project scope. Some schools have reservations about sharing confidential payment information. In those cases, we provide a new letter of support from the Ministry of Education and/or the District Education Board Secretariat (DEBS) explaining the reason for collecting this data. Some schools have complained of the extra work involved in filling in the Fee Payment Data forms. Accountants or bursars commonly use the same receipt book for all pupils at the school, making it difficult to single out information for specific girls, especially if they make multiple payments. In these schools, the accountants or bursars tend to not provide the data, as they are too busy to carry on such extra tasks without extra compensation. The majority of the schools do not track payment dates, making this information impossible to collect at those schools. Some girls' full tuition payments are made in term 1; other people pay their fees in installments and the timing of these installments often differs across girls. Therefore, while the approximate date of payment can be inferred from the date of collection of the data from the school, the exact date remains unknown. Lastly, schools sometimes expect us to pay fees for pupils whose payments are behind or are vulnerable, as they do not see any reason to track and provide this data unless we are helping the pupils financially. In cases where this concern arises often, we again provide a letter from the Ministry of Education and/or the District Education Board Secretariat as clarification.

### *Schooling Status Data*

The Schooling Status Data track whether or not the girls are still pupils at the school, and what has happened to them if they are no longer pupils (including whether they have transferred or dropped out). We also collect information about marriage and health outcomes, including pregnancy, when it is available. To help us collect these data, the contact teacher is asked to fill out a data sheet using appropriate codes indicating each girl's schooling status. Additionally, we ask for this information from class monitors, as they tend to have more accurate and detailed information about what has happened to their peers.

The challenges in obtaining these data are that contact teachers may not have enough time to gather and record the requested status information. Even if teachers have time available, they may not know the status for each of the girls in the study, especially if they do not teach the girls. For this reason, teachers sometimes collect this information from the pupils directly or refer project staff to the pupils for more information.

Given these two challenges, the field team has started (since Grade 9, Term 1) to collect schooling status data from class monitors. We have observed that School Status Data



collected from class monitors tends to be more accurate and is easier to collect. This relies on the field team's access to the monitors, which the schools usually allow as long as the field team's visits are carried out during times when pupils are less busy and do not have exams.

*Summary of Data Collection Activities and Challenges*

We are experiencing attrition at some of the schools in the collection and submission of Administrative Data. This attrition is most likely due to the challenges described above. The field team continues to collect the administrative data described above for all terms. Table 2 reports summary data on the Administrative Data collected as of August 20<sup>th</sup>, 2014



**Table 2: Summary data on Administrative Data collected as of August 20, 2014<sup>3</sup>**

		Grade 8, Term 1	Grade 8, Term 2	Grade 8, Term 3	Grade 9, Term 1	Grade 9, Term 2
<b>ATTENDANCE DATA</b>	Schools with complete data		33	30	31	15
	Schools with incomplete data	<i>Only exam results data collected for</i>	8	8	9	15
	Schools with no data	<i>Grade 8, Term 1</i>	-	3	1	11
	Total number of schools		41	41	41	41
<b>PERFORMANCE DATA</b>	Schools with complete data	Grade 8, Term 1	Grade 8, Term 2	Grade 8, Term 3	Grade 9, Term 1	Grade 9, Term 2
	Schools with incomplete data	29	23	22	28	
	Schools with no data	7	6	7	6	<i>Data collection begins Sept. 2014</i>
	Total number of schools	5	12	12	7	
<b>FEE PAYMENT DATA</b>	Schools with complete data	Grade 8, Term 1	Grade 8, Term 2	Grade 8, Term 3	Grade 9, Term 1	Grade 9, Term 2
	Schools with incomplete data		35	24	25	
	Schools with no data	<i>Only exam results data collected for</i>	-	1	1	<i>Data collection begins Sept. 2014</i>
	Total number of schools	<i>Grade 8, Term 1</i>	6	16	15	
<b>SCHOOLING STATUS DATA (from teachers)</b>	Schools with complete data	Grade 8, Term 1	Grade 8, Term 2	Grade 8, Term 3	Grade 9, Term 1	Grade 9, Term 2
	Schools with incomplete data			30	22	
	Schools with no data	<i>Only exam results data collected for</i>	<i>Started collecting this data in</i>	-	1	<i>Data collection begins Sept. 2014</i>
	Total number of schools	<i>Grade 8, Term 1</i>	<i>Grade 8, Term 3</i>	11	18	
<b>SCHOOLING STATUS DATA (from monitors)</b>	Schools with complete data	Grade 8, Term 1	Grade 8, Term 2	Grade 8, Term 3	Grade 9, Term 1	Grade 9, Term 2
	Schools with incomplete data				35	
	Schools with no data	<i>Only exam results data was collected for</i>	<i>Started collecting this data in</i>	<i>Started collecting this data in</i>	1	<i>will start collecting this data at start of Term 3 (Sept. 2014)</i>
	Total number of schools	<i>Grade 8, Term 1</i>	<i>Grade 9, Term 1</i>	<i>Grade 9, Term 1</i>	5	
				41		

<sup>3</sup> Term 2 and Term 3 fee payment data can be redundant. Term 3 data includes all payments made during the year, including those reported in Term 2 data. There are 4 schools that did not provide us with fee payment data for any term in Grade 8. These schools have also not provided fee payment data for Grade 9.



## **Plans for future Program Implementation Activities**

***Plan to increase schools' collaboration and likelihood of providing data:*** As the schools are not providing as much data as we anticipated, the team is currently exploring ways to increase schools' collaboration and likelihood of providing data. The data the team are mainly concerned with acquiring are test scores and fee payment from Term 3 (of Grade 8), both of which are key outcome areas of interest. Coverage of these two key outcome variables is currently at 55-65% of the full sample (3146 girls) and tends to be lower for non-Pure Control groups.

During her August visit to Zambia, PI Nava Ashraf met with the Ministry of Education and individual schools to discuss options for gathering data and increasing schools' collaboration. MoE officials, Cecilia Sakala (Head of Curriculums and Standards), and Charity Banda (National HIV/AIDS Coordinator), expressed concern, but not surprise, when informed of missing school records, and have offered to provide assistance collecting Administrative Data that is absent or difficult to collect from schools. The MoE may be able to help coordinate with accountants to retrieve data on fee payment and facilitate visits with schools to promote collaboration. We will work with DEBS and the schools to retrieve new test scores as they are released and will exercise caution when trying to retrieve back-data from schools to avoid data falsification.

### ***Plan to collect Grade 9 national exam results:***

The girls in our study will take the national Grade 9 entrance exams at the end of this year. These exams are administered at the pupils' schools and are graded by the Examination Council of Zambia (ECZ). These exams play a crucial role in pupils' education, as the scores determine whether students can progress into secondary school and at which school.

In light of the challenges described above in collecting data from the schools, we have explored various ways of collecting these results. We have identified two main options. The first option is to collect the results from each school once the school receives a copy of all of their pupils' scores from ECZ in January. The second option is to obtain from the schools the confidential examination number assigned to each pupil for the exams, and to then collect the actual results, using these numbers, from ECZ or the District. The latter option would enable us to circumvent the challenges we have faced in collecting data from the schools. This option would also give us a greater guarantee of obtaining the results for all of our participants who will have written Grade 9 exams, assuming we have all of their examination numbers.

Before moving forward with a plan for collecting these results, we must determine whether our original study consent forms to the parents cover getting these exam scores from the exam council/district, rather than from the schools themselves, with the schools giving us the codes (student IDs and names) to get the data from the district or exam council. We are reaching out to the Harvard IRB and ERES Converge (the local Zambian IRB) to determine whether this is the case.



**Section 2: Complete baseline and midline data cleaning and analysis.**

**Table 3: Summary statistics for the baseline sample, showing null effects across Groups due to randomization. Treatment Schools only<sup>4</sup>**

	Control Group in Treatment Schools			Social Capital			Negotiation			P-values (2-sided tests)	
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Negotiation vs. Control	Negotiation vs. Social Capital
Age at baseline	14.4	1.45	744	14.41	1.47	746	14.45	1.47	764	0.47	0.60
Can read Nyanja well	0.65	0.48	744	0.63	0.48	746	0.63	0.48	764	0.27	0.78
Can read English well	0.9	0.3	744	0.9	0.3	746	0.9	0.3	764	0.67	0.92
Can speak Nyanja well	0.88	0.32	744	0.89	0.32	746	0.88	0.32	764	0.89	0.75
Can speak English well	0.79	0.41	744	0.8	0.4	746	0.78	0.42	764	0.43	0.28
Both parents are alive	0.74	0.44	744	0.75	0.44	746	0.72	0.45	764	0.39	0.34
Lives with biological father	0.56	0.5	744	0.55	0.5	746	0.54	0.5	764	0.47	0.51
Lives with biological mother	0.69	0.46	744	0.71	0.46	746	0.7	0.46	764	0.69	0.92
Was ever kept home from school	0.83	0.37	742	0.81	0.39	744	0.84	0.36	762	0.61	0.15
Wants schooling at least to diploma level	0.77	0.42	622	0.79	0.41	606	0.77	0.42	627	0.90	0.40
Believes she will reach at least diploma level	0.27	0.44	622	0.26	0.44	606	0.26	0.44	627	0.93	0.72

<sup>4</sup> Presented in more detail in Milestone 6 Report.

## Midline Data Cleaning and Analyses

The field team in Zambia is working with the team in Boston and New York to clean the midline survey data and run further analyses. In the segments below, we provide:

- Midline completion statistics
- Data cleaning activities and details of midline data from girls and their guardians, illustrating key mechanisms linking negotiation training to intergenerational transfer and health and education outcomes.
- Analyses of scenario response data from girls' midline surveys, assessing efficacy of negotiation training.
- Results from midline Trust Game, providing a behavioral measure of communication skills.

### *Midline completion statistics*

Below, we present the midline completion statistics, broken down by the number and percentage of girls completing midline surveys in each treatment, the number and percentage of guardians completing midline surveys in each treatment, and the number and percentage of girl-guardian pairs completing the Trust Game in each treatment.

**Table 4: Completion statistics for the midline sample<sup>5</sup>**

	<b>Girl Surveys</b>	<b>Girl %</b>	<b>Guardian Surveys</b>	<b>Guardian %</b>	<b>Trust Game</b>	<b>Trust Game %</b>
<b>Negotiation</b>	593	74%	561	70%	574	72%
<i>Info</i>	304	74%	287	70%	296	72%
<i>No Info</i>	289	74%	274	70%	278	71%
<b>Social Capital</b>	582	74%	548	70%	560	71%
<i>Info</i>	282	71%	265	66%	269	67%
<i>No Info</i>	300	78%	283	73%	291	75%
<b>Control within Treatment Schools</b>	546	70%	517	66%	529	68%
<i>Info</i>	272	69%	250	63%	262	66%
<i>No Info</i>	274	71%	267	70%	267	70%
<b>Pure Control</b>	560	72%	543	70%	544	70%
<i>Info</i>	279	72%	274	70%	275	71%
<i>No Info</i>	281	72%	269	69%	269	69%

<sup>5</sup> Reported earlier in Milestone 6

<b>Grand Total</b>	<b>2,281</b>	<b>73%</b>	<b>2,169</b>	<b>69%</b>	<b>2,207</b>	<b>70%</b>
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***Data cleaning activities and details of midline data from girls and their guardians on key mechanisms***

Data cleaning activities included careful recoding of qualitative responses into quantitative answer categories for questions where "other, specify" responses were frequently given. We allowed free responses on multiple questions in the midline survey to ensure we were fully capturing the richness of the girls' experiences, but this meant that our quantitative sample size was limited without hand coding all free responses. The qualitative coding of free responses has now been completed, allowing us to quantitatively analyze key mechanism variables like what girls think their parents would do if they did not have enough money for school fees. Table 5 reports the number of usable survey responses before and after the recoding of qualitative responses.

<b>Variable</b>	<b>N</b>	<b>% Yes</b>
Are you currently dating anyone/have a boyfriend?	3146	10%
When was the last time you had sex?	3146	32%
Did you use condoms in your most recent sexual encounter?	125	42%
How do you usually respond to this pressure?	314	44%

<b>Variable</b>	<b>Before Cleaning and Recoding</b>	<b>After Cleaning and Recoding</b>	<b>% Increase</b>
Why might you have to stop going to school before you wanted to?	2851	3062	7%
If there was not enough money to pay for everyone, how would school fees be decided?	3748	3786	1%
Why were you not able to eat enough?	602	822	37%
What would you do if the person who paid your fees said they no longer could?	3489	3642	4%
<i>Note: Respondents were allowed to provide multiple answers</i>			

For each girl participating in the study, both the girl and her guardian were interviewed at midline (conditioned on a guardian being available for the survey). The guardian midline survey provides some of our most important insights into mechanisms. We cleaned and the guardian survey data and matched it with the girls’ data. Summary statistics for guardian participants, as well as sample questions on guardian beliefs about their girls and guardian relationships with their girls, are provided in Tables 6 – 8, below.

