



Resiliency Pilot Program Evaluation Zambia & South Africa 2006

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EXECUTIVE SUMMARY

Grassroot Soccer (GRS)¹, designed a curriculum and sport-based teaching model to build resiliency, targeting boys and girls in Lusaka, Zambia and Johannesburg, South Africa where most children are reminded daily of the devastation caused by AIDS and where many face chronic and acute hardships. GRS created interactive activities designed to resonate with youths' interests in sport while teaching boys and girls between 10 and 18 years of age skills to build resiliency and prevent infection of HIV. With the support of USAID through CARE, GRS enhanced their existing coach's Training Guide, created a Resiliency Program Logic Model, conducted a Training of Trainers program, and launched a 6-week resiliency, HIV/AIDS education, and life skills pilot program for the boys and girls in Zambia and South Africa. In Zambia, the program was implemented in 19 primary schools and 2 football teams in 12 different areas of Lusaka. In total, 45 trainers were trained in program implementation and 457 boys and girls graduated from the pilot program. In South Africa, GRS partnered with City Year South Africa² and trained 20 City Year Service Leaders and implemented the program in 4 schools, graduating 150 children from the resiliency program.

The primary objective of the evaluation was to answer the following question: Can resiliency be taught to boys and girls between the ages of 10 and 18 years using a sport-based model in Southern Africa?

Specific objectives were: 1) to assess participants' perception and articulation of key resiliency-related concepts pre- and post-intervention; 2) to determine trainer opinions about the GRS resiliency concepts and activities and gain ideas for program improvement; and 3) to determine the participating boys' and girls' experience in the program.

In Zambia, the evaluation approach consisted of pre- and post-intervention surveys, interviews with a sub-sample of program participants, group discussions with trainers, and demographic assessments of each site. In South Africa, the evaluation consisted of assessment information gathered at 5 weekly group reflection and discussion sessions with trainers, trainer assessment, and a program and curriculum feedback form filled by trainers.

In Zambia, data were collected through the administration of a survey designed to capture changes in resiliency indicators based on the four primary resiliency curriculum themes. A pre-intervention survey was administered to a sample of boys and girls, ranging in age from 10-18 from 19 participating schools and 2 football teams (n=520). Upon completion of the resiliency program and graduation, participating students completed a comparable post-intervention survey (n=274). Both surveys were developed to identify areas of risk and of resiliency-promotion in the child's life as well as to examine change in attitude, knowledge, perception, and articulation of key resiliency factors addressed in the GRS sport-based resiliency program. A random sub-sample of students was also interviewed, with those students asked to share opinions of the program and to describe parts of the program that particularly resonated with their own lives (n=29). Additionally, informal discussions were held with trainers who provided feedback on their facilitation of the activities and the usability of GRS resiliency concepts and program (n=26). In South Africa, qualitative data was collected from group discussion sessions among trainers

¹ **Grassroot Soccer (GRS) is a US based nonprofit organization that is using the power of soccer in the fight against AIDS by providing African youth with skills and support to remain HIV free. Founded by former professional soccer players, GRS trains African soccer stars, soccer coaches, and peer educators in the world's most HIV- affected countries to deliver prevention training to youth. GRS has been running its flagship program in Zimbabwe for the past three years and recently expanded into Zambia and Botswana and South Africa. In addition to their flagship sites, GRS has helped to design and launch projects with NGO partners in countries like Ethiopia, Uganda, Namibia, Liberia, and The Dominican Republic.**
<www.grassrootsoccer.org>

² City Year South Africa is an organization of youth who perform one year of volunteer service and training in communities surrounding Johannesburg.

expressing the strengths, challenges, and weaknesses of the program implementation and curriculum activities conducted the previous week (n=20).

Evaluation findings indicate the following:

- The Grassroot Soccer Resiliency Program significantly changes students' identification and articulation of key resiliency themes in their lives. An increase in articulation of future goals and identification of own strengths was observed among both boys and girls.
- Gender gaps on key resiliency-promoting factors are minimized after Grassroot Soccer, especially those factors involved in decision-making and seeking help from an adult. Significant changes in responses differed by gender, showing convergence of genders on responses from at post-intervention assessment.
- Boys showed a significant change in reported decision-making behavior, moving towards more positive practices after the GRS Resiliency intervention.
- The Grassroot Soccer Resiliency Program is successful in affecting the most notable change in resiliency building among its target group, girls and boys 13 to 14 years of age. Significant changes in responses differed by age category. Boys and girls ages 13 to 14 years showed the most significant change in survey responses as compared to other age groups after completing the GRS Resiliency Program.
- Participating students enjoyed the GRS Resiliency Program and found the key messages to be relevant in their own lives. In interviews, students were able to describe how to bounce back from a disappointing situation in their lives and how to use Coach's Voice and give praise outside of Grassroot Soccer.
- Overall, the Trainers found that GRS Resiliency Program activities were useful and important to the lives of the boys and girls they taught. Certain activities were identified as beneficial in other teaching settings. Notably, the activities "Praise Circle" and "Coach's Voice."
- Changes were proposed for improving specific activities to maximize their relevance and value to students.
- Less than half of students surveyed were able to list at least one of the 4 Ways to Stay Strong at posttest (47%).

The Grassroot Soccer Resiliency Program succeeded in helping young boys and girls in Lusaka to identify strengths in their lives and ways to improve their resiliency. In particular, it helped young girls to have and identify a trainer or coach as someone they could ask for help. GRS also helped boys to match their girl peers in believing that they are able to make their own decisions, not always making a decision based on what feels good at the moment, and in seeking help from an adult family member when they have a problem. Both girls and boys learned from GRS how to make a back-up plan for when things don't go their way. GRS helped 13- and 14-year-olds identify the skills they have and learn how to contribute them to their communities. The GRS program also succeeded in helping boys and girls to identify and articulate their strengths and goals for the future. Both boys and girls increased in their ability to say what they are good at and what they hope to achieve in the near or distant future.

Grassroot Soccer equipped trainers with concepts and tools for building resiliency in various educational settings. Students responded well to the concept of listening to your "Coach's Voice" and thinking through making a decision. In South Africa, trainers reported using "Praise Circle" in other educational settings to build esteem and improve relationships among their students.

In conclusion, the Grassroot Soccer Resiliency Program had a direct impact on both trainers and students in Lusaka, Zambia and Johannesburg, South Africa. It affected decision-making and strategies for building resiliency in the lives of boy and girl study participants. By using a sport-based model, this program provided young boys and girls with a caring adult who they could ask for help (i.e. their GRS trainer). Gender conversion observed on survey items pre- and post-intervention indicate that GRS

succeeded in promoting gender equity. It also equipped trainers with new facilitation techniques that can build resiliency in boys and girls in educational interactions outside of GRS. With the specific feedback obtained, GRS will improve the resiliency curriculum to better serve young boys and girls and adult trainers who face recurrent challenges and vulnerabilities in their lives.

Further research should be done to examine the spill-over effect of the Grassroot Soccer model in the community, as there is initial evidence that children and adults intend to practice resiliency building in their daily interactions. GRS trainers reported usage of GRS resiliency activities other youth interactions, showing that the concepts are easily used and have potential for sustainability and further community impact. Capturing the benefit of a sport-based resiliency-building model on community care for orphans and vulnerable children, for example, would be a valuable continuation of this evaluation. Additionally, determining the benefit of expanding the resiliency-building model to other youth activities such as drama, dance, art, or music could yield a benefit to youth, with communities forming new programs and yielding positive impact on communities.

INTRODUCTION

Background

It is estimated that by 2010 there will be 18 million children in Sub-Saharan Africa who will be orphaned due to AIDS. Evidence shows that losing one or both parents exposes youth to a particular vulnerability, making them less likely to receive health care, education, and other needed services.³ The depletion of healthy adults serving as guiding sources of support is an astounding crisis that faces children throughout the developing world and is especially prominent in southern African countries such as South Africa and Zambia.

There is a preponderance of literature across disciplines highlighting the need to provide guidance and mentorship for youth during their transition from adolescence to adulthood. Current prevention interventions in Southern Africa, ranging from media campaigns, to HIV/AIDS education mandates in schools to youth AIDS clubs have thus far been unsuccessful in adequately responding to this challenge. Unless public health practitioners meet the challenge of identifying and supporting vulnerable youth, it is not an exaggeration to state that the prosperity of entire nations will be threatened.

One theoretical solution for addressing the dire circumstances affecting the lives of youth focuses on the concept of resiliency and the promotion of positive developmental assets. Resiliency is conceived as the ability to bounce back from adversity or trauma and persevere, while positive developmental assets are regarded as characteristics both of an individual and of their environment that contribute to their healthy development.⁴ Evidence shows that interventions promoting protective factors are often considered optimal in situations where risk factors are difficult to identify or to eliminate completely.⁵ This implies that the promotion of positive assets, which are positive relationships, opportunities and competencies a young boy or girl needs to succeed, may have a significant effect on the health and well-being of vulnerable boys and girls.

A study conducted among adolescents in the United States reports that a higher number of positive assets are correlated with engagement in fewer risky behaviors. These assets or protective characteristics in a youth's life contribute to resilience, that is, to his or her ability to cope with trauma and difficult circumstances, such as the loss of a parent or family member to AIDS. HIV prevention literature also reports that self-esteem, for example, is highly relevant to "at risk" women's engagement in HIV risk behavior practices.⁶ These studies regarding resiliency and positive assets, however, are primarily focused on US-based and resource-intensive contexts. While they do not address the needs of youth in developing countries, where the greatest numbers of youth at risk exist, they do offer some direction for further research tailored to resource-poor settings.

Grassroot Soccer - Putting Resiliency Into Practice

One method of operationalizing the solution in resource-poor settings, drained of adult infrastructure, involves using sport as a tool for youth social development (Sport for Development). Grassroot Soccer (GRS) is one of the few organizations in southern Africa that dedicates itself to defining the core components of effective Sport for Development, piloting innovative models that use sport to unify

³ Joint United Nations Program on HIV/AIDS. <<http://www.unaids.org/en/>>

⁴ Developmental assets are the positive relationships, opportunities, competencies, values, and self-perceptions that youth need to succeed (Scales & Leffert, 1999).

⁵ Luthar, Suniya, and Cicchetti, Dante. (2000). The Construct of Resilience: Implications for Interventions and Social Policies. *Developmental Psychology*. Vol.12: pp.857-885.

⁶ Sterk CE, Klein H, Elifson KW. (2004). Self-esteem and "at risk" women: determinants and relevance to sexual and HIV-related risk behaviors. *Women Health*. 40(4):75-92.

communities toward the common goals of health, education, and economic prosperity. GRS uses low-cost community-based activities to leverage communal cohesion among youth by identifying and uniting teams that can serve as support networks and distributors of information.

Specific to this project, with the support of USAID through CARE, Grassroot Soccer used peer interactions and very strategic use of adult role models (often a scarce resource in southern Africa) to engage youth in meaningful education about topics such as decision-making, identifying strengths, building support networks, planning for the future, and HIV prevention in Zambia and South Africa. Grassroot Soccer staff conducted a broad review of resiliency literature, spanning perspectives from the fields of education, psychology, child development, and public health HIV prevention. Please refer to Appendix A for a Resiliency Literature Review.

With the help of Edgework Consulting,⁷ GRS staff developed a working definition of resiliency in a Sport for Development context.

Resiliency was defined as:

Seeing your strengths and building your skills so that you can stay strong and bounce back when things don't go your way.

GRS believes that youth inherently possess the necessary skills for resiliency and that often they just need to recognize those skills and practice them. Given that a resilient youth is less likely to engage in risky behavior, more likely to avoid HIV infection, and more likely to live a healthy life, GRS enhanced the organization's existing curriculum with resiliency messages and activities focused on building resiliency in youth. GRS used their experienced trainers as key agents to promote and develop strengths in the youth through four primary methods, in order to help these youth build an enhanced response to stressful situations. The "Four Ways to Stay Strong" were developed by GRS staff based on their field expertise in SfD curriculum design, as well as on evidence from the resiliency literature review.

The "Four Ways to Stay Strong" are:

- I. **Use your Strengths:** This involves improving a student's self esteem and confidence through things like constructive praise, vocabulary development, and providing a positive outlook. Youth are encouraged to identify things they like to do, are good at, and learn fast and use these skills to stay healthy and strong.
- II. **Plan your Next Move:** This involves helping young people to think about their future and realize that they can achieve success by making the right choices in life. Students will learn skills that will help them to strategize and achieve goals that they set for themselves in the short and long term.
- III. **Build your Support Team:** This involves using the concept of teamwork and joining the GRS "team" to show youth the value of surrounding themselves within a positive community of peers and mentors. GRS will help youth to recognize who are positive teammates and where to find them in the community.
- IV. **Take Action in the Community:** GRS helps youth to get active in their community. These types of activities may include: peer education, playing sports, organizing events, and mobilizing their peers, etc.

Additional key resiliency concepts include, "Coach's Voice" and "Praise Circle." "Coach's Voice" is designed to remind youth about the role that a good coach can have in one's life and to consider oneself as a coach each time a decision is made. "Coach's Voice" attempts to create a thoughtful decision-making process weighing the pros and cons for difficult choices. Even when there is not a trustworthy

⁷ Edgework Consulting is an experiential education specialist firm, contracted by GRS to assist with development of the Resiliency curriculum activities for this pilot project.

adult present, one can ask a young boy or girl: What does your coach's voice tell you in this situation? "Praise Circle" is an activity based on the concept of helping youth to identify their strengths and to practice them. Giving praise is an integral part of the GRS Resiliency Pilot Project that builds youths' positive vocabulary and recognition of things they do well. Giving specific praise is important to GRS in order for the youth to know how to replicate his or her behavior in the future. Giving specific praise is a facilitating skill that GRS encourages in its trainers in order to make their interactions with youth more meaningful.

With this working definition of resiliency and key methods for building resiliency in vulnerable youth, GRS developed a resiliency curriculum comprised of educational activities, a training-of-trainers model for those implementing the pilot intervention, and rigorous evaluation of the program uptake, training-of-trainers course, and program design and implementation in Zambia and South Africa.

Program delivery

With the support of USAID through CARE, GRS enhanced their existing coach's training guide with a resiliency curriculum, conducted two training of trainers, and launched a 6-week resiliency, HIV/AIDS education, and life skills pilot program for boys and girls in Lusaka, Zambia and in Johannesburg, South Africa.

In Lusaka, the program was implemented in 19 primary schools and 2 football teams in 12 different areas of Lusaka. In total, 45 trainers were trained in program facilitation and 457 boys and girls graduated from the pilot program.

In South Africa, GRS partnered with City Year South Africa and trained 20 City Year Service Leaders and implemented the program in 4 schools, graduating 150 children from the resiliency program. A Refresher Training of Trainers Course was conducted for trainers three quarters of the way through delivery of the program.