**Table 7: Summary statistics of guardian characteristics**

<i>Variable</i>	<b>Freq.</b>	<b>Percent</b>
Gender		
Male	295	13.74
Female	1852	86.26
Marital status		
Married	1640	76.39
Divorced	104	4.84
Separated	60	2.79
Widowed	244	11.36
Never Married	99	4.61
Level of schooling completed		
Nursery	442	21.72
Primary	1011	49.68
Secondary	238	11.7
Post-secondary	344	16.9

**Table 8: Distribution of Guardian Beliefs about Girl’s Characteristics, Guardian Survey**

<b>Variable</b>	<b>N</b>	<b>How good or bad is &lt;girl in the study&gt; at...</b>			
		<b>very good</b>	<b>good</b>	<b>bad</b>	<b>very bad</b>
Caring for other members of the household	2155	43%	51%	5%	1%



Controlling negative emotions	2152	22%	53%	20%	5%
Pursuing self-interests (getting what she wants)	2154	25%	52%	20%	3%
Asking questions to understand your point of view	2155	43%	44%	10%	3%
Being respectful of others	2155	56%	38%	5%	1%

<b>How good or bad is &lt;girl in the study&gt; at...</b>					
<i>Variable</i>	<b>N</b>	<b>very good</b>	<b>good</b>	<b>bad</b>	<b>very bad</b>
<i>Caring for other members of the household</i>	2155	43%	51%	5%	1%
Controlling negative emotions	2152	22%	53%	20%	5%
Pursuing self-interests (getting what she wants)	2154	25%	52%	20%	3%
Asking questions to understand your point of view	2155	43%	44%	10%	3%

The principal purpose of the midline survey is to provide insight into the mechanisms of the treatment's effects. To gain this insight, many of the variables ask unusually detailed questions, with many answer choices, as well as qualitative follow-up questions. This rich data required significant cleaning and coding in order to be ready for quantitative analysis. In Tables 9 and 10, below, we provide examples of two key mechanisms that have now been cleaned and prepared for analysis: girls' engagement in risky sexual behavior and girls' expressions of empathy. The example tables provide information for the entire study population, without regard to treatment status.

Variable	N	% Yes
Are you currently dating anyone/have a boyfriend?	3146	10%
When was the last time you had sex?	3146	32%
Did you use condoms in your most recent sexual encounter?	125	42%
How do you usually respond to this pressure?	314	44%

**Table 10: Distribution of Responses to Empathy Questions, Girls Midline (N = 2279)**

Variable	The following statement describes me...				
	very well	well	a little	not well	not at all
I try to look at my parent's side of a disagreement.	23%	19%	13%	20%	24%
I sometimes try to understand my parents better by imagining how things look from their perspective.	49%	30%	10%	7%	5%
I believe that there are two sides to every question and try to look at them both.	32%	27%	12%	14%	15%
When I'm upset at my parents, I usually try to 'put myself in their shoes' for a while.	42%	20%	10%	12%	16%
Before criticizing my parents, I try to imagine how I would feel if I were in their place.	45%	24%	10%	9%	11%

Distribution of Responses to Empathy Questions, Girls Midline (N = 2279)					
	The following statement describes me...				
Variable	very well	well	a little	not well	not at all
I try to look at my parent's side of a disagreement.	23%	19%	13%	20%	24%
I sometimes try to understand my parents better by imagining how things look from their perspective.	49%	30%	10%	7%	5%
I believe that there are two sides to every question and try to look at them both.	32%	27%	12%	14%	15%
When I'm upset at my parents, I usually try to 'put myself in their shoes' for a while.	42%	20%	10%	12%	16%

*Analyses of scenario response data from girls' midline surveys, assessing efficacy of negotiation training.<sup>6</sup>*

In one section of the girls' midline survey, girls were given a scenario and asked to imagine themselves in that situation. In the scenario, the girl needs to study for a test and asks her sister to take care of their younger brother, but the sister says that she wants to go visit a friend. After reading the description of the scenario, the girls were asked four questions about what they would do if they were in this situation. We coded the girls' responses for understanding of the negotiation skills taught in the intervention. The negotiation skills include discovering the other person's interests, making sure their own interests are met, working together to solve the problem, dealing positively with emotions, and brainstorming solutions. Results from the qualitative data show that the girls in the negotiation treatment successfully acquired and retained knowledge of negotiation skills and when to apply them. When asked how they would respond at multiple stages in a progressively the more difficult negotiation scenario, the girls in the Negotiation group expressed significantly greater understanding of negotiation skills than girls in the Social Capital and Control groups.

<sup>6</sup> Reported with more detail in Milestone 6

The simple means tests of the responses across treatment groups, presented in Table 11, revealed, as predicted, that girls in the Negotiation group expressed significantly greater understanding of negotiation skills than girls in the Social Capital and Control groups. While not direct evidence that the girls in the Negotiation group are using these concepts in their everyday lives, the consistent and highly significant differences between the knowledge of negotiation skills displayed in the responses by the girls in the negotiation treatment relative to those in the Control and the Safe Space treatments show that the training increased girls’ capacity for advocating effectively for their own needs. The girls in the negotiation treatment conveyed accurate knowledge of a repertoire of negotiation skills and they were able to apply them appropriately in hypothetical situations. The negotiation treatment therefore builds girls’ potential to apply these skills to difficult situations in their own lives.

**Table 11: Means Tests of Girls Responses to Negotiation Scenario Questions. Score scales span from 1 to 7, where higher values reflect greater understanding of the negotiation skills taught in the intervention.**

	Control	Safe Space	Negotiation
Mean score, Q1 (1-7)	3.72	3.73	4.46***
SE of mean	0.06	0.06	0.07
Mean score, Q3(1-7)	4.2	4.08	4.98***
SE of mean	0.08	0.08	0.08
Mean score (1-7)	3.75	3.79	4.52***
SE of mean	0.09	0.09	0.09

Notes: Stars (\*\*\*)  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ ) correspond to the p-values from the two-sided t-test of the means, compared to the mean of the pure control group.

***Results from midline Trust Game, behavioral measure of communication skills<sup>7</sup>***

Results from the Trust Game show that the intervention helps girls to take advantage of opportunities for communication to improve their family’s investment in them. The opportunity to communicate in the Trust Game *only* benefited girls who had exposure to

<sup>7</sup> Reported with more detail in Milestone 6



either the safe space group or the negotiation training (and more with the negotiation training), an important finding given that previous trust game studies have found that communication almost always improves outcomes. These results, shown in Table 12, are very much preliminary; we continue to clean the data and refine our analyses, adding control variables and running alternative analyses as robustness checks.

**Table 12: Effect of Negotiation Treatment on Trust Game Outcomes. Predicted effects in bold. Standard errors in parentheses.**

	Number of tokens sent by the guardian to the girl				
	1	2	3	4	5
Negotiation treatment	-0.418**	-0.431**	-0.428*	-0.471**	-0.437**
	(-0.17)	(-0.207)	(-0.238)	(-0.207)	(-0.21)
Social Capital treatment	-0.423**	-0.287	-0.312	-0.323	-0.32
	(-0.173)	(-0.21)	(-0.241)	(-0.21)	(-0.212)
1 if game with communication	-0.142	-0.142	-0.0558	-0.151	-0.154
	(-0.177)	(-0.177)	(-0.248)	(-0.176)	(-0.178)
<b>Communication X Negotiation</b>	<b>0.765***</b>	<b>0.764***</b>	<b>0.764**</b>	<b>0.794***</b>	<b>0.788***</b>
	<b>(-0.244)</b>	<b>(-0.244)</b>	<b>(-0.345)</b>	<b>(-0.243)</b>	<b>(-0.246)</b>
Communication X Social Capital	0.521**	0.521**	0.575*	0.538**	0.587**
	(-0.247)	(-0.247)	(-0.345)	(-0.246)	(-0.249)
1 if game with word search		-0.00792	0.0804	-0.0193	0.00738
		(-0.177)	(-0.251)	(-0.176)	(-0.178)
Word search X Negotiation		0.0264	0.018	0.0499	0.00634
		(-0.244)	(-0.341)	(-0.243)	(-0.246)
Word search X Social Capital		-0.281	-0.23	-0.27	-0.293
		(-0.247)	(-0.347)	(-0.246)	(-0.249)
Communication X word search			-0.176		
			(-0.353)		
Communication X word search X Social Capital			-0.115		
			(-0.494)		
Communication X word search X Negotiation			0.00677		
			(-0.488)		
School FE	No	No	No	Yes	Yes
Controls	No	No	No	No	Yes
Observations	1,321	1,321	1,321	1,321	1,288
R-squared	0.016	0.018	0.019	0.051	0.061

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Notes: Comparison group is the control group in treatment schools. Randomization occurred at the individual level, so the error is not clustered.

Controls include baseline survey data: a) age, b) reads English well, b) speaks English well, c) both parents are alive, d) lives with biological father, e) lives with biological mother, f) was ever kept home from school, and g) parents pay the school fees.



### **Section 3: Disseminate preliminary results to local stakeholders, so that local NGOs can begin incorporating best practices.**

#### ***Dissemination plan:***

We plan to complete our analysis of the midline survey data in the next few months, and start presenting the results to our partner organizations in the government of Zambia. First we plan to disseminate results to the Ministry of Education and the schools that have participated in the program. To disseminate results of the study back to the schools themselves, we will hold meetings with the school administration and teachers.

We already have established relationships with the Ministry of Education and have been meeting with them regularly since the beginning of this project. More recently, in August 2014, Principal Investigator Nava Ashraf met and shared preliminary results with Charity Banda, the National HIV/AIDS coordinator, and Cecilia Sakala, the Director of Standards at the Ministry of Education (MoE), who were very enthusiastic about the research results and supportive of scaling up the program nation-wide. Professor Ashraf also met with Abigail Tuchia, Expressive Arts/Life Skills Education Coordinator at the Ministry of Education as well as the Head of Curricular Development. She also held meetings with the Examination Council, including the Director of Testing and Curriculum Development, who are interested in assessing non-cognitive skills in students and are interested in using our instruments to refine their methods of assessment. The Ministry and Examinations Council believe strongly that these other types of skills are very important in the labor market but in have not been taught in Zambia, and there is little attention to how to assess their development in the students.

The MoE has launched a new life skills curriculum in all grades this year which included a key negotiation skills component. However the Ministry continues to have questions on how best to teach these skills and is interested in improving their methods as it is often difficult for teachers who have not themselves been trained in negotiation to know how to teach it. During our meetings, the Director of Standards expressed that the most powerful way that our program could be incorporated into the country's and the Ministry's need, would be to help train their teachers across the country in teaching negotiations skills. We plan to help the Ministry by training the teachers with our experienced coaches. We already have evidence that our program can successfully teach negotiations skills so we are confident that we can move forward with this part of the scale-up. We would also share our assessment tools with the Examination Council to help them evaluate the program's progress. Additionally, we have already received interest from donors who might be willing to fund this scale-up. We can also work with NGOs who are also looking to teach negotiation skills and help train their coaches with our methods.

If our results show conclusively that the program is also effective at reducing drop-out rates and pregnancies and increasing school attainment, we hope to incorporate the program into



national policy. We are conducting early scale-up efforts with control groups first in order to learn how to operate the program in a more sustainable way. To prepare for the expansion, we revised the curriculum so that it could be taught in five days. This shortened curriculum allowed the field team to deliver training to the Pure Control schools within a single week during the school vacation. This way the negotiations training does not interfere with school activities during the examination year, grade 9, which is the grade that these girls are now in. The revised curriculum also incorporates changes suggested by the coaches after the initial intervention. The revised curriculum was finalized after review and edits by the field team. Coaches who had been part of the initial intervention participated in a four-day training session August 5 through August 8 to familiarize themselves with the new curriculum and prepare for the expansion. In addition, there is a larger number of girls per class, in an effort to reduce the cost and increase the scale-ability of the program to a larger set of students.

Table 13 provides a list of materials to potentially share with various stakeholders, based on which materials are most relevant for each stakeholder. In addition to providing progress reports to our key partners, we continue to tailor our dissemination strategy with each stakeholder based on our interactions and the project areas they express interest in.

**Table 13: Dissemination plan for various stakeholders**

<i>Charity Banda / Others at Ministry of Education</i>	<i>Individual schools</i>	<i>DEBS</i>	<i>Other stakeholders</i>
§ Report on program implementation § Letter requesting permission/support for project activities, in particular related to collecting Grade 9 exam results § Report on survey activities/data (already available), including preliminary findings as we continue to clean and analyze data	§ School-specific achievement data: we are meeting with schools to identify information that we could provide them with based on the data they have provided us schools. In providing school-specific information, we must be cautious not to be perceived as evaluating or auditing the schools, but rather responding to their information requests) § Report on program implementation	§ Report on program implementation § Letter requesting permission/support for project activities, in particular related to collecting Grade 9 exam results	§ Updated project brief § (Specific materials in which stakeholder expressed interest in during first meeting)



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	§ Report on additional opportunity implementation		
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**USAID-DIV Milestone 8 Report**  
Negotiating a Better Future  
Grant No. AID-OAA-F-13-00030  
November 1st, 2014

This Milestone 8 Report is divided into two sections. The first section includes a description of program implementation and data collection to date. We focus on challenges that have the potential to affect study quality and our plans to mitigate them. In the second section, building on previous deliverable reports, we further describe the implications of the changes in our evaluation plan, including the choice to replace the endline survey with an expanded midline and long-term administrative data collection.



## **Section 1: Update on program implementation and data collection activities.**

### **Program Implementation**

#### ***Expansion of the Negotiation Training to girls in the Pure Control Schools***

The expansion of the Negotiation Training was completed in August and September 2014. To prepare for the expansion, we revised the curriculum so that it can be taught in five sessions in five days. This shortened curriculum allowed the field team to deliver training to the Pure Control schools within a single week during the school vacation. We offered the expansion during the school vacation so as not to interfere with the examination year that is Grade 9. The revised curriculum also incorporates changes suggested by the coaches after the initial intervention. The revised curriculum was finalized after review and edits by the field team.<sup>1</sup>

10 Coaches who had been part of the initial intervention participated in a four-day training session from August 5 through August 8 to familiarize themselves with the new curriculum and prepare for the expansion.

The field team collected registration slips for the expansion at all 12 of the Pure Control schools. Each school was visited three times: once to introduce the program, once to drop invitation letters, and one last time to collect registration slips. A coach was present during each visit at each school, and that coach was the main contact person with the school regarding the expansion invitation and registration process. Pupils were given two weeks to register for the expansion by bringing the registration slips included in the invitation letters to the contact teacher at the school before a set deadline. Registration required written permission from the pupil's guardian.

The curriculum was taught in the 12 Pure Control schools over five sessions from Monday-Friday. We provided a snack of biscuits and drinks on the first four days and a bigger meal of chicken and chips or meat pies on the last day, in order to encourage participation and help girls maintain focus.

The take up figures for the expansion of the Negotiation training to girls in the Pure Control schools are presented in Table 1. Table 2 provides further information on attendance for girls who registered for the Negotiation Training in the Pure Control Schools.

#### **Table 1. Take up numbers and rates for Negotiation Training Scale-up in the 12 Pure Control Schools**

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<sup>1</sup> The revised curriculum is included under a separate cover.

School	# of eligible pupils	# of pupils registered	Take up rate
Chakunkula	69	24	34.78%
Chawama	67	13	19.40%
Chazanga	64	48	75.00%
Chimwemwe	53	26	49.06%
Chingwele	64	41	64.06%
Kabulonga	64	23	35.94%
Nelson Mandela	60	35	58.33%
New Kamulanga	63	38	47.62%
New Mandevu	78	52	65.38%
Nyumba Yanga	55	32	58.18%
Tunduya	87	19	21.84%
Twatasha	55	39	70.91%
<i>All eligible girls</i>	779	390	50.06%

**Table 2: Attendance details for girls attending Negotiation Training sessions in Scale-up to Pure Control Schools.**

School	Average number of days attended	Average attendance (out of girls registered) over 5 sessions	% of girls who attended at least one session (out of girls registered)
Chakunkula	3.25	65.00%	79.17%
Chawama	2.69	53.85%	69.23%
Chazanga	4.46	89.17%	97.92%
Chimwemwe	2.27	45.38%	53.85%
Chingwele	4.02	80.49%	87.80%
Kabulonga	1.74	34.78%	39.13%
Nelson Mandela	3.86	77.14%	88.57%
New Kamulanga	4.76	95.26%	97.37%
New Mandevu	4.35	86.92%	98.08%

Nyumba Yanga	4.28	85.625%	81.25%
Tunduya	3.42	68.42%	89.47%
Twatasha	3.15	63.08%	79.49%
<b>Overall</b>	<b>3.74 average across all participants</b>	<b>70.43%</b>	<b>85.38% of participants overall</b>
	<b>3.52 average across schools</b>		<b>80.11% average across schools</b>

It is difficult to explain the variance in the take up rate across schools, especially since these are Pure Control schools where pupils have had very little exposure to the project. The only Girls Arise project activities conducted at these schools were the baseline and midline survey, and the administrative data collection visits, which do not entail much interaction with the pupils except for the class monitors in charge of taking attendance. While the computer camp was also offered at all Pure Control schools, it was presented as a separate program from the Girls Arise project. The registration process for this expansion was less closely controlled by project staff than at intervention, and thus relied heavily on a different contact teacher at each school. Therefore, one potential factor affecting take up may be the contact teacher’s behavior and attitude (e.g. how enthusiastic she or he is about the program, how often she or he reminds the pupils about the program and the registration deadline).

### **Summary of Data Collection Activities and Challenges**

The project collects four different types of administrative data on girls in our sample at each school: Attendance data, Performance (exam) data, Fee Payment data, and Schooling Status data. Table 3 provides summary information on data collection status as of October 28, 2014, disaggregated by number of visits at each school.



**Table 3: Summary data on Administrative Data collected as October 28, 2014**

<b>ATTENDANCE DATA</b>	Schools with complete data	Grade 8, Term 1	Grade 8, Term 2	Grade 8, Term 3	Grade 9, Term 1	Grade 9, Term 2
	Schools with incomplete data	<i>Only exam results data collected for Grade 8, Term 1</i>	8	8	8	9
	Schools with no data		-	5	0	-
	Total number of schools		41	41	41	41
<b>PERFORMANCE DATA</b>	Schools with complete data	Grade 8, Term 1	Grade 8, Term 2	Grade 8, Term 3	Grade 9, Term 1	Grade 9, Term 2
	Schools with incomplete data	28	23	23	30	37
	Schools with no data	8	7	8	9	4
	Total number of schools	5	11	10	2	-
<b>FEE PAYMENT DATA</b>	Schools with complete data	Grade 8, Term 1	Grade 8, Term 2	Grade 8, Term 3	Grade 9, Term 1	Grade 9, Term 2
	Schools with incomplete data	<i>Only exam results data collected for Grade 8, Term 1</i>	35	24	25	38
	Schools with no data		-	1	1	0
	Total number of schools		6	16	15	3
<b>SCHOOLING STATUS DATA (from teachers)</b>	Schools with complete data	Grade 8, Term 1	Grade 8, Term 2	Grade 8, Term 3	Grade 9, Term 1	Grade 9, Term 2
	Schools with incomplete data	<i>Only exam results data collected for Grade 8, Term 1</i>		30	22	25
	Schools with no data		<i>Started collecting this data in Grade 8, Term 3</i>	-	1	0
	Total number of schools			11	18	16
<b>SCHOOLING STATUS DATA (from monitors)</b>	Schools with complete data	Grade 8, Term 1	Grade 8, Term 2	Grade 8, Term 3	Grade 9, Term 1	Grade 9, Term 2
	Schools with incomplete data	<i>Only exam results data collected for Grade 8, Term 1</i>	<i>Started collecting this data in Grade 9, Term 1</i>	<i>Started collecting this data in Grade 9, Term 1</i>	35	40
	Schools with no data				1	0
	Total number of schools				5	1
				41	41	



The field team continues to collect the administrative data described above for all terms. The team has made especially great strides in collecting performance and fee payment data in the most recent data collection period (Grade 9 Term 2) compared to previous collection periods. We discuss the reasons for this success (including combating reluctance by school officials, the main barrier to collecting performance and fee payment data along with poor record-keeping) in detail below. The team is still working to collect fee payment data from the three schools for which data is currently missing.

Attendance data is more difficult to collect for previous periods than other data types. This is true because attendance data is often unavailable not because school officials are reluctant to provide the data but because the data was lost. For this reason, we did not expect to collect as much data from previous collection periods for this data type.

Schooling status data presents collection challenges when contact teachers are not as familiar with students' schooling status (i.e. if girls left the school and, if so, for what reason) as the students' peers. We began collecting schooling status from class monitors beginning in Grade 9 Term 1. Using monitors to collect schooling status data increased the amount and accuracy of schooling status data we were able to obtain. In the most recent collection period (Grade 9 Term 2), we successfully collected complete schooling status data from all but one school so far.

### ***Plans implemented for administrative data collection at the start of Term 3***

Grade 9 Term 3, which we are currently in, is the last term in which we will be collecting administrative data from the schools. Therefore, we have been taking additional steps to attempt to collect as much data as we can from last term (Grade 9 Term 2), as well as any missing data from previous terms schools are able to provide us with. We discuss these additional steps in detail below.

*Training and hiring coaches as administrative data collectors:* At the completion of the expansion of the Negotiation Training to the Pure Control schools, and before the start of Term 3, we hired and trained some of our coaches to collect administrative data from the schools. During the 1-day training session, we included coaches' suggestions on the best ways to approach schools about administrative data collection and brainstormed solutions to some of the challenges we have faced while collecting administrative data from schools in the past. Assigning a coach to each school allowed the field team to increase the pace of our school visits and leave time to address any compliance issues arising from specific schools.

*School reports:* We have been giving out reports to schools during the visits. These reports provide project updates and a basic summary of our findings so far. We gave the reports



out during the administrative data visits along with our usual start-of-term letter to the schools and a support letter from the DEBS (District Education Board Secretariat) about collecting Grade 9 national exam results and examination numbers. While we have not received substantive feedback from the head teacher (to whom the report is addressed) at all schools, the feedback we have received so far has been positive.

*Involving MoE and DEBS representatives at less compliant schools:* It is difficult to collect data from previous terms. In general, we are more likely to collect missing data from previous terms at schools where the main collection issue is reluctance rather than poor record keeping (in the latter case, the data is no longer available and may no longer exist at all). After the initial round of visits, we identified less compliant schools and spent more time and attention on these schools. We also involved Ministry of Education and DEBS representatives in the data collection at these schools. In the latest round of administrative data collection (term 3, 2014), our field team was accompanied by our main contact at the MoE for two school visits, and by our contact at the DEBS for five school visits. Our contact from DEBS had previously accompanied the field team on one school visit. This has proved useful in helping us collect more data from schools, especially, as expected, in the case where schools were not providing us with data because of reluctance, as opposed to poor or lack of record-keeping.

*Collecting Grade 9 National Exam results and examination numbers:* Zambian Grade 9 pupils will write national exams in October-November 2014 to determine whether they can enroll in Grade 10 and at which school. These exams represent a critical point for pupils' progression into secondary school and thus constitute important information for us to collect in order to track participant education outcomes and our program's impact. We would therefore like to collect these results from the schools in early January. In order to prepare for this, we have been collecting our participants' individual examination numbers in the upcoming term. This will facilitate the process of matching exam scores to participants when collecting results from the schools and will require less time and effort from the schoolteachers in January. Therefore, in addition to the data we usually collect from schools (class attendance, exam results, fee payment information, and school status), we have been collecting the examination number for all pupils ahead of time in order to facilitate the process of identifying individual participants when collecting exam results. We emphasized to the schools that we will not be taking these examination numbers to the Examination Council of Zambia (which grades and distributes the results), DEBS, or any other party, and that we are only collecting them to ease the process of collecting the results from the schools in January.

No school has expressed major concerns about us collecting Grade 9 examination results and numbers so far (though some contact teachers asked to be given time to run this by the head teacher before they provided the results). The DEBS issued a letter of support in the first week of Term 3, which we have been giving to the schools. 40 of 41 schools have already provided exam numbers, and the team plans to collect exam numbers from the last school in the first week of November. In the event that some schools end up for one reason



or another *not having* the national exam scores available for collection in early 2015, we may then consider involving DEBS either by going back to the school with the Standards Officer and the examination numbers, or by collecting the results from DEBS directly.

## **Section 2: Midline Expansion**

Our study design features multiple types of data collection that will allow this project to shed light on the health and education effects of the intervention, and on the mechanisms driving these outcomes. The original plan for the collection of outcome measures included a midline survey conducted with girls and their guardians approximately four months following the intervention, take up rates on an educational opportunity offered outside school, guardians' resource allocation decisions in a trust game experiment, and an endline follow-up survey conducted approximately 16 months after the initial intervention.

As planned, girls in all of the participating schools were offered the opportunity to participate in a computer skills course outside of school, providing data on take up of additional educational opportunities (as reported in Section 2 above). Also as planned, each girl participated in a trust game with her guardian, allowing us to measure the effect of the intervention on guardians' allocation of resources to girls.

We made two major changes to the evaluation plan described above.

1. Expanded the midline survey to replace the endline survey
2. Improved the intensity and quality of administrative data collection

This provides a clear demarcation in the measurement of outcomes and the mechanisms driving the outcomes. The midline survey data focuses on the mechanisms, while the trust game results, take up of the additional opportunity, and administrative data provide measures of the behavioral outcomes that we are interested in affecting through the intervention.

### ***Expanded the midline survey to replace endline survey***

During the planning for the implementation of the midline data collection, we discovered that some of the program participants had either dropped out of school or changed schools subsequent to the initial intervention, so we could not survey them at midline. This implied that ensuring high participation rates for the endline survey a year later would present an even more problematic challenge to data collection. Due to exams and the passage of time, girls would have a greater propensity to drop out or change schools by the time the endline survey was scheduled. This led us to expand the scope of the midline survey to include all

the mechanisms that we were planning to cover in the endline survey. Eliminating the endline survey thus, does not negatively impact the scope or scale of the project and neither has it affected our ability to collect the outcome measures proposed. Adding endline questions to the midline survey did, however, guarantee the project a greater number of participants than expected at the follow-up survey. Collecting the additional data at midline also allows a clear identification of mechanisms associated with behavioral measures gathered after the midline. The expansion of the midline survey increased costs for surveyors and data entry at midline, effectively moving expenses from endline to midline. We expand on these implications below.

The Midline Data Collection involved two separate activities: surveys for the girls and their guardians; and a Trust Game played between the girls and their guardians. The Midline activities were designed to provide data regarding whether or not Negotiation training had affected girls’ self-reported beliefs and behavior, whether any differences in beliefs and behavior were evident to the girls’ guardians, and whether the intervention could increase the level of trust between the girls and their guardians and thus lead to more optimal outcomes for both the girl and the household as a whole.

The midline activity completion statistics, broken down by the number and percentage of girls completing midline surveys in each treatment, the number and percentage of guardians completing midline surveys in each treatment, and the number and percentage of girl-guardian pairs completing the Trust Game in each treatment, are presented in the table below.