A Program Logic Model was developed to outline the objectives of the GRS Resiliency Program. GRS resources are listed and program outputs are described. The outcomes of the program activities are divided into short-, medium-, and long-term changes that are expected to occur as a result of the program. Finally, desired impacts of the program are described. These impacts will not be assessed in the present study. Please refer to Appendix B for a GRS Resiliency Pilot Program Logic Model.

EVALUATION DESIGN

Study Objectives

The primary purpose of this evaluation study was to assess if resiliency could be taught through a sport-based Grassroot Soccer Resiliency pilot curriculum by trainers and program participants in Zambia and South Africa.

ZAMBIA

The evaluation study consisted of pre- and post-intervention data collection from program participants in Lusaka, Zambia. It also included post-intervention individual interviews with a subset of participants and informal group discussions with Grassroot Soccer trainers at completion of training and at completion of program implementation. Demographic data was collected for each of the site catchment areas.

Sample

Program participants were selected from 21 schools and 2 football teams in 12 different areas of Lusaka. The schools and soccer teams were selected by the previous work experience and assignment of each trainer to the site. In these sites, 554 participants were assigned subject identification numbers for confidentiality of study materials. Among these students, 520 were invited to take the baseline pre-intervention survey. Of those offered a survey, 515 pre-intervention surveys were completed. Of those 554 students who were assigned a subject identification number, 537 were offered participation in the Grassroot Soccer Resiliency Pilot Project. Of the 21 schools and 2 football teams selected, 19 schools and 2 football teams offered the intervention to a total of 487 participants. Of those students offered participation in the Grassroot Soccer Resiliency Pilot Project, 457 completed the graduation requirements and were recognized as Grassroot Soccer Resiliency Graduates. Among those who graduated, 406 participants were offered post-intervention surveys upon completion of their graduation activities. Among those participants offered to return for a post-intervention survey, 280 returned and completed the survey.

Eligibility for the study included completing both pretest and posttest surveys and completing Grassroot Soccer Resiliency graduation requirements. Two subjects were removed for lack of completion of graduation requirements. And two subjects were removed from the sample for not having taken a pretest. The final study sample consists of 271 participants.

The table below compares baseline frequencies of different variables among the whole sample at baseline and among those who returned for a posttest. Any statistically significant baseline difference between the sample participants who returned for posttest and the entire pretest sample is indicated by an asterisk and is considered at the α 0.05 level.

Table 1. Composition of study participants as compared to baseline sample: Adolescent-targeted HIV prevention and resiliency-building intervention for boys and girls in Lusaka, Zambia.

Variable	Baseline Pretest N (%)	Returned for Posttest N (%)
Total	511 (100%)	274 (53.6%)
Number of schools	21	14
Number of football teams	2	2
Female	270 (52.8%)	159 (58.0%)*
Male	241 (47.2%)	115 (42.0%)*
Age		
10-12 years old	99 (19.5%)	40 (14.8%)
13 -14 years old	238 (46.9%)	122 (45.2%)
15-17 years old	157 (30.9%)	149 (55.2%)
18 years old	12 (2.4%)	7 (2.6%)
Grade*		
5	33 (6.5%)	(3.7%)
6	149 (29.1%)	96 (35.0%)
7	145 (28.3%)	71 (25.9%)
8	160 (31.3%)	81 (29.6%)
9	25 (4.9%)	16 (5.8%)
Have withdrawn from school	117 (24.4%)	62 (24.4%)
Both parents alive	317 (63.2%)	166 (61.9%)
Who do you live with*		
Both parents	231 (45.7%)	113 (42.2%)
Mother only	121 (24.0%)	59 (22.0%)
Father only	27 (5.4%)	13 (4.9%)
Neither Mother nor father	44 (8.7%)	22 (8.2%)
Other	82 (16.2%)	61 (22.8%)
Have safe place to sleep	469 (92.5%)	246 (91.1%)
Decision-Making		
11a) I believe I am responsible for my own decisions	405 (80.7%)	216 (81.2%)
11b) I believe I am able to make my own decisions	340 (67.5%)	178 (65.9%)
11c) I know how to stand up to peer pressure	289 (58.1%)	156 (58.4%)
11d) I think about all of my choices carefully	460 (91.8%)	
11e) I do the first thing that comes to mind	155 (30.9%)	71 (26.0%)*
11f) I don't think; I just do it	60 (11.9%)	33 (12.3%)
11g) I take my time to carefully decide what to do	470 (93.0%)	253 (93.4%)
11h) I make a list of	350 (69.9%)	194 (71.65)

Variable	Baseline Pretest N (%)	Returned for Posttest N (%)
positive and negative consequences		
11i) I do whatever feels good at the moment	290 (57.8%)	154 (57.5%)
Safety and Social Cohesion Index		
26a) I have many friends in my neighborhood	336 (68.6%)	182 (68.4%)
26b) I feel safe walking around in my neighborhood	359 (73.1%)	193 (72.0%)
26c) There is a lot of crime in my neighborhood	131 (26.7%)	68 (25.5%)
26d) I have heard that girls have been raped in my neighborhood	191 (39.1%)	99 (37.55)
26e) I am scared of some people in my neighborhood	302 (61.3%)	163 (60.8%)
26f) People in my neighborhood trust one another	264 (54.0%)	136 (51.1%)
26g) I have been harassed by someone of the opposite sex	128 (26.2%)	81 (30.1%)*
26h) I have a place to meet friends of same sex outside of school	320 (65.7%)	185 (69.6%)*
26i) There is someone I could borrow money from, if I needed	293 (59.6%)	159 (59.3%)
26j) There is someone that I trust, if I didn't have a place to stay at night	302 (61.45)	159 (59.1%)

* Statistically significant difference between baseline and posttest sample at α 0.05 level as determined by Pearson χ^2 test
 ψ All measures taken at baseline pretest

Table 2. Comparison of eligible study participant sample Age vs. Gender

Age	Male N (%)	Female N (%)	Total N (%)
10	0 (0%)	2 (1.3%)	2 (0.8%)
11	1 (0.9%)	13 (8.4%)	14 (5.2%)
12	14 (12.4%)	10 (6.5%)	24 (9.0%)
13	19 (12.4%)	32 (20.7%)	51 (19.0%)
14	30 (26.6%)	41 (26.5%)	71 (26.55)
15	19 (16.8%)	28 (18.1%)	47 (17.5%)
16	15 (13.3%)	19 (12.7%)	34 (12.7%)
17	11 (9.7%)	7 (4.5%)	18 (6.7%)
18	4 (3.5%)	3 (1.9%)	7 (2.6%)
Total	113 (100%)	155 (100%)	268 (100%)

Site Demographic Data

Each intervention site was visited and assessed by GRS staff on a number of specifically developed criteria. Observational assessments were recorded per site and can be found in Appendix C - Table 3.

METHODS

Survey

The Grassroot Soccer Resiliency Pilot Surveys were designed to identify changes in indicators of resiliency among students in Lusaka, Zambia. These indicators are based on the four primary curriculum themes developed by Grassroot Soccer through a combination of extensive literature review and field expertise. The four primary themes in this sport-based resiliency curriculum are: 1) Know your strengths; 2) Build your support team; 3) Plan your next move; 4) Take action in the community.

The pre- and post-test survey questions were aimed to capture change in the following expected outcomes of the program were participants'

- 1) recognition of their own strengths or assets,
- 2) reported decision-making practices,
- 3) goal-setting and making plan for next step in life,
- 4) social networks and peer support,
- 5) problem-solving and help-seeking behavior, including identification of a trustworthy adult who participant feels he or she can ask for help,
- 6) community engagement.

The same outcome questions were included in both pre-intervention and post-intervention surveys. The pretest survey had eight additional questions capturing level of safety in surroundings and level of vulnerability. These items were designed to collect descriptive data on the study participants, including the death of either parent, having a safe place to sleep, and the experience of neighborhood crime or violence, etc.⁸ In the post-test survey, three questions were added addressing specific concepts that were presented in the program. These included listing the "Four Ways to Stay Strong," reported frequency of list-making practices, and new words learned throughout the program.

Development of Surveys

The pretest survey was tested on two groups in Lusaka to inform revision prior to administration. Five males, ages 14 to 18 years, from the Breakthrough Sports Academy took the survey in the first test. These youth were, on average, slightly older than study participants, had slightly higher educational attainment levels, and were representative of study participants' socioeconomic levels. Revisions were made and the survey was re-administered to two groups of youth from the Africa Directions center in Mtundere Township in Lusaka. In both cases, each question was read aloud by a GRS staff member in English.

Posttest surveys were not tested before administration. After administration of posttest to class #10 (ID numbers 185-199) minor revisions were made. Question order was changed, moving questions 40 and 41 to the middle of the survey (following question 16) and an open ended question listing the Four Ways to Stay Strong was added and administered first on the back of the survey. These changes were applied to all posttests following class #10 (ID numbers 185-199).

Final revisions to the survey were made by Martha Brady from the Population Council and Grassroot Soccer staff.

Administration of Pretest Surveys

Surveys were administered to study participants by two trained Grassroot Soccer Monitoring & Evaluation (M&E) staff. Survey items were read aloud in English and translated into Nyanja, the local language, when appropriate. The level of English proficiency of the entire class typically influenced oral

⁸ Please refer to Table 1. Composition of Study Participants for full presentation of descriptive data items.

translation into Nyanja. After the first week-and-a-half, the two GRS M&E staff split and administered surveys alone. The GRS English-only staff member only administered surveys where the level of English proficiency of the class was determined to be high enough to not necessitate translation.

Explanations of specific vocabulary in the survey were given in English and/or in Nyanja. GRS staff avoided giving examples of the words in question, but rather gave a definition of the word. The following list of words was explained for each pretest survey administered at baseline: “withdraw,” “peer pressure,” “consequences,” “goals,” “praise,” “accomplishments,” “harassed,” “opposite sex,” and “urgently.” Other vocabulary words were explained at pretest upon participants’ request, including: “strengths,” “plan,” “lists,” “post-university,” “compliment,” “crime,” “rape,” “role model,” and “skills.” Logistical questions were also answered. Additionally, assistance was given for spelling in open-ended questions such #9, “List three things you do well” and #12, “What are your goals for your future?”

Survey administration always began with the same oral instructions and request for consent from the participants. GRS staff also introduced the Resiliency Pilot project and did a warm-up energizer activity with participants. After the second survey administered, GRS staff began taking a break after question #25 to do a quick energizer activity with the participants. Students were often given sweets at the completion of the exercise.

Overall, the comprehension of the participants varied dramatically. Some participants had low levels of English comprehension; others did not need translation at all. Some students had very poor English writing skills, some wrote and read well in English. These disparities tended to be clustered by class and all needs of participants were addressed at the time of survey administration. The testing conditions ranged as well. Some participants did not have their own pens and some had to share a desk or bench. One survey was administered outdoors on a football pitch. When groups consisted of more than 30 students, students were randomly selected to participate in the pretest baseline survey.

Administration of Post-Test Surveys

The post-test survey reflects questions that measure change in knowledge or behavior. The survey includes questions from the pre-test as well as two additional questions asking about list-making and new vocabulary.

The survey was given after the graduation ceremony because planning and participating in the graduation ceremony is an important part of the GRS curriculum. Students completed the graduation – performed plays, poems, dances, received certificates, took pictures, and received drinks – before taking the post-test survey. The survey was administered in the same way the pretest was given, except that there was no energizer in the middle of the survey. The post-test was shorter and did not require a break. It was 5 pages long with 26 questions. The pretest was 8 pages with 39 questions.

Data Management

Each student and corresponding survey was given an individual student identification code number between one and 535. The number was attached to the name of the student so that no name was recorded on the survey itself. Each survey was also labeled with the date, time, name of the school, and the person administering the survey. Names and student codes were recorded on an electronic spreadsheet using *Excel* and were only referred to by GRS M&E staff for verification of student name and ID number. All names and identities of participants were kept anonymous for confidentiality purposes. After the completion of the surveys, each school was given a random school code number as well. Surveys were organized into piles and each pile was given a cover sheet with the school code, name of the school, name of the trainer, date, and the range of student ID codes.

Data was entered into an *Excel* spreadsheet database. Notes are kept on the spreadsheet regarding any abnormalities in the surveys or the method of data entry. Six trained GRS staff members entered data onto three computers. In some cases, data entry staff worked in pairs to double-check each other's work for errors. Data from the three computers were compiled into one master *Excel* spreadsheet database for pretest data and one for post-test data.

All data was reviewed for data entry errors. Completion of both pretest and post-test was verified for study sample eligibility. Those without both a pretest and post-test were not considered in the study sample. Completion of graduation requirements was also verified for eligibility in the study sample by reviewing trainer monitoring books and attendance logs. Two subjects were removed for lack of completion of graduation requirements. Two subjects were removed from the sample for not having taken a pretest.

Data analysis

Analysis of Closed Survey Questions

Paired t-tests were performed using STATA statistical software to compare change in survey response from pre- to post intervention for those participants who completed both a pretest and a posttest (n=274). For those survey questions that allowed multiple responses, each response was assigned a dummy variable of (0,1). Change in each response was then considered separately pre- and post-intervention. Results were disaggregated both by gender and then by age category in order to isolate change within these groups. Desegregation by both age category and gender simultaneously was not conducted due to the small sample size that would exist in each of the categories, which would threaten the assumptions made in the statistical tests. Statistically significant change in survey times, from pre-to posttest, at the 0.01, 0.05, and 0.10 α -level were entered into results tables. Non-statistically significant results are not reported here.

Analysis of Open-Ended Survey Questions

Responses to open-ended questions were reviewed by the investigator. Thematic codes were then developed based on reoccurring themes observed in the data. These codes were then applied manually to the responses. Some responses were assigned more than one code because the child wrote two ideas that spanned two separate themes. A dummy variable was created for each code of (0,1). Paired t-tests were then run to identify change in the participants' responses before and after the Resiliency intervention. In the case where three "strengths" or three "goals" were listed, all themes at pretest were grouped and compared to all themes listed at posttest. This was done in order to capture the full range of themes expressed by the participant without regard for order of those themes. Analyses were disaggregated by gender first and then by age.

Participant Interviews

Twenty-nine students were randomly selected from all graduating programs and individual interviews were conducted with these students by GRS M&E staff in Nyanja. Interviewer questions were designed to discover what lessons the student had learned in GRS and what part of GRS they enjoyed the most. Each interview was recorded by audio and transcribed in English. The investigator read the interview transcripts and key themes were identified in the responses.