**Table 4: Midline Activity Completion Statistics**

	<b>Girl Surveys</b>	<b>Girl %</b>	<b>Guardian Surveys</b>	<b>Guardian %</b>	<b>Trust Game</b>	<b>Trust Game %</b>
<b>Negotiation</b>	593	74%	561	70%	574	72%
<i>Info</i>	304	74%	287	70%	296	72%
<i>No Info</i>	289	74%	274	70%	278	71%
<b>Social Capital</b>	582	74%	548	70%	560	71%
<i>Info</i>	282	71%	265	66%	269	67%
<i>No Info</i>	300	78%	283	73%	291	75%
<b>Control within Treatment Schools</b>	546	70%	517	66%	529	68%
<i>Info</i>	272	69%	250	63%	262	66%

<i>No Info</i>	274	71%	267	70%	267	70%
<b>Pure Control</b>	560	72%	543	70%	544	70%
<i>Info</i>	279	72%	274	70%	275	71%
<i>No Info</i>	281	72%	269	69%	269	69%
<b>Grand Total</b>	<b>2,281</b>	<b>73%</b>	<b>2,169</b>	<b>69%</b>	<b>2,207</b>	<b>70%</b>

### *Improved the intensity and quality of administrative data collection*

In addition to the outcome measures provided by surveys, the guardian-girl lab experimental Trust Game, and take up of the Additional Opportunity, we continue to collect long-term administrative data from the schools in our sample. The administrative data collection process has been ongoing since May 2013. Beginning in September 2013, we increased the amount and quality of the administrative data we are collecting from participating schools, beyond that described in our original proposal. Administrative data is of key importance, because it will allow us to test the effects of the intervention on actual health and education outcomes. This administrative data provides measures of the program’s effects on educational outcomes such as grade advancement and dropout rates, as well as on related health outcomes such as pregnancy and HIV risk.

The bullets below list the types and source of administrative data being collected:

- Class attendance (attendance registers filled out by selected and trained pupil “class monitors”)
- Fee payment information (provided by school administration)
- Exam results (provided by school administration)
- Tracking information, including school advancement, drop outs, transfer, and pregnancy (provided by school administration and, separately, by class monitors beginning in 2014)

We will continue to collect the administrative data detailed above through 2015. This long-term data allows us to look at the impact of our intervention, and the heterogeneity and mechanisms of that impact will allow us to shed light on this crucial "hot spot" in girls' secondary school dropout rates.

We are in the process of creating a comprehensive plan to track participants across school grades, as girls transition from middle school to high school between the 8<sup>th</sup> and 9<sup>th</sup> grade,



and thus a new set of schools must be contacted in order to continue following participants. We will share this tracking plan in future milestone reports.

As previously explained in the Milestone 6 report, in the initial months of collecting administrative data across 41 schools in Lusaka, we encountered several challenges that required additional attention to ensure the quality of the data. In response, we put several measures in place to address these challenges, including increasing the number of visits, hiring coaches as ‘admin data collectors’, and providing additional information and clarifications about the program to schools

For the latest round of administrative data collection, we took further steps to maximize our ability to collect as much data from schools as possible and best track the outcomes of our study participants. These additional measures and their outcomes are described in the “Data Collection Activities and Challenges” section of this report.

### ***Implications of the change in data collection plan***

The changes made in the project’s data collection plan improve the scope and the scale of the project and enhance our ability to collect the desired outcome measures from the largest possible sample of girls. The improvement in the sample coverage and amount of data collected in the critical last round of administrative data collection before pupils write their Grade 9 exams and move on from their current schools demonstrates how the intensification of administrative data collection activities will help us to enhance this ability. Data from the project will still include the impact of the Negotiation training on the uptake of the Additional Opportunity and long-term health and education outcomes. Data will also include baseline and midline surveys with participating girls and guardians, as well as resource exchange between girls and their guardians as measured in the Trust Game. Taken together, these changes in data collection allow us to gather a rich longitudinal dataset with multiple outcome measures.



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**USAID Milestone 9**  
Negotiating a Better Future  
Grant No. AID-OAA-F-13-00030  
February 1, 2015

This Milestone 9 Report is divided into two sections. The first section includes a description of program implementation and data collection to date, focusing on changes that affect study quality and plans to mitigate them. In the second section, we present the most up-to-date midline data analysis. Data collection and tracking tools and a tracking protocol are included in appendices.



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## **Section 1: Program Implementation and Data Collection Activities**

### **Program Implementation**

Expansion to secondary schools and planning for policy engagement and dissemination comprise current program implementation activities.

#### *Expansion to Secondary Schools*

As initially envisioned at the start of the study, we would like to offer the negotiation skills training (received by participants in the negotiation group during intervention) to the safe space and control groups once data collection activities are completed. We already offered this program to participants from the pure control schools in August-September 2014. As most of our participants completed grade 9 in 2014, they will now be looking to transition into secondary school for grade 10 (conditional on passing their grade 9 exams and paying their school fees). Therefore, the best way to reach our participants now that they have left their primary school is through the secondary schools they might have enrolled at in 2015. We have thus decided to offer the expansion at selected secondary schools where our participants enroll in 2015, conditional on these schools' collaboration in hosting the program.

Through meetings with DEBS, we have learned that the Provincial Education Office (PEO) must approve all programs implemented at secondary schools, though these programs are still under DEBS jurisdiction as well. We introduced the project to the PEO, were assigned an officer to handle all project requests and communication, and were given a support letter for our tracking and expansion activities at secondary schools.

While we don't expect any major changes from the 5-day curriculum used during the expansion to pure control schools, we plan to conduct a focus group with coaches to get their thoughts on any minor changes we can implement based on their experience teaching it in August-September 2014 and their takeaways from debriefs held in September.

The expansion will be introduced to the secondary schools during the introductory visits along with the project and the participant tracking. We intend to recruit former coaches, including the four involved in administrative data collection in January-February (see details below), to teach the curriculum at the secondary schools.

#### *Options for Dissemination /Policy Engagement Plans*

We are enthusiastic that the intervention has been shown to effectively teach negotiation skills (see *Midline Data Analysis* section below) and plan to make our curriculum available to stakeholders in the education sector in the region. We are currently pursuing the options to make our curriculum available for free while also ensuring the material is not altered or used outside of the intended purposes.



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We have already established relationships with the Ministry of Education and have been meeting with them regularly since the beginning of this project. More recently, in August 2014, Principal Investigator Nava Ashraf met and shared preliminary results with Charity Banda, the National HIV/AIDS coordinator, and Cecilia Sakala, the Director of Standards at the Ministry of Education (MoE), and brainstormed potential avenues to utilize the results at scale. In 2014, the MoE launched a new national education curriculum, including a life-skills component featuring negotiation skills; however, the Ministry continues to have questions about how best to teach these skills, and is interested in improving their methods, as it is often difficult for teachers who have not themselves been trained in negotiation to know how to teach it. We are thus looking into the teaching materials from this new curriculum, and seeking to understand how our own curriculum and findings can help in teaching these skills.

Professor Ashraf also briefly met with Abigail Tuchili, Expressive Arts/Life Skills Education Coordinator and Head of Curricular Development at the Ministry of Education and established contact. She also held meetings with the Examination Council, including the Director of Testing and Curriculum Development, who are interested in assessing non-cognitive skills in students, and in using our instruments to refine their methods of assessment. The Ministry and Examinations Council believe strongly that these other types of skills are very important in the labor market, but they have not been taught in Zambia, and little attention is given to assessing their development in students.

In addition, the project team, along with IPA Zambia's Country Director, has held meetings with various local stakeholders in the education and life-skills sector, including lead staff from Save the Children, Population Council, FAWEZA, and the Anti-Aids Teacher Association of Zambia (ATAAZ). The objective of these meetings is to map the policy and stakeholder landscape, and explore opportunities for engagement with potential partners that may be able to learn from the project's findings and experience implementing an after-school life skills program. We intend to continue to organize such meetings to identify possible partners and instruct our dissemination strategy when all the data is collected and findings are available.

The project team has also maintained its collaboration with Remmy Mukonka through his transition from the Ministry of Education to UNESCO Zambia, and continues to update him on the project and benefit from his advice regarding project activities and possible avenues for policy dissemination.

IPA and the Principal Investigators plan to continue communication with all the above stakeholders to build momentum in policy dissemination and collaboration. If our results show conclusively that the program is also effective at reducing drop-out rates and pregnancies and increasing school attainment, we hope that what we learn will be used for widespread policy outreach. Our early scale-up efforts with control groups, described



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above in the *Program Implementation* section, will help us learn how to operate the program in a more sustainable way.

## **Summary of Data Collection Activities and Challenges**

Data collection activities include administrative data collection and preparing for participant tracking at secondary schools.

### *Administrative Data Collection*

Since the start of the project in mid-2013, we have been collecting the following information:

- Class attendance (attendance registers filled out by selected and trained pupil “class monitors”)
- Fee payment information (provided by school administration)
- Exam results (provided by school administration)
- Tracking information, including school advancement, drop outs, transfer, and pregnancy (provided by school administration and, beginning in 2014, also being collected separately by class monitors)

Detailed information on the administrative data collected to date is provided in the tables below. Table 1 contains a summary of all administrative data collected to date. Table 2 provides register collection by number of schools for Grade 9 Term 3. Table 3 shows the number of classes missing registers at schools where not all registers were collected for Grade 9 Term 3.



**Table 1: Summary Data on Administrative Data collected as of January 27<sup>th</sup>, 2015**

		Grade 8, Term 1	Grade 8, Term 2	Grade 8, Term 3	Grade 9, Term 1	Grade 9, Term 2
<b>ATTENDANCE DATA</b>	Schools with complete data		33	28	33	33
	Schools with incomplete data	<i>Only exam results data collected for Grade 8, Term 1</i>	8	8	8	8
	Schools with no data		-	5	0	0
	Total number of schools		41	41	41	41
<b>PERFORMANCE DATA</b>	Schools with complete data	28	23	23	30	37
	Schools with incomplete data	8	7	8	9	4
	Schools with no data	5	11	10	2	0
	Total number of schools	41	41	41	41	41
<b>FEE PAYMENT DATA</b>	Schools with complete data		35	24	25	41
	Schools with incomplete data	<i>Only exam results data collected for Grade 8, Term 1</i>	-	1	1	0
	Schools with no data		6	16	15	0
	Total number of schools		41	41	41	41
<b>SCHOOLING STATUS DATA (from teachers)</b>	Schools with complete data			30	22	25
	Schools with incomplete data	<i>Only exam results data collected for Grade 8, Term 1</i>	<i>Started collecting this data in Grade 8, Term 3</i>	-	1	0
	Schools with no data			11	18	16
	Total number of schools			41	41	41
<b>SCHOOLING STATUS DATA (from monitors)</b>	Schools with complete data				35	40
	Schools with incomplete data	<i>Only exam results data collected for Grade 8, Term 1</i>	<i>Started collecting this data in Grade 9, Term 1</i>	<i>Started collecting this data in Grade 9, Term 1</i>	1	0
	Schools with no data				5	1
	Total number of schools				41	41

**Table 2: Register collection by number of schools for Grade 9 Term 3**

Number of schools where all registers were collected	33
Number of schools where some but not all registers were collected	8
Number of schools where no registers were collected	0

**Table 3: Number of classes missing registers at schools where not all registers were collected for Grade 9 Term 3**

Missing register for 1 class	5
Missing register for 2 classes	1
Missing register for 3 classes	0
Missing register for 4 classes	2

The team continues to collect administrative data. In January 2015, we began the last round of data collection visits at partner primary schools. We hired and trained four coaches who have been involved in administrative data collection to conduct these school visits. These four coaches will focus solely on administrative data collection at GN primary schools until mid-February. These coaches will be collecting the following information:

- Grade 9 exam results for all participants who have written them
- Updated information on payment of Grade 9 school fees for 2014
- *For treatment schools (as opposed to pure control schools) only:* secondary school assignment information (i.e. what secondary schools participants who met the cut off point for Lusaka district were assigned to)
- Information on whether participants have collected their grade 9 final exam results

Each type of data is collected in a different way and presents unique challenges. Descriptions of these data and the accompanying challenges are provided in the text below.

*Collection of Grade 9 Exam Results*

The girls in our study took the national Grade 9 final exams at the end of 2014. Grade 9 exams, which are a requirement for entry into secondary school, are administered at the pupils' schools and are graded by the Examination Council of Zambia (ECZ). These exams play a crucial role in pupils' education, as the scores determine whether students can progress into secondary school and at which school.



Grade 9 exam scores were released in mid-January. According to the figures released by the government, out of the 299,875 pupils who wrote the grade 9 exams nationally, 56.5% made the cutoff for grade 10 and thus get a certificate, 38% did not meet the cutoff but still passed their exams and hence receive a statement of results (and can thus try to look for a school that will have a place for and accept them), and 5.5% failed. Additionally, according to figures provided by the DEBS office, the transition rate from grade 9 to grade 10 among girls in 2013 in Lusaka province was 43.6%<sup>1</sup>. These figures give us a rough idea of what to expect in terms of exam results and transition rates into grade 10 among our participants. They also provide context for the data we will collect through our data collection and tracking activities (along with gender- and province-specific figures we have requested from the PEO).

Challenges we have previously faced when collecting exam results include combating reluctance by schoolteachers and poor record keeping. In light of these past challenges and of the critical importance of grade 9 exam results as an outcome measure, we explored various ways of collecting grade 9 exam results. Based on discussions with schools and DEBS, we ultimately decided to obtain from the schools the confidential examination number assigned to each pupil for the exams, and to then collect the actual results, using these numbers, from the schools. Having these individual examination numbers for most of our participants who wrote grade 9 exams when visiting the schools facilitates the process of collecting the results, particularly because it enables our admin data collectors to more easily identify the pupils and copy their results themselves, thereby reducing the time and effort required from teachers and school administrations. Another challenge in collecting this data is that this is a very busy time for schools, as parents and pupils come to collect grade 9 exam results in addition to enrollment activities for other grades, thereby making minimizing the burden on the schools a priority. Therefore, collecting examination numbers before exams took place, along with the better school record-keeping associated with national exam results (as opposed to school-administered end-of-term exams) enables us to mitigate the challenges we have previously faced in collecting data from the schools.

### *Collection of Grade 9 Fee Payment Data for 2014*

Fee payment data includes information on the girls' school fee payment, i.e. amounts paid, balance due, and the dates of payment (when recorded by the school) for each girl in our sample. We also ask each school for the tuition amount and the fee payment deadline at the school, as both of these can vary by school. The accountant or bursar at the school, as

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<sup>1</sup> 2013 Education Statistical Bulletin. Republic of Zambia Ministry of Education, Science, Vocational Training and Early Education. Prepared by: Directorate of Planning and Information. Publication date: April 2014



the party with access to student payment receipts, usually supplies Fee Payment Data on a pre-printed data sheet provided by the field team.

Challenges in obtaining this data include school concerns over confidentiality, school concerns over extra work, limited record keeping regarding dates of payment, and expectations around project scope. Some schools have reservations about sharing confidential payment information. In those cases, we provide a new letter of support from the Ministry of Education and/or the District Education Board Secretariat (DEBS) explaining the reason for collecting this data. Some schools have complained of the extra work involved in filling in the Fee Payment Data forms. Accountants or bursars commonly use the same receipt book for all pupils at the school, making it difficult to single out information for specific girls, especially if they make multiple payments. In these schools, the accountants or bursars tend not to provide the data, as they are too busy to carry on such extra tasks without extra compensation. The majority of the schools do not track payment dates, making this information impossible to collect at those schools. Some girls' full tuition payments are made in term 1; other pupils pay their fees in installments and the timing of these installments often differs across girls. Therefore, while the approximate date of payment can be inferred from the date of collection of the data from the school, the exact date remains unknown. Lastly, schools sometimes expect us to pay fees for pupils whose payments are behind or are vulnerable, as they do not see any reason to track and provide this data unless we are helping the pupils financially. In cases where this concern arises often, we again provide a letter from the Ministry of Education and/or the District Education Board Secretariat as clarification. Finally, in the most challenging cases, we have involved Ministry of Education and DEBS representatives in the data collection. In the latest previous round of administrative data collection (term 3, 2014), our field team was accompanied by our main contact at the MoE for two school visits, and by our contact at the DEBS for five school visits. Our contact from DEBS had previously accompanied the field team on one school visit. When conducting these visits, we are cautious to approach the school in a collaborative, rather than punitive way, in order to maintain a productive relationship with the schools. This strategy has proved useful in helping us collect more data from schools, especially, as expected, in the case where schools were not providing us with data because of reluctance, as opposed to poor or lack of record-keeping.

### *Tracking Girls Across Schools/Participant Tracking at Secondary Schools*

Tracking girls at secondary schools will become the major data collection activity once our participants who manage to transition into grade 10 enroll at secondary schools. Enrollment at secondary schools usually takes place a few weeks after the release of

grade 9 exam results, as pupils have to clear any school fee balance from grade 9, collect their exam results from their former primary school, and pay their grade 10 fees at their new secondary school upon enrollment. Pupils who did not meet the cutoff in their exam scores also have to look for a school that will accept them (usually in afternoon classes), and pupils who wish to transfer to a different secondary school than they were assigned need to obtain a transfer letter before enrolling at their new secondary school. Tracking girls at secondary schools is important because tracking data, in combination with administrative data, allows us to determine which participants moved on to grade 10 and which did not (and if they did not, to postulate why that might be).

This tracking process will involve working with new schools that have never been exposed to the project (except at a few schools within our sample that are both a primary and secondary school). One challenge will thus be to introduce these secondary schools to the program, and secure their collaboration, both for the tracking process and the expansion of the negotiation skills training to participants who have yet to be given the opportunity to receive. To address this challenge, we plan to bring letters of support and introduction letters to secondary schools upon our introduction visit. Both the DEBS and PEO have provided a letter of support regarding the project's tracking activities.

Through administrative data collection at primary schools and tracking activities at secondary schools, the team is gathering the following complementary pieces of information that, together, will help us determine the schooling status of participants and track them across schools. It should be noted that we will not attempt to track girls from pure control schools. This is due to the fact that this participant group already received the negotiation skills training in August-September 2014 and is thus no longer a valid control group for this outcome measure. Data from girls in the pure control schools was mainly intended to measure spill-over effects of the treatment on safe space and control groups within intervention schools.

***Information collected through administrative data collection at primary schools:*** in addition to grade 9 exam results and fee payment information, which constitute outcome measures in themselves, we will collect the following information at primary schools as part of our efforts to track participants.

***“Assignment information” on where they might enroll in grade 10:*** pupils who meet a certain cutoff point in terms of their grade 9 exam scores are assigned to government secondary schools by the DEBS office. This guarantees them a place in grade 10 as long as they pay their school fees upon enrollment. In order to enroll at this secondary school, the pupils must collect their exam results transcript and an entrance letter issued to the school from the DEBS office. The school thus receives records from DEBS indicating which pupils have been assigned to secondary schools, and to which schools. Therefore, assuming the schools give us access to this information, we should be able to collect



useful information from schools about where many of our participants are likely to enroll in grade 10.

**Information on whether participants collected their results from their school:** pupils are required to present their grade 9 exam results transcript (and an acceptance letter) in order to enroll at the secondary school to which they were assigned. They also require their results transcript to enroll at any other secondary school. Therefore, and as previously mentioned, pupils must collect their grade 9 exam results from their former primary school in order to enroll into grade 10. Furthermore, at most schools, pupils are required to clear their grade 9 fees balance before they can collect their results. Upon collection of their results, pupils sign a record to indicate they have received their results from the school. Assuming that schools give us access to this record, we should thus be able to find out whether each participant has collected their grade 9 exam results in early 2015. Together with their fee payment information, the collection status of exam results enable us to determine whether pupils completed this required step toward enrolling into grade 10, and whether their decision not to collect their results was driven by their (in)ability to pay their grade 9 fees.

**Information collected through tracking activities at secondary schools:** we will use the information collected at primary schools to track participants at secondary schools where they have been assigned.

Hired and trained “trackers” will conduct participant tracking. These trackers will be different than coaches, as coaches will be needed for administrative data collection and expansion, which will overlap with participant tracking. Before starting the tracking process, we plan to conduct introductory visits at secondary schools beginning in early February. During this visit we will introduce the program, agree on the best way to implement the tracking process and get their thoughts on hosting the expansion. We will stagger the first few visits to make sure we can adjust our approach if necessary based on the first schools’ reaction to the introduction of the program.

We will break up the tracking process into two stages, (i) initial tracking and (ii) extended follow-up tracking. The first stage will consist in visiting the secondary schools to which our participants were assigned. The second stage will consist of visiting secondary schools where some participants may have enrolled (based on the information provided by participants we find at ‘assigned’ secondary schools during the first stage).

We plan to use two types of tracking tools at each secondary school we visit. The first is a “*Grade 10 Enrollment Status Sheet*,” a sheet where all the names of the pupils assigned to that secondary school are listed, and where the administrative data collector can confirm each participant’s enrollment status. The second proposed tracking sheet is a “*School Status Informant Sheet*,” which will be used to get information from participants we find on other participants. This sheet will list the names of all the former schoolmates of each participant we find, and ask her to provide any information she has about any of



them. This information will be our best chance to track participants who were assigned to a school but did not enroll there, or were not assigned anywhere but still managed to find a place at a secondary school. This protocol has yet to be implemented. Our team is thinking through logistics, potential challenges, and the best way to approach secondary schools.

We will not attempt to track girls outside of Lusaka unless we find out during the tracking process that a significant number of our participants have enrolled at a specific school. The rationale for this decision is that the costs would be prohibitive, and we will not be able to get any reliable information about whether girls enrolled outside of Lusaka (thus making it unlikely that we would find them if we tried).

Table 6 summarizes all the information we intend to collect during the admin data collection and tracking activities, and how this information should help us determine our participants' school status.

We will use these tracking visits to offer selected secondary schools the opportunity to host the expansion of the negotiation skills training. Conditional on school approval, we will start inviting participants to the expansion once the initial stage of tracking is completed, and invite all the girls that were found in this first stage. We will also invite any participants in the second stage to attend the expansion at schools where it is still or is yet to take place.

We expect trackers to visit each secondary school at least four times, the first two visits being mostly for tracking purposes and the last two focused on expansion. There may be need for follow up visits depending on how the visits at the schools go. However, trackers should be trained thoroughly to avoid having to go back for needs that can be done on prior visits. The last 2 visits, while mainly dedicated to expansion, can be used to follow up with schools about any tracking information if required.

#### *Expanded midline survey complete for all girls*

As explained in previous milestone reports, changes were made to the project's initial data collection plan, one of which being expanding the scope of the midline survey to include all the mechanisms that we were initially planning to cover in the endline survey. We believe that this change does not negatively impact the scope or scale of the project, and instead enhanced our ability to collect the desired outcome measures from the largest possible sample of girls. Data from the project will still include the impact of the Negotiation training on the uptake of the Additional Opportunity and long-term health and education outcomes. Data will also include baseline and midline surveys with participating girls and guardians (including data from endline questions to the midline survey), as well as resource exchange between girls and their guardians as measured in



the Trust Game. Taken together, these changes in data collection allow us to gather a rich longitudinal dataset with multiple outcome measures.

## **Section 2: Midline Data Analysis**

### *Analyses of scenario response data from girls' midline surveys, assessing efficacy of negotiation training*

In one section of the girls' midline survey, girls were given a scenario and asked to imagine themselves in that situation. In the scenario, the girl needs to study for a test and asks her sister to take care of their younger brother, but the sister says that she wants to go visit a friend. After reading the description of the scenario, the girls were asked four questions about what they would do if they were in this situation. We coded the girls' responses for understanding of the negotiation skills taught in the intervention. The negotiation skills include discovering the other person's interests, making sure their own interests are met, working together to solve the problem, dealing positively with emotions, and brainstorming solutions. Results from the qualitative data show that the girls in the negotiation treatment successfully acquired and retained knowledge of negotiation skills and when to apply them. When asked how they would respond at multiple stages in a progressively the more difficult negotiation scenario, the girls in the Negotiation group expressed significantly greater understanding of negotiation skills than girls in the Social Capital and Control groups.

The simple means tests of the responses across treatment groups, presented in Table 4, revealed, as predicted, that girls in the Negotiation group expressed significantly greater understanding of negotiation skills than girls in the Social Capital and Control groups. While not direct evidence that the girls in the Negotiation group are using these concepts in their everyday lives, the consistent and highly significant differences between the knowledge of negotiation skills displayed in the responses by the girls in the negotiation treatment relative to those in the Control and the Social Capital treatments show that the training increased girls' capacity for advocating effectively for their own needs. The girls in the negotiation treatment conveyed accurate knowledge of a repertoire of negotiation skills and they were able to apply them appropriately in hypothetical situations. The negotiation treatment therefore builds girls' potential to apply these skills to difficult situations in their own lives.

### *Results from midline Trust Game, behavioral measure of communication skills*

Results from the Trust Game (see Table 5) show that the intervention helps girls to take advantage of opportunities for communication to improve their family's investment in them. The opportunity to communicate in the Trust Game *only* benefited girls who had exposure to the negotiation training, an important finding given that previous trust game



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studies have found that communication almost always improves outcomes. In the game without communication, both Negotiation and Social Capital girls received about a half token less from their guardians, from an average of between 5 and 6 tokens given. We hypothesize that this was due to parents feeling their children were already receiving a benefit from the program, having gotten the after school program, versus parents of control girls feeling their children should share in the benefit of the tokens. However, when given the opportunity to communicate, girls in the negotiation treatment overcome this deficit, actually receiving a half token *more* than girls in the control group. Girls in the social capital group also do better when given the chance to communicate, but only receive tokens equivalent to the control group, rather than extra tokens. Girls in the control group receive fewer tokens when able to communicate than when not able to communicate at all. These results indicate that the ability to communicate with parents regarding resource allocation in this controlled setting was only beneficial to girls who had been trained, through participation in the negotiation curriculum, to take advantage of this opportunity. Analysis of the long-term administrative data should show whether the negotiation skills aid girls in eliciting investments outside of this controlled setting.



## Appendix 1: Analysis Tables

**Table 4: Means Tests of Girls Responses to Negotiation Scenario Questions. Score scales span from 1 to 7, where higher values reflect greater understanding of the negotiation skills taught in the intervention.**

	Control	Social Capital	Negotiation
Mean score, Q1 (1-7)	3.72	3.73	4.46***
SE of mean	0.06	0.06	0.07
Mean score, Q3(1-7)	4.2	4.08	4.98***
SE of mean	0.08	0.08	0.08
Mean score (1-7)	3.75	3.79	4.52***
SE of mean	0.09	0.09	0.09

Notes: Stars (\*\*\*)  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ ) correspond to the p-values from the two-sided t-test of the means, compared to the mean of the pure control group.