Informal Discussions

GRS held a Refresher Training-of-Trainers Course (1 day) at the conclusion of the Resiliency Program (n=26). At this training, there was an informal discussion held with trainers for their reflection on the Resiliency materials and Program. Trainers were asked to share their views of the successes and challenges with the Resiliency concepts, activities, and teaching experience. Notes were

SOUTH AFRICA

Informal discussions

Weekly reflection and planning meetings were held between the trainers (n=20) and GRS staff. At these meetings an informal discussion took place to report on the “Pluses (+) and Delta (Δ)” (that is the things that went well and the challenges or things that need change) during Resiliency Program facilitation sessions that week. Recommendations were made by the group on how to improve the facilitation of the upcoming week’s session. Trainers also took turns presenting the activity for the upcoming week to the group. Both GRS staff and the other trainers gave feedback (“Pluses & Deltas”) to those trainers who facilitated the activity.

Trainer Feedback Form

GRS staff conducted a Refresher Training-of-Trainers Course (1 day) near the end of the Resiliency Program implementation. At this time, trainers were trained in the remaining GRS Resiliency Program activities. Trainers also reviewed all of the key messages and teaching steps to those activities that they had already facilitated in the program. Finally, each trainer filled a Feedback Form, identifying strengths and improvements of themselves as trainers, the Resiliency Program curriculum, program implementation, and GRS staff trainers (n=20).

STUDY LIMITATIONS

Loss to follow-up between pre- and post-test in Zambia is the largest limitation of this study. This attrition occurred at various points in the study. However, Table 1. illustrates that the final study sample did not differ very much from the main group at baseline (only a few measures showed statistically significant difference between the pre-test and the post-test samples).

At baseline, 520 surveys were filled and at posttest only 274 surveys were filled. The baseline survey was offered to participants from 21 schools and 2 football teams. Of those, 20 sites carried out GRS Resiliency Programs (19 schools and 2 football teams). Eighteen sites completed all the activities, including a graduation ceremony (two classes were ineligible for the post-test because they did not complete the graduation ceremony, which is a required GRS activity). Of the 18 classes that graduated, GRS staff invite 16 back to complete a post-test. Many participants were absent from the post-test, which was arranged outside of normal school hours. The lacking attendance at the post-test was primarily due to the timing of the program. Schools were closing for holiday, and this coincided with the conclusion of the Resiliency Program. It was more difficult to attract the students to return for a post-test once school had closed. Also, since the post-test was administered after the GRS graduation ceremony, there was little incentive left for students to return. Transportation and duties at home may have also kept some kids from attending the post-test. As is shown in Table 2, the average age of those who attended the post-test was slightly higher than the average age of the baseline group. It is likely that older kids have more mobility outside of attending school than the younger students have.

In this study, the programs in Zambia and in South Africa were assessed separately using slightly different methods. A limitation of this study design is that it offers little comparability between South Africa and Zambia. With more resources available, it would have been beneficial to use the same methodology in both countries and make a regional comparison.

FINDINGS

ZAMBIA

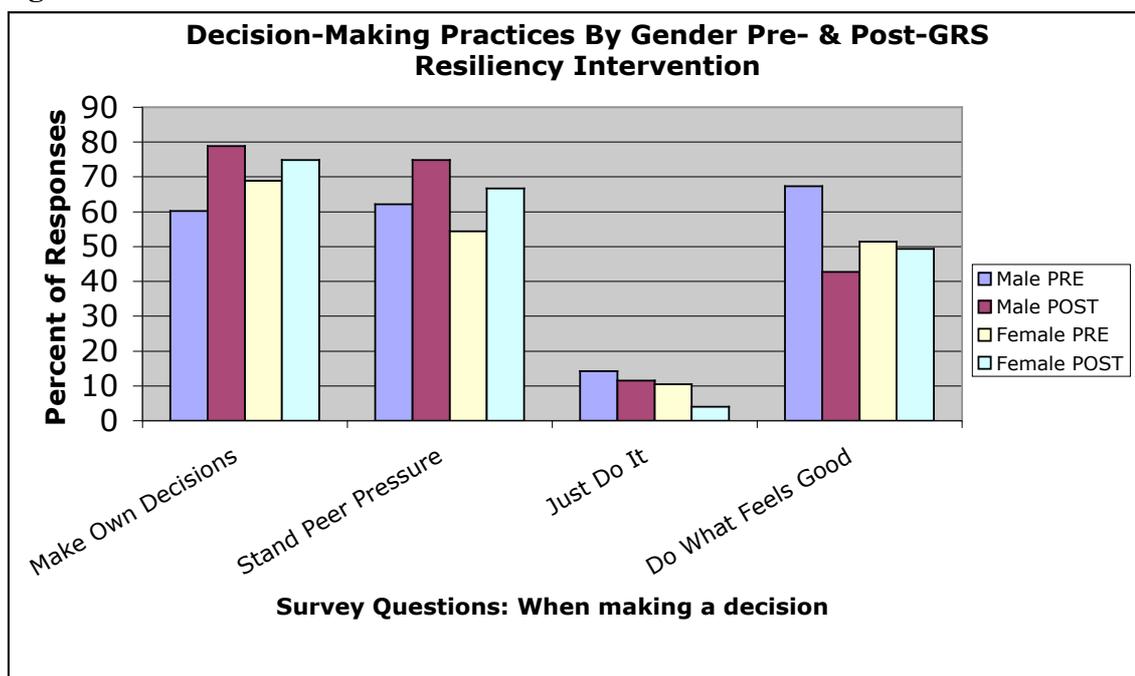
Changes in survey response from baseline to post-test separated by gender and age category: Decision-making, Goal-setting, Problem-solving and Help-seeking, Community Engagement, and HIV/AIDS Attitudes and Knowledge

Please refer to Table 4. Comparisons of Survey Measures Pretest to Posttest by Gender in Appendix D for complete data presentation.

GENDER

Decision-making

Figure 1.



I believe I am able to make my own decisions – Agree

There was significant change in participant students' reported decision-making practices from baseline to the completion of Grassroot Soccer Resiliency intervention.⁹ Boys who responded¹⁰ increased 18.6 percent (from 60.2-78.8 percent) in their belief that they are able to make their own decisions. Though the change among girls was not statistically significant at the 0.05 level, girls' reported a 5.96 percent increase (68.9-74.8 percent) in agreement to the same statement, nearly reaching the level observed among boys.

I know how to stand up to peer pressure – Agree

Both boy and girl respondents showed a significant change in agreement that they know how to stand up to peer pressure. Boys increased 12.6 percent, from 62.2 percent to 74.8 percent. Girls caught up to their male peers' baseline level with a 12.3 percent increase from 54.4 to 66.7 percent.

⁹ Changes in all survey variables from pretest to posttest were tested by means of paired sample t-tests prepared by Jacob Bor. Statistical significance was determined by p-values at 0.05 and 0.00 α levels.

¹⁰ Sample size of respondents to both pretest and posttest range from n=104 to n=115 for boys and n=146 to n=158 for girls.

I don't even think about it; I just do it – Agree

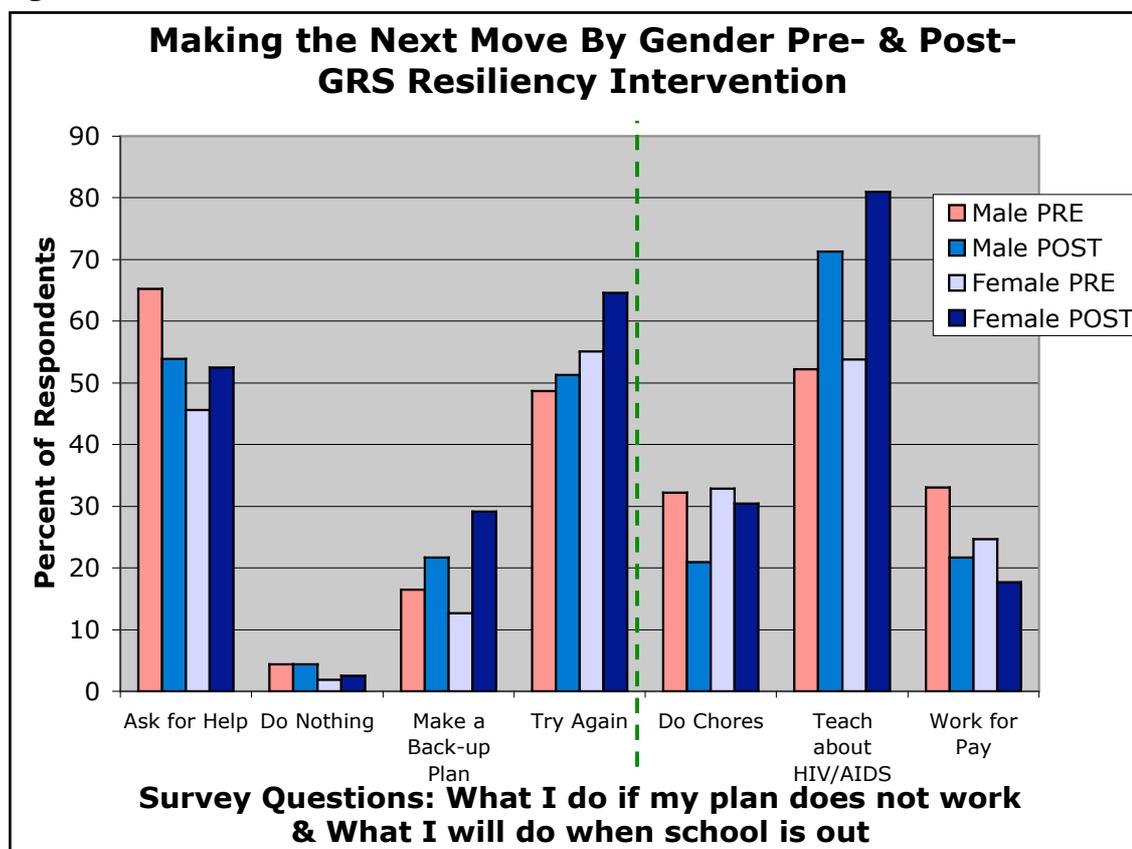
Among girl respondents, there is significant 6.6 percent decrease in agreement that when making a decision “I don’t even think about it; I just do it,” (10.5-4.0 percent). Among boy respondents, the 2.7 percent decrease in agreement to the same statement is not statistically significant (14.2-11.5 percent).

I do whatever feels good at the moment – Agree

There is a significant decrease of 24.6 percent in boy respondents who agree with the statement “I do whatever feels good at the moment,” (from 67.3 to 42.7 percent). The percentage of boys who agreed with this statement dropped to converge with their girl peers. The girl respondents had a lower percentage of agreement than boys at baseline and showed an insignificant drop of 2.1percent (from 51.4-49.3 percent).

Goal-setting and Making the Next Move

Figure 2.



What do you do if your plan does not work? – Ask for help

There was significant change from baseline to post-test in both male and female responses to the question, “What do you do if your plan does not work?”¹¹ The percentage of boys who selected “Ask for help” dropped 11.3 percent from 65.2 to 53.9 percent. Girls showed no significant change from 45.6 at baseline to 52.5 percent at post-test.

¹¹ Respondents were asked to select all survey answers that applied to their case.

What do you do if your plan does not work? – Make a back-up plan

Girl respondents showed a significant increase of 16.5 percent in those who selected “Make a back-up plan” when a plan does not work. Their boy counterparts did not show a significant change from 48.7 to 51.3 percent who selected the same response.

What do you do if your plan does not work? – Try again

Girl respondents who selected “Try again” when a plan does not work increased significantly by 9.5 percent (55.1 to 64.6 percent). Boy respondents did not show significant change; 48.7 to 51.3 percent selected this response.

What will you do when school is out? – Chores/ Housework

When asked, “What will you do when school is out?” boy respondents’ selection of “Chores/ Housework” decreased by 11.3 percent (32.2 to 20.9 percent) from baseline to post-test. Girl respondents showed a non-significant decrease of 2.5 percent in selection of the same response (32.9 to 30.4 percent).

What will you do when school is out? – Play sports

Though not significant at the 0.05 level, girl respondents who selected “Play sports” “when school is out” increased by 7 percent (32.9-39.9 percent, p-value 0.117). Boy respondents did not show a significant change from 47.0 at baseline to 48.7 percent at post-test.

What will you do when school is out? – Teach others about AIDS

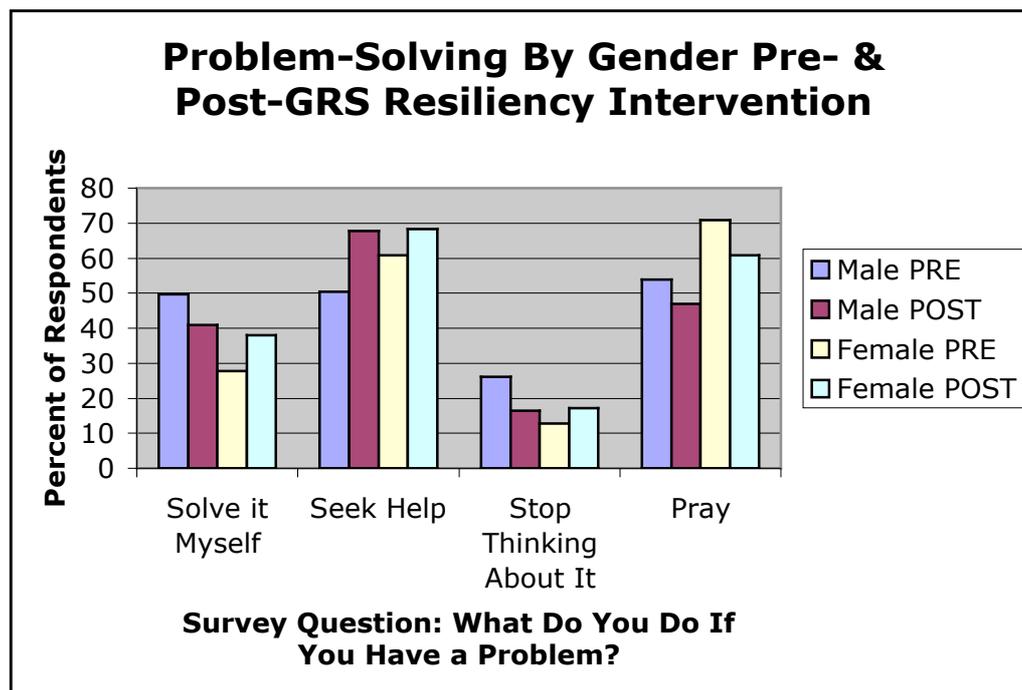
Both boy and girl respondents who selected “Teach others about AIDS” “when school is out” increase significantly (at 0.00 α level). Boys increased by 19.1 percent from 52.2 at baseline to 71.3 percent at post-test. Girls increased by 27.2 percent, from 53.8 percent at baseline to 81.0 percent at post-test.

What will you do when school is out? – Work for pay

Boy and girl respondents both decreased significantly in their selection of “Work for pay” “when school is out” from baseline to post-test. Boys decreased by 11.3 percent (33.0-21.7 percent). Girls who selected “Work for pay” decreased by 7.0 percent (24.7-17.7).