**Table 5: Trust Game Main Results**

	Dependent variable: Tokens sent to girl by guardian									
	Communication					No Communication				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
<b>Negotiation</b>	<b>0.542***</b>	<b>0.520***</b>	<b>0.519***</b>	<b>0.523***</b>	<b>0.496**</b>	<b>-0.523***</b>	<b>-0.519***</b>	<b>-0.527***</b>	<b>-0.549***</b>	<b>-0.426**</b>
	<b>(0.183)</b>	<b>(0.181)</b>	<b>(0.183)</b>	<b>(0.183)</b>	<b>(0.212)</b>	<b>(0.168)</b>	<b>(0.171)</b>	<b>(0.172)</b>	<b>(0.173)</b>	<b>(0.194)</b>
<b>Social Capital</b>	<b>0.159</b>	<b>0.119</b>	<b>0.161</b>	<b>0.177</b>	<b>0.194</b>	<b>-0.475***</b>	<b>-0.481***</b>	<b>-0.483***</b>	<b>-0.484***</b>	<b>-0.435**</b>
	<b>(0.183)</b>	<b>(0.182)</b>	<b>(0.187)</b>	<b>(0.189)</b>	<b>(0.217)</b>	<b>(0.171)</b>	<b>(0.174)</b>	<b>(0.175)</b>	<b>(0.176)</b>	<b>(0.197)</b>
Wordsearch game	-0.215	-0.207	-0.164	-0.161	-0.130	-0.000969	0.00820	0.00135	0.0114	-0.0394
	(0.149)	(0.147)	(0.150)	(0.150)	(0.172)	(0.136)	(0.138)	(0.139)	(0.139)	(0.156)
Guardian Female	-0.468**	-0.478**	-0.427*	-0.430*	-0.540**	-0.387**	-0.448**	-0.399**	-0.399**	-0.515**
	(0.230)	(0.231)	(0.234)	(0.235)	(0.270)	(0.190)	(0.196)	(0.199)	(0.199)	(0.220)
Guardian Biological	0.0265	0.0814	-0.0200	-0.0190	-0.00276	0.0542	0.0816	0.205	0.217	0.279
	(0.160)	(0.161)	(0.188)	(0.189)	(0.215)	(0.147)	(0.151)	(0.180)	(0.182)	(0.203)
Age			-0.0560	-0.0482	-0.104			-0.0264	-0.0146	0.0636
			(0.0629)	(0.0637)	(0.0727)			(0.0497)	(0.0501)	(0.0565)
English reading			0.0807	0.0720	-0.0267			0.456*	0.474*	0.458
			(0.287)	(0.288)	(0.349)			(0.241)	(0.242)	(0.299)
English speaking			0.104	0.116	0.102			-0.0990	-0.0883	-0.194
			(0.204)	(0.205)	(0.235)			(0.185)	(0.186)	(0.225)
Both parents alive			0.318	0.313	0.429			0.167	0.144	0.0907
			(0.225)	(0.226)	(0.264)			(0.200)	(0.202)	(0.227)
Live with mom and dad			-0.102	-0.0882	-0.251			-0.340*	-0.346*	-0.286
			(0.214)	(0.215)	(0.256)			(0.196)	(0.196)	(0.221)
Average exam score					0.195**					0.154*
					(0.0883)					(0.0839)
Income controls				Y					Y	
School FEs		Y	Y	Y	Y		Y	Y	Y	Y
Constant	5.665***	5.653***	6.119***	5.748***	6.925***	5.766***	5.795***	5.781***	5.583***	4.598***
	(0.279)	(0.279)	(1.046)	(1.102)	(1.219)	(0.244)	(0.252)	(0.858)	(0.885)	(0.973)
Observations	606	606	593	593	446	636	636	621	621	459
R-squared	0.025	0.107	0.115	0.118	0.127	0.023	0.056	0.066	0.077	0.091

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 6: Possible outcomes of different administrative data and tracking information scenarios**

Possible scenarios	Information collected from admin data collection at GN primary schools			Information collected from tracking at secondary schools		Possible outcome(s)
	<i>Paid grade 9 fees</i>	<i>Collected grade 9 exam results</i>	<i>Was assigned to a secondary school (within Lusaka District)</i>	<i>Enrolled at assigned school</i>	<i>Enrolled at another school</i>	
<i>Scenario 1</i>	No	/	No	/	/	<ul style="list-style-type: none"> <li>Pupil did not enroll anywhere for grade 10 and did not have a place reserved for her at any school</li> </ul>
<i>Scenario 2</i>	No	/	Yes	/	/	<ul style="list-style-type: none"> <li>Pupil did not enroll anywhere for grade 10 though had a place reserved for her at a school</li> </ul>
<i>Scenario 3</i>	Yes	No	No	/	/	<ul style="list-style-type: none"> <li>Pupil did not enroll anywhere for grade 10 and did not have a place reserved for her at any school</li> </ul>
<i>Scenario 4</i>	Yes	No	Yes	/	/	<ul style="list-style-type: none"> <li>Pupil did not enroll anywhere for grade 10 though had a place reserved for her at a school</li> </ul>
<i>Scenario 5</i>	Yes	Yes	No	/	Unknown (to be determined during tracking process)	<ul style="list-style-type: none"> <li>Pupil did not enroll anywhere for grade 10 and did not have a place reserved for her at any school</li> <li>Pupil enrolled at a school even though there was no place reserved for her at any school (went to a school where extra places were available or with lower entry standards)</li> </ul>
<i>Scenario 6</i>	Yes	Yes	Yes	Yes	/	<ul style="list-style-type: none"> <li>Pupil enrolled at school she was assigned</li> </ul>
<i>Scenario 7</i>	Yes	Yes	Yes	No	Unknown (to be determined during tracking process)	<ul style="list-style-type: none"> <li>Pupil did not enroll anywhere for grade 10 and did not have a place reserved for her at any school</li> <li>Pupil enrolled at another school than assigned (e.g. enrolled into another school of lower, similar or higher quality, either outside or within Lusaka)</li> </ul>



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**USAID Milestone 10**  
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This Milestone 10 Report is divided into two sections. The first section includes a description of program implementation and data collection to date, focusing on changes that affect study quality and plans to mitigate them. In the second section, we discuss progress in data cleaning of midline data and year-end administrative data.



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## **Section 1: Program Implementation and Data Collection Activities**

### **Program Implementation**

Expansion to secondary schools and planning for policy engagement and dissemination comprise current program implementation activities.

#### *Expansion to Secondary Schools*

As initially envisioned at the start of the study, we are offering the negotiation skills training (received by participants in the negotiation group during intervention) to the safe space and control groups from intervention schools, now that administrative data collection activities are complete. We already offered this program to participants from the pure control schools in August-September 2014. As most of our participants completed grade 9 in 2014, they have now transitioned into secondary school for grade 10 (so long as they passed their grade 9 exams and paid their school fees); therefore, we decided that the best way to reach our participants now that they have left primary school is through the secondary schools at which they might have enrolled in 2015. We thus decided to offer the expansion at selected secondary schools where our participants enroll in 2015. We invited all of the participants from intervention schools we were able to find at any Lusaka secondary schools. We grouped the secondary schools based on location and number of GN participants enrolled. We identified 11 host schools at which the expansion will take place, and recruited eight former coaches to teach the curriculum after they received a 3-day refresher training.

The expansion was introduced to the secondary schools during introductory visits. We dropped off invitation letters to the schools and used this opportunity to try to find any participants that we may have missed during our tracking visits at secondary schools. Schools were highly receptive to hosting the program. All 11 schools identified as hosts for the expansion agreed to have the program take place at their school.

**Table 1: Expansion Take-up Rates**

<b>Secondary school</b>	<b>Number of girls invited</b>	<b>Number of girls registered</b>	<b>Take up rate (%)</b>
Arakan Girls Secondary School	57	15	26.3
Chelston Secondary School	31	11	35.5
Chilenje South Secondary School	9	4	44.4
Chinika Secondary School	97	55	56.7
Chunga Secondary School	49	34	69.4
Highland Secondary School	43	25	58.1
Kabulonga Girls Secondary School	88	37	42.0
Kamulanga Secondary School	17	10	58.8
Kamwala Secondary School	23	13	56.5
Kamwala South Secondary School	25	16	64.0
Libala Secondary School	50	13	26.0
Lusaka Girls School	32	7	21.9
Lusaka Secondary School	49	26	53.1
Matero Girls Secondary School	80	24	30.0
Munali Girls Secondary School	46	15	32.6
Nelson Mandela Secondary School	15	6	40.0
New Matero Secondary School	21	4	19.0
Northmead Secondary School	56	27	48.2
Olympia Secondary School	40	14	35.0
Twin Palm Secondary School	22	0	0.0
Woodlands 'A' Secondary School	14	10	71.4
<b>Total</b>	<b>864</b>	<b>349</b>	<b>40.4</b>

We faced low initial take-up for the expansion at a few schools. Two schools had initial take-up rates of zero because contact teachers did not give invitations to their pupils due to scheduling challenges. Two others with initial take-up rates of zero told their girls to bring permissions slips to host schools when the program begins. We informed the two former schools that pupils who had not brought their permission slip to the contact teacher by the end of the term could come to the school on the first day of the program with their slip, and would be able to register for the sessions then. We also informed other schools that they could do this when coach capacity allowed us to teach more pupils that week. We are working with the schools where contact teachers did not give out invitations to get in touch with the girls using the contact numbers the school has for these pupils' guardians and inviting them using that information. This has proven to be a



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successful tactic. Students at what is now the only school with a take-up rate of zero will bring permission slips on the first day of the program.

Attendance across schools has been excellent. The average attendance rate during the first two weeks was 84.6%. The lowest attendance rate has been 56.3% while the highest attendance has been 100%.

We anticipate two potential challenges during the expansion sessions. To address these challenges, we held brainstorming sessions with the coaches during the coaches training. The first challenge is how to adjust coaching style to adapt to the slightly older girls. We determined that in working with older girls, we hope to strike a balance between remaining friendly and interactive while acknowledging the fact that girls are a bit older and may thus want to be treated accordingly. We currently plan for coaches to go into training sessions with awareness and to adjust coaching style where appropriate.

A second challenge is how to allow guests to attend sessions while limiting the amount of disruption this causes. As discussed in greater detail below, some of the potential scale up partners, the Ministry of Education, FAWEZA, Grassroot Soccer and news outlets sent representatives to observe one or more of the sessions. To limit guest disruption, we decided that guests should not come on the first day of the program to allow the girls to get used to their coaches, whom they would have just met. We also decided that that guest should arrive before the sessions begin so that they do not disrupt the girls' attention mid-session. Our reasoning is that having guests arrive pre-session will help make them seem more like coaches and less like outsiders and will allow the session to flow more smoothly, without interruptions.

#### *Options for Dissemination /Policy Engagement Plans*

We are enthusiastic that analyses show that the intervention effectively teaches negotiation skills (see Milestone 9 for details regarding this analysis) and plan to make our curriculum available to stakeholders in the education sector in the region. We are currently exploring options for making our curriculum available for free to NGOs or other organizations that would like to teach girls negotiation skills. Using a “copylefting” approach will allow us to maintain knowledge of and some control over the curriculum while maximizing dissemination to groups or organizations that will expand its impact.

We already have established relationships with the Ministry of Education and have been meeting with them regularly since the beginning of this project. The project team frequently meets with Charity Banda, the HIV/AIDS coordinator at the Ministry of Education (MoE), to update her on project progress and submit progress reports to the Ministry. In August 2014, Principal Investigator Nava Ashraf met and shared preliminary results with Charity Banda, and Cecilia Sakala, the Director of Standards at the MoE, and brainstormed potential avenues to utilize the results at scale. In 2014, the MoE launched a



new national education curriculum, including a life-skills component featuring negotiation skills; however, the Ministry continues to have questions about how best to teach these skills, and is interested in improving their methods, as it is often difficult for teachers who have not themselves been trained in negotiation to know how to teach it. The other Principal Investigators on our project, Prof. Kathleen McGinn and Corinne Low, also met with Charity Banda in early 2015, and engaged with her on how our program and curriculum relate to the MoE's new life skills curriculum and broader approach to teaching life skills, including the MoE's partnerships with non-governmental organizations teaching life skills to youth in the Country. Finally, the project team and IPA Zambia's Country Director also had a productive meeting with Abigail Tuchili, Expressive Arts/Life Skills Education Coordinator and Head of Curricular Development at the MoE, whom Professor Ashraf had previously met. Charity attended one of the negotiation sessions during the roll out of the last phase of the program in schools in April 2015.

During her visit in 2014, Prof. Ashraf also held meetings with the Examination Council, including the Director of Testing and Curriculum Development, who are interested in assessing non-cognitive skills in students, and in using our instruments to refine their assessment methods. The Ministry and Examinations Council strongly believe that these other types of skills are important in the labor market; however, such skills have not been taught in Zambia, and little attention is given to assessing their development in students.

In addition, the project team, along with IPA Zambia's Country Director, held meetings with various local stakeholders in the education and life-skills sector, including lead staff from Save the Children, Population Council, FAWEZA, and the Anti-Aids Teacher Association of Zambia (AATAZ). The objective of these meetings was to map the policy and stakeholder landscape, and explore opportunities for engagement with potential partners that may be able to learn from the project's findings and experience implementing an after-school or holiday life skills program. We have followed up with these organizations to explore the possibility of them integrating the curriculum into their regular program activities.

As part of these efforts, we organized a 1-day meeting with 10-12 FAWEZA staff members, including the Executive Director, to demonstrate the curriculum and engaging with the audience. Agness Mumba, the FAWEZA Executive Director, attended the entire training. She expressed enthusiasm about the curriculum and interest in integrating it into FAWEZA's programs. We have since met with other FAWEZA staff members to discuss the possibility of the organization teaching our curriculum through their programs. One of the Principal Investigators on our project, Prof. Kathleen McGinn, attended one of these meetings to engage on the challenges with teaching our curriculum through different programs and in different settings.