Problem-solving and Help-seeking Behavior

Figure 3.



What do you do if you have a problem? – Try to resolve it myself

Significant changes were observed in boy and girl respondents' responses to questions regarding problem-solving and help-seeking practices from baseline to post-test. When asked, "What do you do if you have a problem?" fewer boys selected "Try to resolve it myself" at post-test than at baseline and more girls selected this answer at post-test than at baseline. Boys' selection of "Try to resolve it myself" decreased insignificantly by 8.7 percent (49.6-40.9 percent, p-value 0.11). Girls' selection of "Try to resolve it myself" increased significantly by 10.1 percent (27.8-38.0 percent, p-value 0.01).

What do you do if you have a problem? – Seek help from someone

Both boy and girl respondents who selected "Seek help from someone when you have a problem" increased significantly from baseline to post-test. Boys' selection of "Seek help form someone" increased by 17.4 percent (50.4 to 67.8 percent, p-value 0.01). Girls' selection of "Seek help form someone" increased insignificantly by 7.6 percent (60.8-68.4 percent, p-value 0.06).

What do you do if you have a problem? – Try to stop thinking about it

Boys who selected "Try to stop thinking about it" when they have a problem decreased significantly by 9.6 percent (26.1 to 16.5 percent). Though not statistically significant, girl respondents who selected "Try to stop thinking about it" when they have a problem increased by 4.4 percent from baseline to post-test (12.7to 17.1 percent, p-value 0.16).

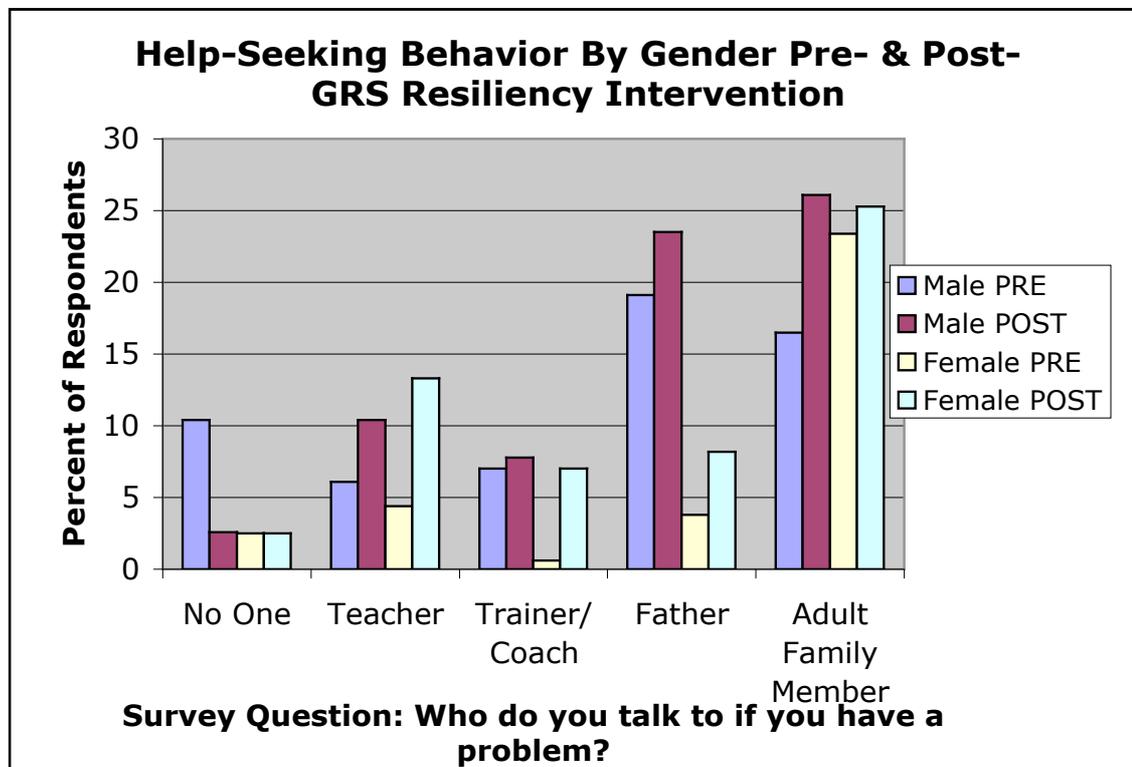
What do you do if you have a problem? - Pray

Girl respondents who selected "Pray" in response to the question "What do you do when you have a problem" decreased significantly from baseline to post-test by 10.1 percent (70.9 to 60.8 percent). Boys also decreased in this choice, although insignificantly by 7.0 percent (53.9 to 47.0 percent, p-value 0.22).

If you have a problem do you have someone you can talk to about it? – YES

Both boy and girl respondents show a slight increase, though not statistically significant, in identifying someone they can talk to when they have a problem. Boys increased from 88.7 to 92.5 percent and girls increased from 94.2 to 96.8 percent (3.8 and 2.6 increase respectively).

Figure 4.



Who is the person you usually talk to when you have a problem? – No one

Boy respondents showed a significant decrease of 7.8 percent in selection of having “No one” to talk to when they have a problem and converged to match their girl peers at post-test (10.4 to 2.6 percent). Girls showed no significant change in selection of “No one” to talk to from baseline to posttest (2.5-2.5 percent).

Who is the person you usually talk to when you have a problem? – Teacher

Girl respondents who selected “Teacher” as a person they usually talk to when they have a problem increased significantly by 8.9 percent from baseline to posttest (4.4-13.3 percent, p-value 0.00). Boy respondents had a higher percentage of those who selected this response at baseline than girls, and showed no significant change at posttest (6.1-10.4 percent, p-value 0.20).

Who is the person you usually talk to when you have a problem? – Trainer/ Coach

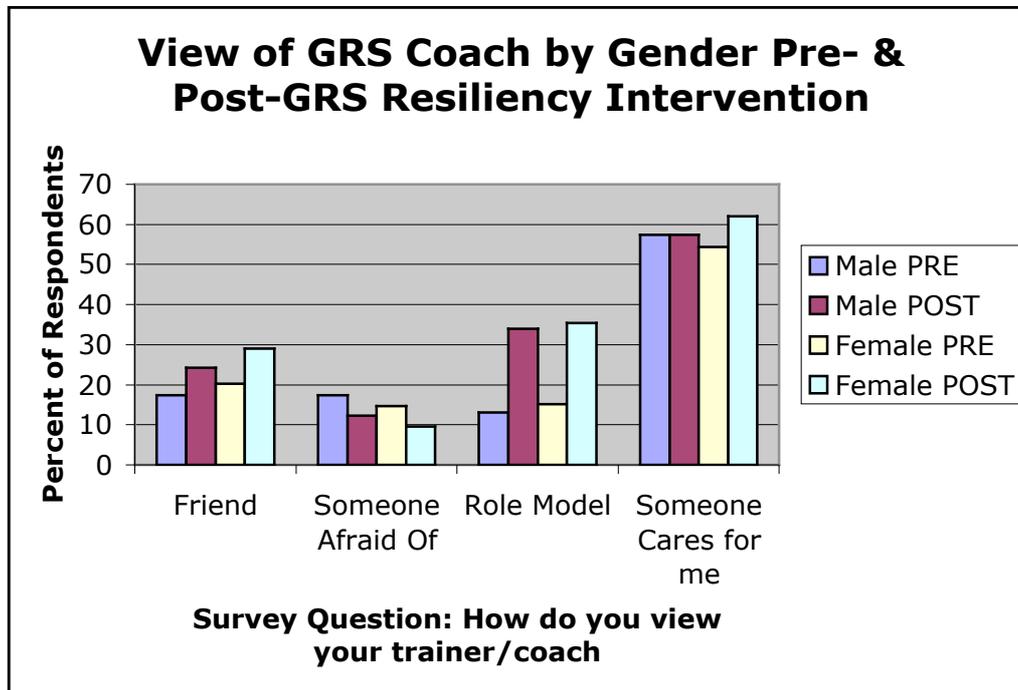
Girls who selected “Trainer/ Coach” as someone they usually talk to when they have a problem increased significantly by 6.3 percent (p-value 0.00). This increase converged percent of boy and girl respondents who selected “Trainer/ Coach” from 7.0 and 0.6 percent, respectively, at baseline to 7.8 and 7.0 percent, respectively, at post-test.

Who is the person you usually talk to when you have a problem? – Adult family member

Boy respondents who selected “Adult family member” as the person they usually talk to when they have a problem increased significantly by 9.6 percent (16.5 to 26.1 percent). Girl respondents did not show

significant change in selection of “Adult family member” (23.4 to 25.3 percent); the girls, however, were already higher than the boys in this measure at baseline.

Figure 5.



How do you view your trainer or coach? – A friend

Girl respondents who selected “A friend” for how they viewed their trainer or coach increased significantly by 8.9 percent (20.3 to 29.1 percent). Boy respondents who selected “A friend” increased by 7.0 percent, though not statistically significantly (17.4 to 24.3 percent, p-value 0.13).

How do you view your trainer or coach? – Someone I am afraid of

Both boy and girl respondents who selected “Someone I am afraid of” to describe their trainer or coach decreased, though insignificantly, by 5.2 and 5.1 percent, respectively (p-value 0.20 and 0.10, respectively).

How do you view your trainer or coach? – Role Model

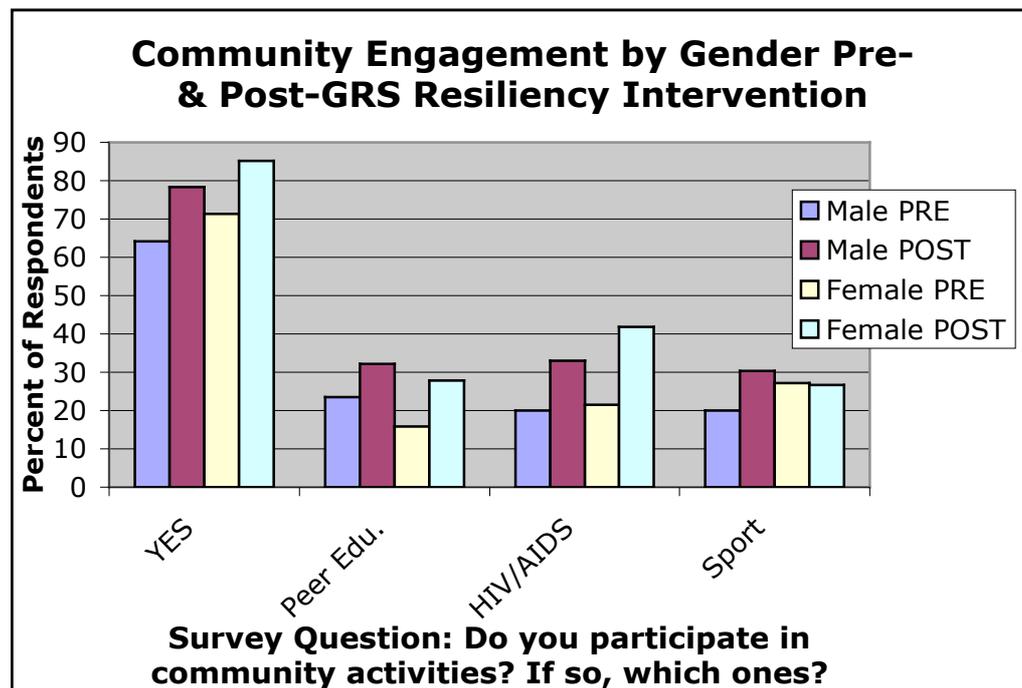
Girl and boy respondents who selected “Role Model” to describe their trainer or coach increased significantly from baseline to post-test (p-value 0.00 for both genders). Boys who selected “Role Model” increased by 20.9 percent (13.0 to 33.9 percent) and girl respondents increased by 20.3 percent (15.2 to 35.4 percent).

How do you view your trainer or coach? – Someone who cares for me

Girl respondents who chose “Someone who cares for me” to describe their trainer or coach increased, though insignificantly, by 7.6 percent (p-value 0.12). Boy respondents showed no change from baseline to post-test in this measure (p-value 1.00).

Community Engagement

Figure 6.



Do you participate in activities that help your community?

Both boy and girl respondents who selected “YES” increased significantly from baseline to post-test. Boys increased by 14.2 percent (64.2 to 78.3 percent) and girls increased by 13.6 percent (71.4 to 85.1 percent).

What activities have you participated in during the last 6 months in your community – Peer Education

Girl respondents who selected “Peer Education” as an activity they have participated in recently increased significantly by 12.0 percent (15.8 to 27.9 percent). Boy respondents who selected “Peer Education” increased insignificantly by 8.7 percent (23.5 to 32.2 percent, p-value 0.09).

What activities have you participated in during the last 6 months in your community – HIV Awareness Campaign

Girl respondents who selected “HIV awareness campaign” as an activity they have participated in recently increased significantly by 20.3 percent (21.5 to 41.8 percent, p-value 0.00). Boy respondents who selected “HIV awareness campaign” increase insignificantly by 13.0 percent (20.0 to 33.0, p-value 0.01).

What activities have you participated in during the last 6 months in your community – Sporting Event

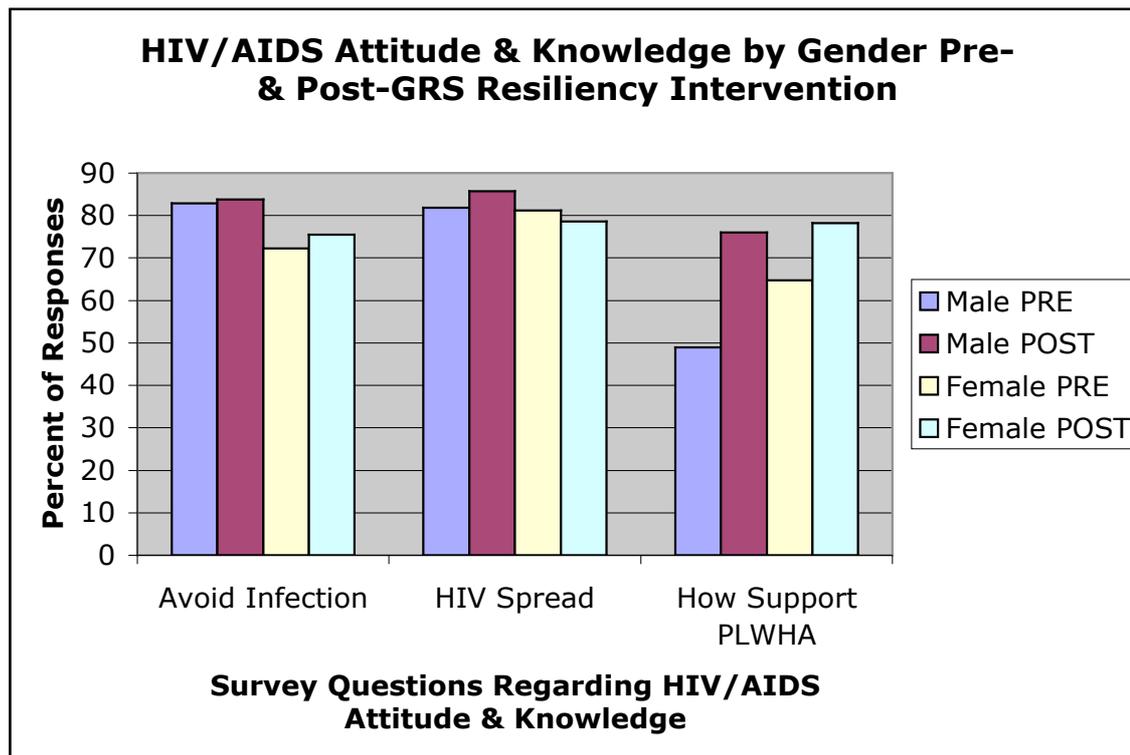
Boy respondents who selected “Sporting event” as an activity they have participated in recently increased significantly by 10.4 percent (20.0 to 30.4 percent). Girl respondents who selected “Sporting event” increased, though not significantly, by 0.6 percent (27.2 to 26.6 percent, p-value 0.88).

I believe I have the skills to contribute to my community

Boy respondents who selected “YES” to having skills to contribute to their community increased insignificantly by 4.8 percent (88.5 to 93.3 percent, p-value 0.2). Girl respondents who selected “YES” did not increase significantly, changing by 0.7 percent from baseline to post-test (88.8 to 89.5 percent, p-value 0.83).

HIV/AIDS Attitude and Knowledge

Figure 7.



*Graph represents % of respondents who correctly agree with factual statement regarding HIV prevention and transmission and who agree with positive support of PLWHA.

The most effective way to avoid HIV infection is to not have sex at all

Both boy and girl respondents showed no significant change from baseline to post-test in agreement with this statement. Boys who agreed increased by 1.0 percent (82.9 to 83.8 percent, p-value 0.86) and girls who agreed increased by 3.2 percent (72.3 to 75.5 percent, p-value 0.44).

The most common way HIV is spread in South Africa is through unprotected sex with an HIV positive person

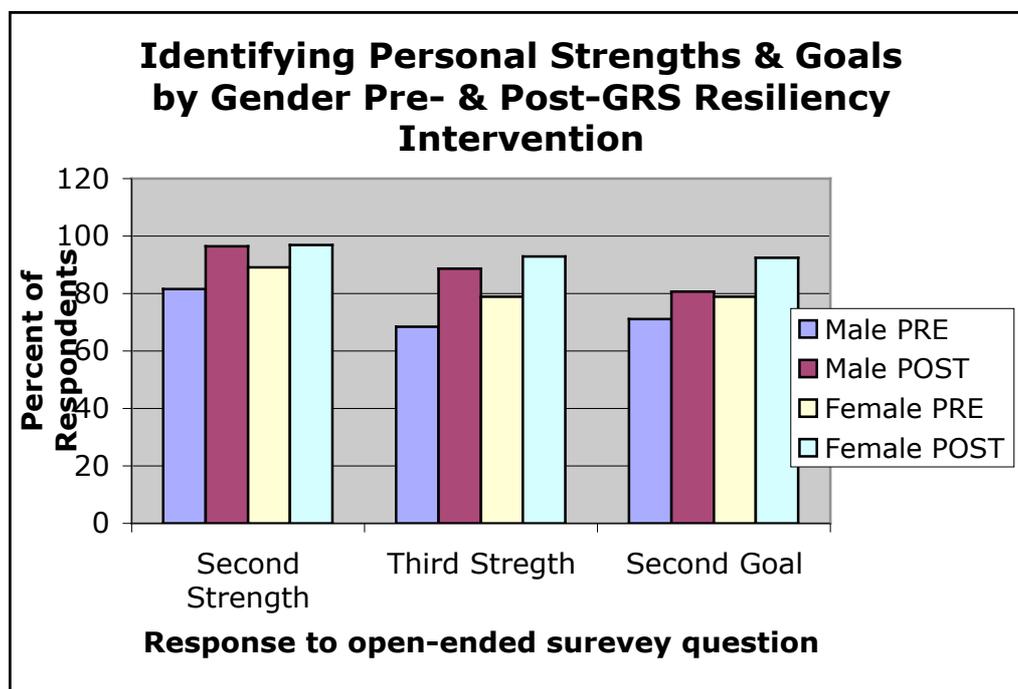
Both boy and girl respondents showed no significant change from baseline to post-test in agreement with this statement. Boys who agreed increased by 3.8 percent (81.9 to 85.7 percent, p-value 0.42). Girls who agreed decreased by 2.5 percent (81.2 to 78.6 percent, p-value 0.50).

I know how to support someone in my community who is HIV positive

Both boy and girl respondents who agree with this statement increased significantly from baseline to post-test. Boy respondents who agreed increased by 26.9 percent (49.0 to 76.0 percent). Girl respondents who agreed with this statement increased by 13.5 percent (64.7 to 78.2 percent).

Personal Strengths

Figure 8.



Students who reported having more than one personal strength increased significantly from pre-test to post-test for both genders (students were asked to write three things they were good at). The number of girls who identified a second personal strength increased by 7.6% (p-value 0.00) from pre-test to post-test. Boys increased in identifying a second personal strength by 14.9% (p-value 0.00) from pre-test to post-test. Both boys and girls who identified a third personal strength increased significantly. The number of girls who reported having three strengths increased by 14.1% (p-value 0.00) from pre-test to post-test. Boys increased by 20.2% (p-value 0.00) in identifying three strengths. In all occasions, fewer boys reported strengths than girls at baseline. At post-test both genders were nearly equal in identifying their strengths.

Statistically significant change in the theme of strengths was only observed in a few cases. From pre-test to post-test boys who reported having a strength that was school or academically related decreased by 12.3% (p-value 0.01). Boys who reported a strength that was sports related increased by 11.4% (p-value 0.02). Both boys and girls who reported HIV/AIDS prevention related strengths increased significantly from pre-test to post-test. Boys who reported having a strength relating to HIV/AIDS prevention activities increased by 9.7% (p-value 0.00) and girls increased by 4.5% (p-value 0.01). No other statistically significant change in the theme of the response was observed from pre-test to post-test. Please refer to Table 4b. Identifying Personal Strengths and Future Goals: Comparisons of Open-Ended Survey Items Pre-test to Post-test by Gender in Appendix D.

Future Goals

A significant increase was observed in the percent of respondents who were able to record more than one goal for the future at post-test. Boys who listed a second goal increased from 71.1% at pre-test to 80.7% at post-test (p-value 0.070). Girls who listed a second goal for the future increased from 79.0% to 92.4% (p-value 0.000). A few themes expressed in the open-ended responses changed significantly from pre- to post-test. Among them, boys' future goals with HIV/AIDS themes increased from 0.9% to

4.4% (p-value 0.045). Both boys and girls increased significantly in their goals that included GRS/ Life skills/ Teaching about HIV/ Resiliency related themes. Boys increased by 6.1% (p-value 0.019) and girls increased by 7.0% (p-value 0.011). Boys' goals that included helping or teaching the community increased significantly from 1.8% to 7.9% (p-value 0.034), whereas girls increased from 5.1% to 7.6% at post-test (p-value 0.287). Girls' goals that included owning a house or business decreased from pre- to post-test by 3.2% (p-value 0.025). Many other themes identified in the open-ended responses for future goals did not change significantly from pre-test to post-test. Please refer to Table 4b. Identifying Personal Strengths and Future Goals: Comparisons of Open-Ended Survey Items Pre-test to Post-test by Gender in Appendix D.

Four Ways to Stay Strong

Study participants were asked to list the “Four Ways to Stay Strong” from the GRS Resiliency Program only in the post-test. At post-test, 47% of students correctly listed one of the “Four Ways to Stay Strong.” Among those students who did not list any of the “Four Ways to Stay Strong,” 26.2% listed GRS resiliency messages, 14.5% listed HIV/AIDS Prevention/Education messages, 26.6% listed words from the GRS “Team Contract,”¹² 7.8% listed sports-related messages, 4.8% reported nutritional messages, and 20.2% listed responses with other themes (“support your local team,” “pray,” etc.). Please refer to Table 4c. Open-Ended Post-Test Only Measures in Appendix D.

AGE CATEGORY

Statistically significant change in responses from pre- to post-test was most frequently observed among the 13-14 year old category and the 15 & over category (Three age categories are: 12 & under; 13-14; 15 & over). Please refer to Table 5. Comparisons of Survey Measures Pre-test & Post-test by Age Category in Appendix D for survey measures disaggregated by age category.

Decision-making

Statistically significant change from pre-test to post-test, agreeing with the statement “I believe I am able to make my own decisions,” was observed in the 15 & over category only with an increase of 11.9% (p-value 0.023). Responses in the 12 & under category dropped, though insignificantly, for agreeing with “I know how to stand up to peer pressure” (-16.9%, p-value 0.136). A large and significant increase in was observed for the same survey item among the 13-14 and the 15 & over categories. Increase in reported ability to stand up to peer pressure from pre- to post-test was 16.4% (p-value 0.004) and 18.4% (p-value 0.004) respectively. Agreement with “I don’t even think about it; I just do it” decreased significantly for those 13-14, -7.4% (p-value 0.020). A large and significant change was observed among the 13-14 group on the item: when making a decision, “I make a list of positive and negative consequences.” Those 13-14 year olds who make a list increased by 13.2% (p-value 0.006) from baseline to post-test. Both of the other age categories showed insignificant change on this same survey item. A large and significant change was observed among the 12 & under category on the item: “I do whatever feels good at the moment.” decrease of 28.2% (p-value 0.006) of respondents who agreed with this statement was observed. An insignificant decrease was observed for the 13-14 group (-7.6 %, p-value 0.081) and an almost significant increase was observed for the 15 & over group (+11.2%, p-value 0.070). Statistical significance was considered at the 0.05 and 0.01 α levels.

Goal Setting & Making the Next Move

Significant change was observed among the 13-14 year old category. Those who would select to “make a back-up plan” when met with a challenge increased by 16.9%, from 12.9% to 29.8% (p-value 0.000). Among 13-14 and 15 & over groups, those who chose to “teach others about AIDS” when school is out increased by 16.1%, from 61.3% to 77.4% (p-value 0.002) and 37.7%, from 41.5% to 79.2% (p-value

¹² Please refer to the GRS Resiliency Curriculum for further detail on specific concepts and activities.

0.000) respectively. Among 12 & under, those who selected to “work for pay” when school is out decreased by 19.5% (p-value 0.031).

Problem-solving & Help Seeking Behavior

The greatest and most frequent changes from pre- to post-test are observed among the 13-14 and the 15 & over groups. When asked, “what do you do if you have a problem,” those 13-14 year olds who selected “seek help from someone” increased from 58.1% to 71.8% (p-value 0.006) and among 15 & over selection increased from 57.5% to 67.9% (p-value 0.048) at post-test. Both 13-14 and 15 & over participants increased in their selection of a teacher as a person they would talk to if they had a problem, 7.3% and 9.4% increase respectively. Significant increase was observed among those 13-14 year olds who selected their mother as the person they talk to when they have a problem, 24.1% at baseline and 35.5% at post-test (p-value 0.030). Similarly, an increase in 13-14 year olds selected their father as the person they talk to when they have a problem, 10.5% at baseline and 18.5% at post-test (p-value 0.041). Participants in group 15 & over increased in their selection of “other adult family member” to talk to when they have a problem, 14.2% at baseline to 27.4% at post-test (p-value 0.006). The 15 & over group also increased in their selection of “a friend” as someone to talk to when they have a problem, 17.0% at baseline and 30.2% at post-test (p-value 0.008). Participants 12 & under increased slightly in their selection of “a brother or sister” as someone to talk to when they have a problem, 7.3% at baseline and 19.5% at post-test (p-value 0.058).

When asked, “how do you view your GRS coach?” both the 13-14 and the 15 & over groups increased in their view of their coach as a role model, changing significantly from 16.1% and 12.2% respectively at baseline to 33.9% and 37.7% respectively at post-test (p-value for both groups 0.000).

Community Engagement

Overall, study participants increased significantly in their participation in activities held in their communities after the GRS Resiliency Program. Study participants in the 13-14 and 15 & over age categories both increased in reporting that they do participate in activities that help their community, with 76.5% and 57.8% respectively at baseline and 87.4% and 74.5% respectively at post-test (p-value 0.023 and 0.003). Both 13-14 and 15 & over participants increased significantly in participating in peer education in their communities, from 21.0% and 17.9% respectively at baseline to 31.5% and 29.2% respectively at post-test (p-value 0.032 and 0.039). The greatest change in activities in their community was participation in HIV/AIDS awareness campaigns. This change from pre- to post-test was observed among the 13-14 and 15 & over age categories, increasing from 20.2% and 14.2% respectively at baseline to 40.3% and 34.0% respectively at post-test (p-value for both 0.000). Those who participate in drama or theater in their community also increased significantly among the 13-14 age group, 18.5% at baseline and 26.6% at post-test. A great increase in those who know how to use their skills to help their community was observed in the 12 & under age category, increasing from 78.4% at baseline to 100% at post-test (p-value 0.003).

HIV/AIDS Attitudes and Knowledge

No statistically significant change was observed on questions of HIV/AIDS knowledge from pre-test to post-test. At baseline, 84.2% of 12 & under, 73.9% of 13-14 and 77.5% of 15 & over correctly agreed with the statement, “the most effective way to avoid HIV is to not have sex at all.” At post-test only 13-14 year olds increased in correct responses. The 12 & under group decreased by 2.6% to 81.6%, 13-14 year olds increased to 80.7% and the 15 & over group decreased by 2.0% to 75.5%. Only the 13-14 year olds increased in their agreement to “the most common way HIV is spread in Africa is through unprotected sex with an HIV positive person.” With the lowest percentage at baseline, the 13-14 group increased, though not statistically significantly, from 77.3% to 80.7% at post-test. Both the 12 & under and the 15 & over groups decreased from pre- to post-test, with 78.4% and 87.3% respectively correct at baseline and 75.7% and 85.3% respectively at post-test.

There was a significant increase in “knowing how to support someone who is HIV positive” across all age categories. The 12 & under group increased from 64.1% at baseline to 82.1% at post-test (p-value 0.051). The 13-14 year olds increased from 56.3% agreement to 74.8% at post-test (p-value 0.001). And the 15 & over group increased in agreement from 59.4% to 78.2% at post-test (p-value 0.001).