We have decided that inviting representatives from stakeholders and partner organizations sit in on and observe expansion sessions in action will be a helpful way for



them to learn about our program. The sessions will serve to familiarize their staff with the skills being taught in the curriculum and how they are taught, with in mind the possibility of eventually integrating parts of the curriculum to the materials taught as part of their programs. Two representatives from Grass Root Soccer and Charity from the MoE attended sessions during the second week of the expansion. FAWEZA plans to send representatives to attend expansion sessions.

We will continue to organize meetings with other stakeholders that may be willing to teach negotiation skills, and pursue opportunities to share our curriculum and help train their coaches with our methods. The project team has also maintained its collaboration with Remmy Mukonka through his transition from the Ministry of Education to UNESCO Zambia, and continues to update him on the project and benefit from his advice regarding project activities and possible avenues for policy dissemination.

As part of our cooperation with FAWEZA, we have introduced an initiative to facilitate access to FAWEZA scholarships for selected GN participants. Through our data collection efforts, we have identified participants who met the cut off on their grade 9 national exams to be assigned to a secondary school, yet have not been found to be enrolled at the secondary school they were assigned to, or any other secondary school that we have visited in the Lusaka District. For these high-performing participants, there is good reason to believe that the constraint preventing their enrollment into grade 10 at a secondary school is inability to pay fees.

FAWEZA is committed to complementing scholarship programs with life skills training in order to provide pupils with a comprehensive ‘package’ of tools to help girls achieve better outcomes. Our project participants have been given repeated opportunities to receive negotiation and life skills training. Therefore, if able to secure FAWEZA funding, our participants would have been provided with a combination of benefits consistent with those FAWEZA seeks to provide through its programs. Therefore, these selected high-performing, resource-constrained participants would be great candidates for FAWEZA programs and funding, and be able to benefit most from it. We left a list of our participants meeting these criteria both at their former primary school and the secondary school they were assigned to, in order to communicate this opportunity to them and encourage them to visit the secondary school. The secondary school can then submit their names to FAWEZA to be considered for scholarship programs.

## **Summary of Data Collection Activities and Challenges**

We have completed collecting administrative data. Our main data collection activity since mid-February 2015 has been participant tracking at secondary schools.

### *Administrative Data Collection*



We have completed the administrative data collection process. From the start of the project in mid-2013 through early 2015, we collected the following information:

- Class attendance (attendance registers filled out by selected and trained pupil “class monitors”)
- Fee payment information (provided by school administration)
- Exam results (provided by school administration)
- Tracking information, including school advancement, drop outs, transfer, and pregnancy (provided by school administration and, beginning in 2014, also being collected separately by class monitors)

### *Tracking Girls Across Schools/Participant Tracking at Secondary Schools*

The team is currently merging complementary pieces of information that, together, will help us determine the schooling status of participants and track them across schools. These pieces of information include previously collected administrative data from primary schools, “assignment information” on where they might enroll in grade 10, information on whether participants collected their results from their school, and information collected through tracking activities at secondary schools.

Tracking girls at secondary schools is the major data collection activity, now that participants who managed to transition into grade 10 are enrolled at secondary schools. Enrollment at secondary schools usually takes place a few weeks after the release of grade 9 exam results, as pupils have to clear any school fee balance from grade 9, collect their exam results from their former primary school, and pay their grade 10 fees at their new secondary school upon enrollment. Pupils who did not meet the cutoff in their exam scores also have to look for a school that will accept them (usually in afternoon classes). Tracking girls at secondary schools is critical, as it allows us to determine which participants moved on to grade 10 and which did not (and if they did not, to gather information on why that might be).

We used the information collected at primary schools to track participants at secondary schools where they have been assigned. We broke up the tracking process into two stages: initial tracking and extended follow-up tracking. The first stage consisted of visiting the secondary schools to which our participants were assigned. From this, we gathered what we refer to as “outcome data.” The second stage consisted of visiting secondary schools where some participants may have enrolled (based on the information provided by participants we find at ‘assigned’ secondary schools during the first stage). This gave us what we refer to as “lead data.”

We have completed both rounds of tracking visits at the 17 ‘designated’ secondary schools to which our participants were assigned. During these the first round of visits, participants were considered ‘found’ only if our trackers actually saw the participants themselves at a secondary school or their names in the school’s enrollment records.

According to this definition, we found 364 participants in the first round of tracking. We then used the ‘leads’ we collected from these participants we found to attempt to track the ones we had not yet found. During the second round of visits, trackers sought both to determine whether participants who had been reported to have enrolled at the school were in fact enrolled at the school and whether any other participants who hadn’t been reported to have enrolled at this or any school were pupils at the school. Throughout this second round of tracking, our trackers found 460 more participants across 21 secondary schools, including the 17 ‘designated’ secondary schools and 4 other secondary schools within Lusaka District where participants were reported to be enrolled. The table below shows the number of participants found, broken down by their exam status.

**Table 2: Tracking Figures for Girls at Secondary Schools, Broken Down by Exam Status**

Exam status	tracking status				total
	found		not found		
Scored 361 or above	451	77.2%	133	22.8%	584
Scored between 320 and 360	234	35.1%	432	64.9%	666
Passed but scored below 320	123	24.3%	383	75.7%	506
Failed	16	4.1%	375	95.9%	391
Registered but did not write exams	5	5.4%	88	94.6%	93
Did not register for exams	15	12.1%	109	87.9%	124
<i>total</i>	844	35.70%	1,520	64.30%	2,364

When considering these figures, it is important to remember that only pupils who met the cutoff assignment (which was 361 for girls this year) were guaranteed a place at a secondary school. Pupils who passed their exams but scored below that cutoff needed to find a place for themselves at a secondary school that would accept them, often in afternoon classes. The higher the pupil’s exam score, the more likely the secondary school was to accept them. Pupils who failed their exams or did not write them (because they transferred or dropped out of the school before they could write the exams) could not enroll into grade 10 at any school. Finally, it is critical to keep in mind that enrollment into secondary school is conditional on paying grade 10 fees upon enrollment (and grade 9 fees previously to collect exam results from primary school). There remain some inconsistencies in the exam data, as the 36 combined pupils who failed or did not write their exams should not have been able to enroll into grade 10. The field team is taking steps to correct these inconsistencies through visits at primary intervention schools. We have visited 28 of 29 primary schools and will visit the remaining school in the beginning of term 2.

Our tracking activities at secondary schools are nearly completed. We will complete all activities in mid-May once schools re-open after the end of the Term 1 holiday break. We will visit the secondary schools we have already visited as part of tracking one more time. During this visit we will give out certificates to participants who took part in the



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negotiation sessions during the holiday break, and inquire one last time about any of our participants who may be enrolled at the school that we have not yet found. We will also visit the 5 government secondary schools in the Lusaka District that we have not yet visited to determine whether any of our participants have enrolled there. By the end of tracking activities, we will thus have visited all government secondary schools within the Lusaka District (with the exception of all-boys schools).

This tracking process at secondary schools involved working with new schools that have never been exposed to the project (except at a few schools within our sample that are both a primary and secondary school). One potential challenge we anticipated was thus to introduce these secondary schools to the program, and secure their collaboration, both for the tracking process and the expansion of the negotiation skills training to participants who have yet to be given the opportunity to receive. To address this challenge, we brought letters of support and introduction letters to secondary schools upon our introduction visit. Both the DEBS and PEO provided a letter of support regarding the project's tracking activities. The response from the schools to the programs was largely positive, and they were cooperative in facilitating our activities.

### *Tracking visits at primary schools*

The team visited GN intervention primary schools to ask about any participants who passed their exams and were assigned to a school, but we did not find at their assigned secondary school or any other secondary school that we have visited. We have already attempted to gather information on them from other participants found at secondary schools, so the only remaining source of information available to us is their former primary school. These visits were not very successful in gathering information about participants. The teachers we spoke to turned out to not have much information about what has happened to pupils since they have left the primary school.

## **Section 2: Data cleaning of endline data and year-end administrative data**

By making the decision to track at secondary schools, we have extended the data collection on tracking outcomes. We have cleaned the administrative data we collected from primary schools since 2013 and are running tests to ensure that there are no errors. We are still waiting for all the tracking data to be collected before we can have a clean dataset for merging tracking data with the administrative data. We have entered and cleaned the tracking data collected so far. We expect all tracking data to be cleaned and merged by the end of May, once we have included any tracking data collected as part of the last tracking activities described above.

### **Videotaping negotiation sessions**



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Please see the email to which this report was attached for a proposal regarding videotaping for the Milestone 11 report (due on August 1, 2015).



**USAID Milestone 11**  
 Negotiating a Better Future  
 Grant No. AID-OAA-F-13-00030  
 August 1, 2015

This Milestone 11 report is divided into two sections. The first section includes a description of program implementation and data collection to date, focusing on changes that affect study quality and plans to mitigate them. In the second section, we discuss how the video of coaches teaching the curriculum will be made available and accessible, given language and Internet connectivity issues.

**Section 1: Program Implementation and Data Collection Activities**

**Program Implementation**

All program implementation has been complete as of May 31, 2015. The team is now focusing on data analysis. Expansion to secondary schools and planning for policy engagement and dissemination comprise the most recent program implementation activities.

*Expansion to Secondary Schools*

We offered the negotiation skills training (received by participants in the Negotiation group during intervention) to the Safe Space and control groups from intervention schools once administrative data collection activities were complete. We offered the expansion at selected secondary schools where our participants enrolled in 2015. We invited all participants from intervention schools that we were able to find at any Lusaka secondary schools. We grouped the secondary schools based on location and number of Girls' Negotiation participants enrolled. We then identified 11 host schools to host the expansion and recruited eight former coaches to teach the curriculum after receiving a three-day refresher training.

The expansion was introduced to the secondary schools during introductory visits. We dropped off invitation letters to the schools and used the drop-off as an opportunity to try to find any participants we might have missed during our tracking visits at secondary schools. Schools were highly receptive to hosting the program. All 11 schools identified as hosts for the expansion agreed to have the program take place at their school. Table 1 details the expansion take-up rates across secondary schools.

<b>Secondary school</b>	<b>Number of girls invited</b>	<b>Number of girls registered</b>	<b>Take up rate (%)</b>
Highland Secondary School	43	25	58.1

Chinika Secondary School	97	55	56.7
Kamulanga Secondary School	17	10	58.8
Kamwala South Secondary School	25	16	64.0
Chelston Secondary School	31	11	35.5
Matero Girls Secondary School	80	24	30.0
New Matero Secondary School	21	4	19.0
Chunga Secondary School	49	34	69.4
Nelson Mandela Secondary School	15	6	40.0
Munali Girls Secondary School	46	15	32.6
Libala Secondary School	50	13	26.0
Arakan Girls Secondary School	57	26	45.6
Kamwala Secondary School	23	13	56.5
Northmead Secondary School	56	28	50.0
Olympia Secondary School	40	15	37.5
Lusaka Girls School	32	7	21.9
Lusaka Secondary School	49	27	55.1
Kabulonga Girls Secondary School	92	52	56.5
Woodlands 'A' Secondary School	14	10	71.4
Chilenje South Secondary School	9	4	44.4
Twin Palm Secondary School	23	22	95.7
<b>Total</b>	<b>869</b>	<b>417</b>	<b>48.0</b>

Table 1: Expansion Take-up Rates

The final take-up rate across schools was 48.0%. Of those who registered for the expansion, attendance was high with an average completion rate of 4 days out of 5 for all pupils (see Table 2).

<b>Secondary school</b>	<b>Mean number of days attended (pupil average)</b>	<b>Percentage of pupils completing all 5 days</b>
Highland Secondary School	4.56	56%
Chinika Secondary School	4.07	61.8%
Kamulanga Secondary School	2.83	44.4%
Kamwala South Secondary School	3.38	53.5%
Chelston Secondary School	4.82	81.8%
Matero Girls Secondary School	4.67	87.5%
New Matero Secondary School	4.5	75%
Chunga Secondary School	4.82	88.2%
Nelson Mandela Secondary School	4.83	83.3%
Munali Girls Secondary School	4.19	50%



Libala Secondary School	3.77	69.2%
Arakan Girls Secondary School	3.31	57.7%
Kamwala Secondary School	3.38	46.2%
Northmead Secondary School	4.79	92.9%
Olympia Secondary School	4.2	60%
Lusaka Girls School	4.29	85.7%
Lusaka Secondary School	3.92	70.4%
Kabulonga Girls Secondary School	3.88	52.9%
Woodlands 'A' Secondary School	3.7	40%
Chilenje South Secondary School	4	75%
Twin Palm Secondary School	2.3	0%
<b>Total</b>	<b>4.01</b>	<b>62.1%</b>

Table 2: Expansion Attendance Rates

*Options for Dissemination / Policy Engagement Plans*

We are enthusiastic that analyses show that the intervention effectively teaches negotiation skills and plan to make our curriculum available to stakeholders in the region. We plan to use a “copylefting” approach (described in detail in section 2) that will allow us to maintain knowledge of and some control over the curriculum while maximizing dissemination to groups or organizations that will extend its impact. Our engagement with such groups is detailed below.