Personal Strengths

A great and significant increase was observed across age categories in the participants’ ability to list a second and third strength after the GRS Resiliency Program. The greatest magnitude of change was observed among the 13-14 year old group with an increase of 13.8%. The 12 & under improved in their ability to identify a second personal strength from 78.0% to 92.7% at post-test (p-value 0.032). The 13-14 year olds increased from 84.6% to 98.4% at post-test (p-value 0.000). And the 15 & over group increased from 90.6% to 96.2% at post-test (p-value 0.083). When asked to list a third personal strength all three age categories increased significantly from pre- to post-test. Age 12 & under increased from 65.9% to 85.4% at post-test (p-value 0.003); age 13-14 increased from 74.8% to 94.3%, achieving the highest percentage of participants recording a third personal strength at post-test (p-value 0.000); and the 15 & over increased from 77.4% to 89.6% at post-test (p-value 0.006). For the most part, the themes conveyed in the strength responses did not change significantly from pre- to post-test. One exception is an increase in strengths relating to HIV prevention and GRS observed among the 13-14 year olds and the 15 & over category.

Future Goals

A significant increase in those who recorded a second future goal was only observed among the 13-14 year olds. At baseline 70.7% of 13-14 year olds recorded a second goal for their future. This increased to 88.6% able to record a second goal at post-test. While most of the themes expressed in the goals stayed the same, there was an increase in GRS, Life Skills, and Resiliency themes in the goals of the children at post-test. The 12 & under participants who included a GRS, Life skills, and Resiliency theme in their response increased from 0% at baseline to 9.8% at post-test (p-value 0.044). The 13-14 year olds increased in inclusion of the same theme, from 4.1% to 10.6% at post-test (p-value 0.020). The 13-14 year old group also increased in inclusion of themes relating to helping and teaching in their community, from 3.3% at baseline to 9.8% at post-test.

SOUTH AFRICA

Trainer Feedback Forms

Overall trainers expressed a positive experience with delivering the GRS Resiliency Program in primary schools in Johannesburg. All trainers (n=20) agreed or strongly agreed that the GRS Program helped them develop their skills as a trainer and that they would like to participate in the program again next year. Trainers listed their strengths as facilitators, including: good listener, enthusiastic, engaging, explain effectively, inclusivity, well organized, determination, problem-solver, team player, and confidence, among others. Challenges included communicating with school administration and ensuring consistent attendance of the students after school. Trainers were also asked to list which GRS Resiliency Program activities, if any, were useful to them as trainers. Trainers indicated that non-game activities such as “Praise Circle” and “Coach’s Voice” were of much use to them in other educational settings. One trainer said that he now used “Praise Circle” at the end of any after-school session he facilitated for the children.

DISCUSSION

The Grassroot Soccer resiliency pilot program yielded significant changes in participants' conception of resiliency and decision-making. Differences in responses pre- and post-intervention between genders and age categories indicate that GRS has differential, but comparable, benefits for boys and girls ages 12 to 18 years. More importantly, a gender convergence was observed in many cases where response rates differed by gender. This implies that GRS helped boys to catch up to their female peers and girls to catch up to their boy peers on a number of resiliency-promoting factors. Differential rates of change observed across age groups were also observed. The greatest magnitude of change was found in responses of boys and girls ages 13 and 14 years. This indicates that GRS succeeded in achieving the greatest impact among the target age group for whom the program was designed.

Gender

Differences in responses by gender revealed unique benefits of GRS to boys and girls. More importantly, differences in gender often caused convergence of responses to be observed. That is, when more change was observed in one gender than the other, it usually served to close the gap in response level, between genders, observed from baseline to post-test. For example, on the survey item #11b) "I believe I am able to make my own decisions" at baseline, more females agreed with this statement than males (68.9% and 60.2% respectively, difference of 8.7%). In the post-test, male responses agreeing with the statement increased by 18.9% (p-value 0.01), as compared to 5.96% increase among females, bringing the males' response rate closer to their female peers from pre-test to post-test (at post-test values were: males 78.8% and females 74.8%, difference of 4%). This significant change shows that Grassroot Soccer had a meaningful effect on boys and influencing their belief that they can make their own decisions, helping them to reach a level comparable to that of their female peers. Please refer to Figure 1. in the Results section for a visual representation of the data.

Both genders increased in knowing how to stand up to peer pressure, as is illustrated in Figure 2. This outcome is a possible indication that Grassroot Soccer effectively communicated the risk of negative peer pressure in a gender-equal manner. Though both genders increased in agreement, girls' responses were still lower than their boy peers' (at baseline gender difference of 7.8% and at post-test 8.1%). This shows that while more girls and boys are able to stand up to peer pressure after the resiliency intervention, there remains a disparity between boys and girls.

Another significant gender convergence is observed in the survey item #11i) "I do whatever feels good at the moment." At baseline, girls who agreed with this statement were much fewer than boys who agreed with this statement (51.4% girls vs. 67.3% boys, difference of 15.9%). At post-test, boys showed a remarkable drop in agreement to this statement with a 24.6% decrease (p-value 0.000). Girls' agreement responses only decreased by 2.1% (p-value 0.687). At post-test, boys dropped just below their girl peers in agreement to the statement and closed the gender gap observed at baseline (at post-test: girls 49.3%, boys 42.7%, difference of 6.6%). This is an important shift in boys' attitudes toward making decisions. Specifically, since thinking through decisions and consequences is a highly emphasized theme in the Grassroot Soccer Resiliency Program. Combining the ability to stop and think through a decision and the belief that you can make your own decisions is a very valuable skill in order to make healthy choices in life. Please refer to Figure 1. in the Results section for a visual representation of the data.

Making a back-up plan is a key strategy in the GRS Resiliency Program for being resilient when things do not go your way. At baseline, girls who selected making a back-up plan in survey item #14 were much fewer than boys (12.7% and 16.5% respectively). After going through GRS and learning the benefits of having a "Plan B," the percentage of girls who identified making a back-up plan as a problem solving strategy increased by 16.5% (p-value 0.000). Their male counterparts increased insignificantly by

5.2 %. At post-test, girls who chose making a back-up plan when faced with adversity was even greater than boys (29.1% and 21.7% respectively). The girls surpassed their boy classmates indicating that the GRS resiliency concept of making a back-up plan in order to bounce back from a challenge resonated more with girls than with boys. More girls than boys also said they would “try again” when faced with a problem. At baseline, girls were already higher than the boys on this measure (55.1% and 48.7% respectively). After the GRS Resiliency Program, girls increased significantly by 9.5% to reach 64.6% at post-test (p-value 0.028). Boys who selected “try again” increased insignificantly from 48.7% to 51.3%. These changes observed among girls may reflect an added sense of self-efficacy and confidence among the girls after going through the Grassroot Soccer Resiliency Program. Please refer to Figure 2. in the Results section for a visual representation of the data.

Both genders chose “teaching others about HIV/AIDS once school is out” above other activities at post-test. Boys increased from 52.2% to 71.3% and girls increased from 53.8% to 81.0% (p-value for both 0.000). This change indicates that after completing the Grassroot Soccer Resiliency Program, the majority of boys and girls were excited and motivated to go out and teach others what they had learned about HIV/AIDS. Initiating conversations about HIV/AIDS and sharing what you have learned with others in the community are valuable actions in reducing stigma and increasing knowledge. Such behavior change among the GRS participants is a desired program outcome described in the GRS Resiliency & HIV/AIDS Program Logic Model in Appendix B.

Problem-solving behaviors changed differentially for boys and girls after completing the GRS Resiliency Program. An increase was observed among girls in “try to resolve it myself” when faced with a problem (from 27.8% at baseline to 38.0% at post-test, p-value 0.013). Boys increased significantly in “asking for help” when faced with a problem (from 50.4% at baseline to 67.8% at post-test, p-value 0.002). Boys also decreased significantly in “try to stop thinking about it” when they have a problem (from 26.1% at baseline to 16.5% at post-test, p-value 0.048). This shows that after GRS girls feel empowered to take action when they have a problem and boys are more willing to ask for help. It is possible, that traditional gender roles influence boys to act on their own or disregard a problem and influence girls let someone else fix the problem. The gender shift observed after GRS may have a great impact on both boys’ and girls’ problem-solving behaviors and consequently, on their resiliency in the future. Please refer to Figure 3. in the Results section for a visual representation of the data.

Having a trustworthy adult is one of the primary determining factors of resiliency in children and is a topic widely addressed in the GRS Resiliency Program¹³. Both boy and girl participants in the GRS Resiliency Program increased in identifying a helpful adult at the end of the program. Girls increased significantly in describing their trainer or coach as a person they could turn to if they had a problem. At baseline, 7.0% of boys identified their trainer or coach as an adult they could ask for help, but only 0.6% of girls did the same. After completing the GRS Resiliency Program, girls came to see their GRS trainer or coach as an adult they could ask for help, increasing responses to 7.0% (p value 0.004) and reaching the same level as their boy peers. This increase in girls looking to their trainer or coach from pre- to post-test may be due to the fact that they never had a trainer or coach before. The GRS Resiliency Program not only provided girl participants with a trainer and coach, but simultaneously with an adult that they felt comfortable asking for help.

After completing the GRS Resiliency Program, more boys identified an adult family member as someone they could talk to when they have a problem. At baseline, 23.4% of girls and 16.5% of boys reported confiding in an adult family member when they have a problem. At post-test these numbers increased to 25.3% of girls and 26.1% of boys. Boys also decreased significantly in reporting that they have no

¹³ Please refer to Appendix A for the Resiliency Literature Review

one to talk to when they have a problem, 10.4% at baseline to 2.6% at post-test (p-value 0.020). Girls who have no one to talk to remained the same from pre- to post-test, 2.5%.

Both boys and girls in the GRS Resiliency Program view their trainer or coach as a role model, increasing from 13% and 15.2% respectively at baseline to 33.9% and 35.4% respectively at post-test (p-value for both 0.000). The data indicate that at baseline girls were more likely than boys to identify an adult that they trust to ask for help when they have a problem. After completing the GRS Resiliency Program, however, boys increased in their capacity to identify a trustworthy adult in their lives that they could turn to for help.

Age

Participants 13-14 years old showed the greatest and most frequent change in survey responses after completing the GRS Resiliency Program. This suggests that the messages and activities delivered through GRS resonated with the boys and girls in this age group and may have an impact on their lives. This finding may also indicate that the GRS curriculum is appropriately designed and delivered, as it is tailored to target the age group 13-14 years.

Goals and Strengths

The primary aim of including goals and strengths in the evaluation was to see if after GRS the participants were better able to identify their own strengths and to articulate goals for their futures. Based on the literature, knowing your strengths is a key part to building and maintaining self-esteem as well as feeling useful in your community. Planning for the future is one way to influence decisions that are made each day. The findings show that after the GRS Resiliency Program, participants were more able to identify their strengths and to articulate their goals for the immediate and far future. There was little change in the themes expressed in the strengths and goals from baseline to post-test. This is not a surprise, as the primary intent of the GRS Resiliency Program was to guide students to define their own interests rather than to direct their interests. A positive increase in themes relating to HIV/AIDS and life skills at post-test is encouraging and shows some influence of the GRS Resiliency Program on participants' choices.

HIV/AIDS

While the primary focus of this intervention was to build resiliency in boys and girls, it was done so in the context of HIV/AIDS prevention education. The current evaluation measured attitudes and knowledge of HIV/AIDS prevention through three items on the survey. No statistically significant change was observed for the two survey items concerning HIV transmission and effective prevention. However, correct response rates hovered around 80 to 85% for boys and 75 to 80% for girls. The position of the questions at the end of the survey may have affected the response rate, and as it appears in Table 4, the sample size for the three HIV/AIDS questions is slightly lower than that of other questions (n=105 for boys, and n=154 for girls versus n=115 for boys and n=157 for girls). A more thorough investigation would have to be done to assess to what extent students' knowledge of HIV prevention increased or decreased after the GRS intervention.

A notable change did occur among students feeling that they know how to support someone who is HIV positive. At baseline, 49% of boys and 64.7% of girls said that they knew how to support a person living with HIV/AIDS in their community. After completing the GRS Resiliency Program, 76% of boys and 78.2% of girls said they knew how to support a person with AIDS. This is a significant increase that may reflect the students feeling empowered and knowing the skills they have to offer.

SOUTH AFRICA

The most notable changes observed among GRS trainers in South Africa were the new facilitating skills they learned from GRS and their use of GRS activities in other educational settings. All of the trainers

(n=20) reported what their strengths and weakness were as trainers. In informal discussions, they said that coming to realize which areas to improve on and which areas they are good at as trainers was very helpful for their work. Additionally, they found some of the non-game GRS Resiliency activities applicable and useful when working with children outside of GRS. Specifically, trainers reported using “Praise Circle” and “Coach’s Voice” in order to enhance their interactions with children in the after-school programs through City Year. This speaks to the applicability of a sport-based resiliency program like the one developed by GRS. Valuable feedback on the GRS curriculum was also gained. For example, the activity called “making lists” did not seem to engage the students well and while the message was considered important, the activity was not relevant to the lives of the students. This guidance will help GRS review and modify the activity for future programs.

CONCLUSIONS

Grassroot Soccer succeeded in achieving change in desired areas, enhancing resiliency-building skills among boys and girls in Zambia and South Africa. The changes observed among the participants in decision-making, problem-solving, identifying a trustworthy adult, knowing their own strengths, and setting goals indicate that there is a direct benefit to students from participating in the GRS Resiliency Program. Immediate change was observed in the student’s ability to articulate their strengths and say which adult they would ask for help. There is also a clear indication that students plan to follow through with positive behaviors after the GRS Resiliency Program. For example, teaching others about HIV/AIDS, making a list of consequences when making a decision, and using their own “Coach’s Voice” to think through a decision were all expressed by the students as things they will continue to do. These plans reflect positive behaviors that are intermediate to the ultimate programmatic impact of increasing resiliency and decreasing HIV infection among boys and girls in Zambia and South Africa. Further investigation would allow us to see how the direct benefit of the Grassroot Soccer Resiliency Program carries through the participants’ lives and the extent to which it creates an impact on the community.

APPENDICES

APPENDIX A. Resiliency Literature Review

Introduction

There is a preponderance of literature across disciplines highlighting the need to provide guidance and mentorship for youth during their transition from adolescence to adulthood. Current prevention interventions in Southern Africa, ranging from media campaigns to HIV/AIDS education mandates in schools to youth AIDS clubs have thus far been unsuccessful in adequately responding to this challenge. Unless public health practitioners meet the challenge of identifying and supporting vulnerable youth, it is not an exaggeration to state that the prosperity of entire nations will be threatened.

Evidence shows that interventions that promote protective factors are often considered optimal in situations where risk factors are difficult to identify or to eliminate completely (Luthar & Cicchetti, 2000b). This implies that the promotion of positive assets, which are positive relationships, opportunities, and competencies a youth needs to succeed, may have a significant effect on the health and well-being of vulnerable youth.

A study conducted among adolescents in the United States, reports that a higher number of positive assets are correlated with engagement in fewer risky behaviors. These assets or protective characteristics in a youth's life contribute to resilience, that is, his or her ability to cope with trauma and difficult circumstances, such as the loss of a parent or family member to AIDS.

HIV prevention literature also reports that self-esteem, for example, is highly relevant to "at risk" women's engagement in HIV risk behavior practices (Sterk et.al, 2004). These studies regarding resiliency and positive assets, however, are primarily focused on US based and resource intensive contexts. While they do not address the needs of youth in developing countries, where the greatest numbers of youth at risk exist, they do offer some direction for further research tailored to such resource poor settings.

Literature and research efforts have devoted much attention to understanding the construct of resilience and its utility in promoting the wellbeing of disadvantaged, high-risk individuals. The construct of resilience is associated with specific protective factors or assets that contribute to the reduction of risky behavior, and ultimately reduce the risk of contracting HIV.

The construct of resilience

Resilience is operationally defined as a dynamic process in which individuals display positive adaptation despite experiences of significant adversity or trauma (Luthar & Cicchetti, 2000b). It does not exclusively represent an individual's personality traits or attributes, rather it considers two pivotal constructs: exposure to adversity and positive adaptation outcomes (Luthar & Cicchetti, 2000b). *Adversity* is often used interchangeably with risk and consists of negative life circumstances that are statistically associated with adjustment difficulties. Chronic poverty, for example, constitutes high-risk since children experiencing this condition show greater maladjustment than those who do not. *Positive adaptation* is defined as behaviorally manifested social competence, or success at meeting stage-salient developmental tasks (Luthar & Cicchetti, 2000b). The exact conception of successful outcomes is tied to the particular risk encountered.

Resilience literature suggests that 30 to 40% of children who experience multiple disadvantages do succeed and thrive (Scales & Leffert, 1999). Their resilience, or favorable response to adversity, cuts across levels of the child's ecological context to include: a) individual child attributes, b) family aspects, and c) characteristics of the social environment. Within these contextual areas, studies show reoccurring themes associated with resilience, namely, the importance of youth having at least one adult who cares

for them deeply (typically a parent or family member); contact with at least one adult friend or mentor who cares for the child, acts as a role model, and connects the youth to resources and opportunities; membership in a community where adults talk to each other and support each other, creating a “web of influence” (Price, Cioci, Penner, & Trautlein, 1993 in Scales & Leffert, 1999) that supports youth in the face of adversity (Luthar & Cicchetti, 2000a; Scales & Leffert, 1999).

The construct of resilience, as positive adaptation to adversity, is associated with the clustering of assets that have the potential to create support and guidance for positive youth development, despite exposure to adversity. Literature indicates that possession of such assets promote resilience (Scales & Leffert, 1999).

Developmental Assets Framework

An extensive literature review conducted by the Search Institute identified forty developmental assets associated with positive, healthy development. These assets are conceived as positive relationships, opportunities, competencies, values, and self-perceptions that youth need to be healthy, principled, and productive (Scales & Leffert, 1999).¹⁴ As is true in resilience literature, the Developmental Assets Framework considers the essential community actors, such as family, neighborhood, school youth organizations, congregations, peers, adult role models, etc., that are needed to promote healthy development. Although resilience research has not yet been able to identify which collection of assets contribute to specific positive outcomes, it does maintain that among youth exposed to adversity, those who possess these protective assets fare better than those who do not (Luthar & Cicchetti, 2000b). The identified association between developmental assets and resilience has significant implications for the prevention of risk and the fostering of positive developmental outcomes.

HIV prevention literature link to assets and resilience

Literature on HIV prevention indicates that successful programs must be multifaceted, involve many contexts of youth’s lives and feature adults that are prominent in youths’ experience (Scales & Leffert, 1999). In fact, prevention efforts that do not consider the multiple contexts of an individual or are one-shot interventions are shown to have little effectiveness. Interventions targeted at periods of developmental transition are also found to be especially beneficial to at-risk youth (Luthar & Cicchetti, 2000b).

Prevention intervention efforts traditionally focus on the avoidance of risky behavior for the prevention of adverse health outcomes, such as HIV/AIDS. However, interventions that promote protective factors are often considered optimal in situations where risk factors are difficult to identify or eliminate completely (Luthar & Cicchetti, 2000b). Both the promotion of positive attributes and the avoidance of risk are particularly relevant for addressing the realities many individuals experience in developing countries.

In a study conducted in the United States, researchers report that a higher number of protective factors are correlated with engagement in fewer risky behaviors (Jessor, Van Den Bos, Vanderryn, Cossta, &

¹⁴ Definitions of assets are drawn from Scales & Leffert (1999), **External Assets - Youth as Resources** (Empowerment) - Young people are given useful roles in the community; **Adult Role Model** (Boundaries and Expectations) - Parent(s) and other adults model positive, responsible behavior; **Positive Peer Influence** (Boundaries and Expectations) - Young person’s best friends model responsible behavior; **Internal Assets - Personal Power** (Positive Identity) - Young person feels he or she has control over “things that happen to me;” **Self-Esteem** (Positive Identity) - Young person reports having high self-esteem; **Positive view of personal future** (Positive Identity) - Young person is optimistic about her or his personal future; **Planning and Decision Making** (Social Competencies) - Young person knows how to plan ahead and make choices; **Resistance Skills** (Social Competencies) - Young person can resist negative peer pressure and dangerous situations.

Turbin, 1995 in Scales and Leffert, 1999). High-Risk behaviors for US youth are identified as: consumption of alcohol, tobacco, other drug use, early sexual intercourse, and violence (Scales & Leffert, 1999). Additionally, a Search Institute national survey finds that having protective factors as a young adolescent is more influential on later positive outcomes than having risk factors as a young adolescent (Scales & Leffert, 1999). Essentially, the claim is that assets are stronger determinants of positive outcomes than risks are. The data show a visible correlation between the number of positive developmental assets a child possesses and the % of US adolescents surveyed who reported engaging in various high-risk behaviors (See Tables 1 and 2). For example, the percentage of adolescents surveyed who reported having sexual intercourse three or more times in their lives decreased from 33% for those possessing 1 to 10 assets to 3% for those possessing 31 to 40 assets. When considering positive behavior, the percent of adolescents surveyed who reported avoiding doing things that are dangerous increased from 6% for those possessing 1 to 10 assets to 43% for those possessing 31 to 40 assets.

Table 1: An excerpt from Scales & Leffert (1999) “Patterns of Assets and High-Risk Behavior among Adolescents (in % of respondents)”

Risk Behavior Pattern	Definition	Number of assets			
		1-10	11-20	21-30	31-40
Sexual intercourse	Has had sexual intercourse three or more times in lifetime	33	21	10	3
Depression/suicide	Is frequently depressed and/or has attempted suicide	40	25	13	4
Illicit Drugs	Used illicit drugs three or more times in past year	42	19	6	1

Table 2. An excerpt from Scales & Leffert (1999) “The Relation of Assets to Thriving Indicators among Adolescents (in % of respondents)”

Thriving Behavior	Definition	No of assets			
		1-10	11-20	21-30	31-40
Exhibits Leadership	Has been a leader of a group or organization in the past 12 months	48	67	78	87
Resists Danger	Avoids doing things that are dangerous	6	15	29	43
Overcomes Adversity	Does not give up when things get difficult	57	69	79	86

The correlations found between presence of positive developmental assets and engagement in risky behavior has also been recorded in HIV prevention literature. Self-esteem, for example, is shown to be highly relevant to “at risk” women’s HIV risk behavior practices (Sterk et al., 2004). When specifically considering condom use, girls with higher self-esteem are found to be more likely to hold positive condom attitudes, feel more efficacious in negotiating condom use, and have more frequent communication with sex partners and parents; they perceived fewer barriers to using condoms and were less fearful of negotiating condom use (Salazar et al., 2005).

While literature in resilience, developmental assets, and HIV prevention present overlapping themes of the benefits of protective factors in mitigating risk of negative outcomes, there remains the need for research to explicitly study the convergence of these three fields. Further investigation is needed to explore the utility of building positive developmental assets for the promotion of advantageous adaptation in the face of adversity.

Sport for Development – Operationalizing a Solution

In response to the need to foster resiliency in youth in developing country contexts, there is increasing support for interventions that use sport as an educational tool. In 2003 Secretary-General of the United Nations (UN) Kofi Annan formally acknowledged the role that sport plays in fostering community cohesion, social interactions, and enjoyment, declaring the UN's commitment to promote sport as a tool for economic, social development, and peace (United Nations, 2003). Sport for Development (SfD), in the context of HIV/AIDS prevention, has the potential to enlarge choices and opportunities by its use of low-cost resources and high community involvement, particularly in challenging environments such as the generalized HIV/AIDS pandemic.¹⁵

Sport for Development (SfD) uses low-cost community-based activities to leverage communal cohesion among youth by identifying and uniting teams that can serve as support networks and distributors of information. There is currently very little research assessing this method; questions about how sport can purposefully be used to maximize benefit to the lives of youth, beyond the inherent benefits of participation, remain. The proposed study examines an HIV prevention intervention that purposefully fosters developmental assets as resiliency training in the context of Sport for Development (SfD) in order to reduce youth's risk of contracting HIV. Findings from this study of Grassroot Soccer have the potential to play an important role in the growth of SfD by helping to establish basic scientific and practice standards and to create benchmarks within the field.

Gap in the Research

Currently, there is very little empirical evidence to support the effectiveness of sports for development interventions. Grassroot Soccer is an example of an organization that has a good foundation for evaluation of their intervention model. Further research and measurement is needed to advance this understanding. In 2004, a study showed the GRS curriculum and model to be effective in increasing students' knowledge, attitudes, and perceived social support related to HIV/AIDS prevention. These changes, along with reported behavior change related to peer-education, were sustained over a period of five months (Botcheva & Huffman, 2004). This pilot study will contribute a level of scientific rigor and measurement that is especially necessary to advance and inform the emerging field of Sport for Development, guiding the establishment of evidence-based best practices.

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APPENDIX B: GRASSROOT SOCCER RESILIENCY PROGRAM LOGIC MODEL
APPENDIX C: Site Demographic Data

**PLEASE REFER TO ATTACHED DOCUMENTS FOR THE LOGIC MODEL AND SITE
DEMOGRAPHIC DATA**

APPENDIX D: DATA TABLES

Prepared by Paola Peacock-Villada and Jacob Bor

Table 4. Comparisons of Quantitative Measures Pretest and Post-test by Gender

Survey Question	Gender M/F	% Response Yes/Agree				% Change Pre to Post	
		PRE	n	POST	n		
Decision-Making:							p-value
11b) I believe I am able to make my own decisions	Male	60.2	113	78.8	113	18.6***	0.002
	Female	68.9	151	74.8	151	5.96	0.190
11c) I know how to stand up to peer pressure	Male	62.2	111	74.8	111	12.6**	0.043
	Female	54.4	147	66.7	147	12.3**	0.016
11d) I think about all my choices carefully	Male	88.4	112	88.4	112	0	1.000
	Female	94	150	95.3	150	1.3	0.619
11f) I don't even think about it; I just do it	Male	14.2	113	11.5	113	-2.7	0.494
	Female	10.5	152	4.0	152	-6.6**	0.025
11h) I make a list of positive and negative consequences	Male	71.7	113	80.5	113	8.9	0.105
	Female	71.7	152	75.7	152	4.0	0.345
11i) I do whatever feels good at the moment	Male	67.3	110	42.7	110	-24.6***	0.000
	Female	51.4	146	49.3	146	-2.1	0.687
Goal Setting/ Making the Next Move:							
Survey Question	Gender M/F	% Response Yes/Agree				% Change	p-value
		PRE	n	POST	n		
14_1) What do you do if your plan does not work – ASK FOR HELP	Male	65.2	115	53.9	115	-11.3*	0.069
	Female	45.6	158	52.5	158	7.0	0.153
14_2) What do you do if your plan does not work - NOTHING	Male	4.4	115	4.4	115	0	1.000
	Female	1.9	158	2.5	158	0.6	0.707
14_3) What do you do if your plan does not work – MAKE A BACK UP PLAN	Male	16.5	115	21.7	115	5.2	0.259
	Female	12.7	158	29.1	158	16.5***	0.000
14_4) What do you do if your plan does not work – TRY AGAIN	Male	48.7	115	51.3	115	2.6	0.649
	Female	55.1	158	64.6	158	9.5**	0.028
19_1) What will you do when school is out – HANG OUT WITH FRIENDS	Male	13.9	115	12.2	115	1.7	0.619
	Female	16.5	158	20.9	158	4.4	0.145
19_2) What will you do when school is out – CHORES/HOUSEWORK	Male	32.2	115	20.9	115	-11.3**	0.042
	Female	32.9	158	30.4	158	-2.5	0.557
19_3) What will you do when school is out – PLAY SPORTS	Male	47.0	115	48.7	115	1.7	0.717
	Female	32.9	158	39.9	158	7.0	0.117
19_5) What will you do when school is out – TEACH OTHERS ABOUT AIDS	Male	52.2	115	71.3	115	19.1***	0.000
	Female	53.8	158	81.0	158	27.2***	0.000
19_6) What will you do when school is out – WORK FOR PAY	Male	33.0	115	21.7	115	-11.3**	0.032
	Female	24.7	158	17.7	158	-7.0*	0.086
Problem-Solving and Help-Seeking Behavior:							
Survey Question	Gender M/F	% Response Yes/Agree				% Change	p-value
		PRE	n	POST	n		