We already have established relationships with the Ministry of Education (MoE) and have been meeting with them regularly since the beginning of this project. The project team frequently meets with Charity Banda, the HIV/AIDS coordinator at MoE, to update her on project progress and submit progress reports to the Ministry. In August 2014, Principal Investigator Nava Ashraf met and shared preliminary results with Charity Banda and Cecilia Sakala, the Director of Standards at the MoE, and brainstormed potential avenues to utilize the results at scale. In 2014, the MoE launched a new national education curriculum, including a life-skills component featuring negotiation skills; however, the Ministry continues to have questions about how best to teach these skills, and is interested in improving their methods as it is often difficult for teachers who have not themselves been trained in negotiation to know how to teach it. The other Principal Investigators on our project, Prof. Kathleen McGinn and Corinne Low, also met with Charity Banda in early 2015, and engaged with her on how our program and curriculum relate to the MoE’s new life skills curriculum and broader approach to teaching life skills, including the MoE’s partnerships with non-governmental organizations teaching life skills to youth in the country. Finally, the project team and IPA Zambia’s Country Director also had a productive meeting with Abigail Tuchili, Expressive Arts/Life Skills Education Coordinator and Head of Curricular Development at the MoE, whom Professor



Ashraf had previously met. Charity attended one of the negotiation sessions during the roll out of the last phase of the program in schools in April 2015.

During her visit in 2014, Prof. Ashraf also held meetings with the Examination Council, including the Director of Testing and Curriculum Development, who are interested in assessing non-cognitive skills in students, and in using our instruments to refine their assessment methods. The Ministry and Examinations Council strongly believe that these other types of skills are important in the labor market; however, such skills have not been taught in Zambia, and little attention is given to assessing their development in students.

In addition, the project team, along with IPA Zambia's Country Director, held meetings with various local stakeholders in the education and life-skills sector, including lead staff from Save the Children, Population Council, FAWEZA, and the Anti-Aids Teacher Association of Zambia (AATAZ). The objective of these meetings was to map the policy and stakeholder landscape, and explore opportunities for engagement with potential partners that may be able to learn from the project's findings and experience implementing an after-school or holiday life skills program. We have followed up with these organizations to explore the possibility of them integrating the curriculum into their regular program activities.

As part of these efforts, we organized a 1-day meeting with 10-12 FAWEZA staff members to demonstrate the curriculum and engage with the audience. Agness Mumba, the FAWEZA Executive Director, attended the entire training. She expressed enthusiasm about the curriculum and interest in integrating it into FAWEZA's programs. We have since met with other FAWEZA staff members to discuss the possibility of the organization teaching our curriculum through their programs. One of the Principal Investigators on our project, Prof. Kathleen McGinn, attended one of these meetings to discuss the challenges with teaching our curriculum through different programs and in different settings.

As part of our cooperation with FAWEZA, we introduced an initiative to facilitate access to FAWEZA scholarships for selected GN participants. Through our data collection efforts, we identified gaps in scholarships awarded. More specifically, we identified participants who met the cut off on their grade 9 national exams to be assigned to a secondary school, yet were not found to be enrolled at the secondary school they were assigned to, or any other secondary school that we visited in the Lusaka District. For such high-performing participants, there is good reason to believe that the primary constraint preventing their enrollment into grade 10 at a secondary school is the inability to pay fees.

FAWEZA is committed to complementing scholarship programs with life skills training in order to provide pupils with a comprehensive 'package' of tools to help girls achieve better outcomes. Our project participants have been given repeated opportunities to receive negotiation and life skills training. Therefore, if able to secure FAWEZA funding,



our participants are provided with a combination of benefits consistent with those FAWEZA seeks to provide through its programs. We left a list of our participants meeting these criteria both at their former primary school and the secondary school they were assigned to, in order to communicate this opportunity to them and encourage them to visit the secondary school. The secondary school could then submit their names to FAWEZA to be considered for scholarship programs. FAWEZA has already used this targeting mechanism to extend additional scholarships to girls.

We decided that inviting representatives from stakeholders and partner organizations to sit in on and observe expansion sessions in action would be a helpful way for them to learn about our program. The sessions served to familiarize their staff with the skills being taught in the curriculum and how they are taught, with in mind the possibility of eventually integrating parts of the curriculum to the materials taught as part of their programs.

Representatives from Grassroots Soccer, FAWEZA, and the Ministry of Education attended expansion sessions. Two officers from FAWEZA attended sessions at secondary schools. Following the visit, FAWEZA shared that they intend to integrate our curriculum into their regular programs with their officers who are training teachers at various schools with which they work (150 teachers have already been trained). Charity Banda, HIV/AIDS Coordinator and our main point of contact at the MoE, attended several sessions at secondary schools. In a meeting following the sessions, Charity said that she plans to push to have the GN curriculum used as a nationwide "resource book" for government school teachers to help them in planning their curriculum. Two officers from Grassroots Soccer attended one session. We received feedback via email from one of the officers recommending that their organization adopt the curriculum and style of delivery in their own girls programs.

We will continue to organize meetings with other stakeholders that may be willing to teach negotiation skills, and pursue opportunities to share our curriculum and help train their coaches with our methods. We are currently working with Rebecca Wolfe, Senior Youth and Peacebuilding Advisor at Mercy Corps, on integrating our curriculum into their girls program in Nigeria. Additionally, CFK's Binti Pamoja program has expressed interest in using our curriculum for their work with thousands of 11-18 year-old girls in Kibera. The project team has also maintained its collaboration with Remmy Mukonka through his transition from the Ministry of Education to UNESCO Zambia, and continues to update him on the project and benefit from his advice regarding project activities and possible avenues for policy dissemination.

### **Summary of Data Collection Activities and Challenges**

We have completed participant tracking at secondary schools and primary schools.



### *Tracking Girls across Schools/Participant Tracking at Secondary Schools*

Secondary school tracking is complete, and trackers were able to verify enrollments at all target schools, through records or class listing exercises.

The team is currently merging complementary pieces of information that, together, will help us determine the schooling status of participants and track them across schools. These pieces of information include previously collected administrative data from primary schools, “assignment information” on where they might enroll in grade 10, information on whether participants collected their results from their school, and information collected through tracking activities at secondary schools.

Enrollment at secondary schools usually takes place a few weeks after the release of grade 9 exam results, as pupils have to clear any school fee balance from grade 9, collect their exam results from their former primary school, and pay their grade 10 fees at their new secondary school upon enrollment. Pupils who did not meet the cutoff in their exam scores also have to look for a school that will accept them (usually in afternoon classes). Tracking girls at secondary schools is critical, as it allows us to determine which participants moved on to grade 10 and which did not (and if they did not, to gather information on why that might be).

We used the information collected at primary schools to track participants at secondary schools where they have been assigned. We broke up the tracking process into two stages: initial tracking and extended follow-up tracking. The first stage consisted of visiting the secondary schools to which our participants were assigned. From this, we gathered what we refer to as “outcome data.” The second stage consisted of visiting secondary schools where some participants may have enrolled (based on the information provided by participants we find at ‘assigned’ secondary schools during the first stage). This gave us what we refer to as “lead data.”

We have completed all three rounds of tracking visits at secondary schools. Detailed information on the first two rounds of tracking can be found in the Milestone 10 report.

We used four of our former trackers to complete the third round of tracking. To prepare for this round, we held a refresher training for trackers, during which we emphasized the importance of this final round of tracking and brainstormed possible ways to get enrollment records, particularly in schools where they were not readily available. This was especially important because we visited 12 ‘new’ schools during this round that had not yet been visited. In addition to the 12 schools on the list of ‘new’ schools we had planned to visit, we added three more schools for which we had lead tracking data but were not on our previous list of schools. We also visited the 5 government secondary schools in the Lusaka District that we had not yet visited to determine whether any of our participants have enrolled there. During this round of visits, we also gave out certificates to participants who took part in the negotiation sessions during the holiday break, and

inquired one last time about any of our participants who may be enrolled at the school that we had not yet found.

Of the 2,366 girls located during the critical transition from grade 9 to 10 grade, we found approximately 169 girls during the third round of tracking. Table 3 shows the number of participants found, broken down by their exam and enrollment status.

Exam Status	Tracking Status				TOTAL
	Found to be Enrolled in 10 <sup>th</sup> grade		Not Enrolled in 10 <sup>th</sup> grade		
Scored 361 or above	474	81.6%	107	18.4%	581
Passed to 360	464	39.8%	701	60.2%	1165
Failed	24	6.2%	363	93.8%	387
Registered but did not write exams	6	6.5%	87	93.5%	93
Did not register for exams	18	14.3%	108	85.7%	126
Missing	7	50.0%	7	50.0%	14
<b>TOTAL</b>	<b>993</b>	<b>42.0%</b>	<b>1373</b>	<b>58.0%</b>	<b>2366</b>

Table 3: Tracking Figures for Girls in Secondary School, Broken Down by Exam and Enrollment Status

When considering these figures, it is important to remember that only pupils who met the cutoff assignment (which was 361 for girls this year) were guaranteed a place at a secondary school. Pupils who passed their exams but scored below that cutoff needed to find a place for themselves at a secondary school that would accept them, often in afternoon classes. The higher the pupil’s exam score, the more likely the secondary school was to accept them. Pupils who failed their exams or did not write them (because they transferred or dropped out of the school before they could write the exams) could not enroll in grade 10 at any school. Finally, it is critical to keep in mind that enrollment into secondary school is conditional on paying grade 10 fees upon enrollment (as well as grade 9 fees to collect exam results from primary school).

We faced several challenges during the third round of tracking. One major challenge was determining which of our lead schools are actually schools in Lusaka, given that most of the schools are community private schools and do not appear on most official school databases. Furthermore, we faced the challenge of determining the actual locations of schools we were visiting in Lusaka. The trackers spent a lot of time in the field looking for schools, and some of the schools were further toward the outskirts of the city than we anticipated. In order to address these challenges, we developed a map of known secondary schools in Lusaka to aid surveyors in locating schools during the tracking process.<sup>1</sup> The coordinates were obtained from another Innovations for Poverty Action

<sup>1</sup> [https://www.google.com/maps/d/edit?mid=zRCIwLv\\_Mi4Q.kzeDfIkbGrKQ](https://www.google.com/maps/d/edit?mid=zRCIwLv_Mi4Q.kzeDfIkbGrKQ).



project that geocoded local schools (including government, private, or religious), as well as from the Ministry of Education's EdAssist database. This way, we were able to combine databases and more accurately define all of the school locations for our trackers, reducing the time it took them to locate schools and allowing us to allocate transportations funds appropriately. We have thus have visited all government secondary schools within the Lusaka District (with the exception of all-boys schools).

Next, there was some concern that girls in the control group would not identify as “Girls Arise” participants because they did not receive training or a safe space treatment. We ameliorated this concern by having coaches read out the names of all primary schools that participated in Girls Arise and asking those students to come forward during the third round of tracking.

Lastly, the field team had to visit many schools repeatedly due to individual school challenges, such as contact persons, accountants, or other record keepers not being present or not being prepared to provide us with the information we requested. Despite these challenges, we were able to verify enrollments at all of the target schools.

### *Tracking Visits at Primary Schools*

Primary school exam result verifications have been completed at all target schools. We used the two coaches who have been visiting schools to drop off primary school certificates of participation in the program and to collect corrected exam results data.

One major challenge we faced with primary school visits was collecting accurate fee payment data. The fee payment data we collected from primary schools is designed to help us understand the amounts of school fees a girl has paid and still owes at each term of the school year. Collecting accurate school fee data was challenging because many schools have inconsistent accounting records. While cleaning these data, it became apparent that accountants were interpreting data fields differently. For example, one accountant assumed that the balance should include amount still owed from previous terms and years, while another included only the balance from the current term.

To address this accounting problem, we designed a short questionnaire to help coaches ask accountants at each school how they interpreted each variable in the fee payment form they filled out for us. The goal was to help us decide how to treat discrepancies we found during data cleaning. The exercise revealed a range of interpretations across several variables, which we have incorporated into the data separately by school. The exercise also helped us determine that the data on current term's balance is the most consistent across schools and therefore the most reliable piece of fee payment information.



## Section 2: Videotaping Negotiation Sessions

The team proposed a video format, which was shared with the submission of the Milestone 10 report. As planned, we videotaped all the sessions in a special program at Lusaka Girls School beginning at the start of term 2. Because we did not have permission from girls at other schools, we videotaped only grade 8 girls at Lusaka Girls who gave us permission. We took 25 invitations to the school and 11 girls brought back signed consent forms. We allowed girls who brought signed consent forms to the first day of sessions to attend the sessions; 16 girls ultimately attended. Girls in these sessions consented to both participating in the session and being videotaped. We videotaped each day as a separate session using two of our best coaches.

Video-taping and sound editing is now complete and the footage—including forwards from the project's Field Manager and several coaches—is available in digital raw format. We are currently undertaking English transcription to allow for English subtitling as well as ease future translation into both local Zambian languages and international languages. We recommend making the footage available to USAID once subtitling is complete.

In order to ensure the privacy of the girls in the video and maintain relative control over how the content is used, material will not be widely distributed online. Instead, Harvard Business Press (HBP) will create a page on the HBP educator's website (<http://hbsp.harvard.edu>) that details the Girls Arise initiative and makes the curriculum available for download and the videos available for both streaming and download, following acceptance of the terms of a creative commons licensing agreement.

HBP will not 'productize' these assets for purchase, since they are free. Anyone who has the URL can visit the site and retrieve the materials. Additionally, HBP plans to create an 'umbrella' web page that details the collections/content that is available for free; the Girls Arise Curriculum will be listed there with a feature trailer, along with the link to the page that provides the content.

Video sharing will be done online for global audiences and via DVD or thumb drive for local audiences facing limited streaming or download capacity. We have received funding in the amount of \$18,857 from J-PAL's Youth Initiative for ongoing policy work for the Girls' Negotiation project, including training of trainers (TOT) and distributing the curriculum and videos to interested organizations in Zambia.