27_1) What do you do if you have a problem – NOTHING	Male	6.1	115	2.6	115	-3.5	0.207
	Female	1.9	158	1.9	158	0	1.000
27_2) What do you do if you have a problem – TRY TO RESOLVE IT MYSELF	Male	49.6	115	40.9	115	-8.7	0.114
	Female	27.8	158	38.0	158	10.1**	0.013
27_3) What do you do if you have a problem – SEEK HELP FROM SOMEONE	Male	50.4	115	67.8	115	17.4***	0.002
	Female	60.8	158	68.4	158	7.6*	0.064
27_4) What do you do if you have a problem – TRY TO STOP THINKING ABOUT IT	Male	26.1	115	16.5	115	-9.6**	0.048
	Female	12.7	158	17.1	158	4.4	0.162
27_5) What do you do if you have a problem – PRAY	Male	53.9	115	47.0	115	-7.0	0.219
	Female	70.9	158	60.8	158	-10.1**	0.015
27_6) What do you do if you have a problem – OTHER	Male	0	115	4.4	115	4.4**	0.025
	Female	0	158	6.3	158	6.3***	0.001
28) If you have a problem, do you have someone you can talk to about it? YES	Male	88.7	106	92.5	106	3.8	0.320
	Female	94.2	155	96.8	155	2.6	0.158
29_1) Who is the person you usually talk to when you have a problem – NO ONE	Male	10.4	115	2.6	115	-7.8**	0.020
	Female	2.5	158	2.5	158	0	1.000
29_3) Who is the person you usually talk to when you have a problem – FRIEND OF OPPOSITE SEX	Male	7.0	115	7.0	115	0	1.000
	Female	5.7	158	8.2	158	2.5	0.319
29_4) Who is the person you usually talk to when you have a problem – TEACHER	Male	6.1	115	10.4	115	4.4	0.198
	Female	4.4	158	13.3	158	8.9***	0.002
29_5) Who is the person you usually talk to when you have a problem – TRAINER/ COACH	Male	7.0	115	7.8	115	0.9	0.798
	Female	0.6	158	7.0	158	6.3***	0.004
29_7) Who is the person you usually talk to when you have a problem – FATHER	Male	19.1	115	23.5	115	4.4	0.355
	Female	3.8	158	8.2	158	4.4*	0.090
29_8) Who is the person you usually talk to when you have a problem – ADULT FAMILY MEMBER	Male	16.5	115	26.1	115	9.6**	0.048
	Female	23.4	158	25.3	158	1.9	0.641
29_9) Who is the person you usually talk to when you have a problem – BROTHER OR SISTER	Male	13.9	115	16.5	115	2.6	0.551
	Female	13.9	158	19.6	158	5.7	0.118
29_10) Who is the person you usually talk to when you have a problem – OTHER (including cousin)	Male	0	115	2.6	115	2.6*	0.083
	Female	5.1	158	4.4	158	-0.6	0.740
30_1) How do you view your	Male	17.4	115	24.3	115	7.0	0.131

teacher or coach – A FRIEND	Female	20.3	158	29.1	158	8.9**	0.013
30_2) How do you view your teacher or coach – SOMEONE I AM AFRAID OF	Male	17.4	115	12.2	115	-5.2	0.202
	Female	14.6	158	9.5	158	-5.1	0.103
30_4) How do you view your teacher or coach – TEACHER	Male	35.7	115	27.0	115	-8.7*	0.086
	Female	27.2	158	28.5	158	1.3	0.778
30_5) How do you view your teacher or coach – ROLE MODEL	Male	13.0	115	33.9	115	20.9***	0.000
	Female	15.2	158	35.4	158	20.3***	0.000
30_6) How do you view your teacher or coach – SOMEONE WHO CARES FOR ME	Male	57.4	115	57.4	115	0	1.000
	Female	54.4	158	62.0	158	7.6	0.115
30_7) How do you view your teacher or coach – OTHER	Male	0.9	115	5.2	115	4.3*	0.059
	Female	5.1	158	5.1	158	0	1.000
Community Engagement:							
Survey Question	Gender M/F	% Response Yes/Agree				% Change	p-value
		PRE	n	POST	n		
31) Do you participate in activities that help your community? YES	Male	64.2	106	78.3	106	14.2**	0.008
	Female	71.4	154	85.1	154	13.6***	0.001
32_1) If ‘YES’ what events/activities have you participated in during the last 6 months in your community - NONE	Male	6.1	115	6.1	115	0	1.000
	Female	10.8	158	5.7	158	-5.1*	0.103
32_2) If ‘YES’ what events/activities have you participated in during the last 6 months in your community – PEER EDUCATION	Male	23.5	115	32.2	115	8.7*	0.086
	Female	15.8	158	27.9	158	12.0**	0.005
32_3) If ‘YES’ what events/activities have you participated in during the last 6 months in your community – HIV AWARENESS CAMPAIGN	Male	20.0	115	33.0	115	13.0**	0.007
	Female	21.5	158	41.8	158	20.3***	0.000
32_5) If ‘YES’ what events/activities have you participated in during the last 6 months in your community – SPORTING EVENT	Male	20.0	115	30.4	115	10.4**	0.051
	Female	27.21	158	26.6	158	0.6	0.882
32_6) If ‘YES’ what events/activities have you participated in during the last 6 months in your community – DRAMA/THEATRE	Male	12.2	115	17.4	115	5.2	0.158
	Female	19.6	158	24.1	158	4.4	0.238

35) I believe I have the skills to contribute to my community - YES	Male	88.5	104	93.3	104	4.8	0.198
	Female	88.8	152	89.5	152	0.7	0.828
HIV/AIDS Attitudes and Knowledge:							
Survey Question	Gender M/F	% Response Yes/Agree				% Change	p-value
		PRE	n	POST	n		
37) The most effective way to avoid HIV infection is to not have sex at all - AGREE	Male	82.9	105	83.8	105	1.0	0.859
	Female	72.3	155	75.5	155	3.2	0.435
38) The most common way HIV is spread in Africa is through unprotected sex with an HIV positive person - AGREE	Male	81.9	105	85.7	105	3.8	0.417
	Female	81.2	154	78.6	154	-2.5	0.495
39) I know how to support someone in my community who is HIV positive - AGREE	Male	49.0	104	76.0	104	26.9***	0.000
	Female	64.7	156	78.2	156	13.5***	0.004

Table 4b. Identifying Personal Strengths and Future Goals:¹⁶ Comparisons of Open-Ended Survey Items Pre-test to Post-test by Gender

Identifying Personal Strengths:						
Thematic Code assigned to Strength Response	Gender M/F	% Response Yes/Agree			% Change Pre to Post	p-value
		PRE	POST	N		
Gave response for Strength 1	Male	96.5	97.4	114	0.9	0.707
	Female	99.4	98.7	157	-0.6	0.565
Gave response for Strength 2	Male	81.6	96.5	114	14.9***	0.000
	Female	89.2	96.8	157	7.6***	0.001
Gave response for Strength 3	Male	68.4	88.6	114	20.2***	0.000
	Female	79.0	93.0	157	14.1***	0.000
1 Home/Domestic	Male	13.2	16.7	114	3.5	0.417
	Female	30.0	34.4	157	4.5	0.309
2) School/Academic	Male	65.8	53.5	114	-12.3***	0.010
	Female	60.5	56.1	157	-4.5	0.338
3) Sport Related	Male	63.2	74.6	114	11.4**	0.019
	Female	41.4	45.9	157	4.5	0.329
4) Art/Performance	Male	12.3	18.4	114	6.1*	0.090
	Female	26.8	32.5	157	5.7	0.129
5) Work for Pay	Male	1.8	5.3	114	3.5	0.158
	Female	3.8	4.5	157	0.6	0.707
6) GRS HIV Prevention Activities	Male	0	9.7	114	9.7***	0.001
	Female	0	4.5	157	4.5***	0.008
7) Life Skills	Male	11.4	17.5	114	6.1	0.109
	Female	17.2	20.4	157	3.2	0.413
99) Other	Male	17.5	18.4	114	0.9	0.863

¹⁶ Open ended survey Question: "Please list three things you are good at" and "What are your goals for your future?"

*** Statistically Significant at 0.01 level

** Statistically Significant at 0.05 level

* Statistically Significant at 0.1 level

	Female	14.7	7.6	157	-7.0**	0.034
98) Illegible	Male	4.4	6.1	114	1.8	0.482
	Female	2.6	6.4	157	3.8**	0.034

Setting Goals:

Thematic Code assigned to al Response	Gender M/F	% Response Yes/Agree			% Change Pre to Post	<i>p-value</i>
		PRE	POST	N		
1 respondents list a first al?	Male	97.4	95.6	114	1.7	0.482
	Female	98.7	98.7	157	0	1.000
1 respondent list a second al?	Male	71.1	80.7	114	9.7*	0.070
	Female	79.0	92.4	157	13.4***	0.000
HIV/AIDS	Male	0.9	4.4	114	3.5**	0.045
	Female	4.5	7.6	157	3.2	0.166
Education Profession	Male	15.8	16.7	114	0.9	0.848
	Female	19.8	19.8	157	0	1.000
Health Profession	Male	23.7	23.7	114	0	1.000
	Female	29.3	31.9	157	2.6	0.481
Footballer/Coach	Male	23.7	28.1	114	4.4	0.227
	Female	1.9	2.6	157	0.6	0.565
Other Profession	Male	45.6	35.1	114	-10.5*	0.070
	Female	35.7	35.7	157	0	1.000
Educational Achievement	Male	21.1	25.4	114	4.4	0.338
	Female	31.2	38.2	157	7.0*	0.094
GRS/ Life Skills/ Teach HIV/ siliency	Male	2.6	8.8	114	6.1**	0.019
	Female	5.1	12.1	157	7.0***	0.011
Help poor/sick/vulnerable	Male	3.5	3.5	114	0	1.000
	Female	8.3	8.9	157	0.6	0.797
Build ool/orphanage/hospital	Male	0.9	0	114	-0.9	0.319
	Female	6.4	0	157	6.4	0.319
o Help/teach community	Male	1.8	7.9	114	6.1**	0.034
	Female	5.1	7.6	157	2.6	0.287
o Help Family	Male	6.1	6.1	114	0	1.000
	Female	8.9	5.7	157	-3.2*	0.096
o Have own family	Male	1.8	0.9	114	-0.9	0.566
	Female	1.3	1.3	157	0	1.000
o Self Change	Male	5.3	5.3	114	0	1.000
	Female	6.4	8.3	157	1.9	0.493
o Ownership – house/business	Male	7.0	4.4	114	-2.6	0.368
	Female	3.8	0.6	157	-3.2**	0.025
o Work for pay (have money)	Male	6.1	5.3	114	0.9	0.741
	Female	4.5	6.4	157	1.9	0.367
o Travel	Male	0.9	1.8	114	0.9	0.566
	Female	1.3	1.3	157	0	1.000

Table 4c. Open-ended response to “List the 4 Ways to Stay Strong” (Post-test Only)

4 Ways to Stay Strong	N	%
1) Know your strengths	96	25.2%
2) Build your support team	97	25.5%
3) Plan your next move	102	26.8%
4) Take action in your community	86	22.6%
TOTAL responses listing 1 of 4 “ways to stay strong”	381 (47% of total responses)	100%
Thematic Code	N	%
GRS Resiliency	114	26.2%
HIV Prevention/Education	63	14.5%
GRS Contract Words	116	26.6%
Sports	34	7.8%
Nutrition	21	4.8%
Other (Support local team, pray, etc.)	88	20.2%
TOTAL responses listing things <u>other</u> than 4 ways to stay strong	436 (53% of total responses)	100%

If participants did not list any of the 4 Ways to Stay Strong, then their response was coded by theme:

Table 5. Comparisons of Survey Measures Pre-test & Post-test by Age Category

Decision-Making:							
Survey Question	Age	% Response Yes/Agree				% Change	p-value
		PRE	n	POST	n		
1b) I believe I am able to make my own decisions	12 & under	52.5	40	70.0	40	17.5*	0.090
	13 – 14	66.4	122	76.2	122	9.8*	0.077
	15 & over	68.3	101	80.2	101	11.9**	0.023
1c) I know how to stand up to peer pressure	12 & under	64.9	37	48.6	37	-16.3	0.136
	13 – 14	54.9	122	71.3	122	16.4***	0.004
	15 & over	59.2	98	77.6	98	18.4***	0.004
1f) I don't even think about it; I must do it	12 & under	20.5	39	5.1	39	-15.4*	0.057
	13 – 14	12.3	122	4.9	122	-7.4**	0.020
	15 & over	8.7	103	10.7	103	2.0	0.595
1h) I make a list of positive and negative consequences	12 & under	69.2	39	76.9	39	7.7	0.446
	13 – 14	66.1	121	79.3	121	13.2***	0.006
	15 & over	78.8	104	76.0	104	-2.8	0.580
1i) I do whatever feels good at the moment	12 & under	61.5	39	33.3	39	-28.2***	0.006
	13 – 14	62.7	118	55.1	118	-7.6	0.181
	15 & over	52.0	98	40.8	118	11.2*	0.070
Goal Setting/ Making the Next Move:							
Survey Question	Age	% Response Yes/Agree				% Change	p-value
		PRE	n	POST	n		
4_1) What do you do if your plan does not work – ASK FOR HELP	12 & under	48.8	41	51.2	41	2.4	0.800
	13 – 14	61.3	124	51.6	124	-9.7*	0.096
	15 & over	48.1	106	55.7	106	7.5	0.219
4_2) What do you do if your plan does not work - NOTHING	12 & under	0	41	7.3	41	7.3*	0.083
	13 – 14	5.6	124	2.4	124	-3.2	0.207
	15 & over	1.0	106	2.8	106	1.9	0.320
4_3) What do you do if your plan does not work – MAKE A BACK UP PLAN	12 & under	12.2	41	24.4	41	12.2	0.168
	13 – 14	12.9	124	29.8	124	16.9***	0.000
	15 & over	17.0	106	22.6	106	5.7	0.146
4_4) What do you do if your plan does not work – TRY AGAIN	12 & under	56.1	41	53.7	41	-2.4	0.393
	13 – 14	58.1	124	66.1	124	8.1	0.114
	15 & over	45.3	106	51.9	106	6.6	0.119
4_5) Is anyone helping you to reach your goals? (Yes/No)	12 & under	89.7	39	89.7	39	0	1.000
	13 – 14	87.2	117	82.1	117	-5.1	0.181
	15 & over	76.2	101	84.2	101	7.9	0.117
9_5) What will you do when school is out – TEACH OTHERS ABOUT AIDS	12 & under	58.5	41	68.3	41	9.8	0.323
	13 – 14	61.3	124	77.4	124	16.1***	0.002
	15 & over	41.5	106	79.2	106	37.7***	0.000
9_6) What will you do when school is out – WORK FOR PAY	12 & under	31.7	41	12.2	41	-19.5**	0.031
	13 – 14	25.0	124	19.4	124	-5.6	0.210
	15 & over	30.2	106	20.8	106	-9.4*	0.077
9_7) What will you do when school is out – OTHER	12 & under	17.1	41	7.3	41	-9.8**	0.044
	13 – 14	14.5	124	14.5	124	0	1.000
	15 & over	12.3	106	15.1	106	2.8	0.470

Problem-Solving and Help-Seeking Behavior:

Survey Question	Age	% Response Yes/Agree				% Change	p-value
		PRE	n	POST	n		
27_3) What do you do if you have a problem – SEEK HELP FROM SOMEONE	12 & under	51.2	41	56.1	41	4.9	0.285
	13 – 14	58.1	124	71.8	124	13.7***	0.006
	15 & over	57.5	106	67.9	106	10.4**	0.048
27_5) What do you do if you have a problem – PRAY	12 & under	65.9	41	56.1	41	-9.8	0.253
	13 – 14	69.4	124	57.3	124	-12.1**	0.022
	15 & over	56.6	106	51.9	106	-4.7	0.372
27_6) What do you do if you have a problem – OTHER	12 & under	0	41	2.4	41	2.4	0.323
	13 – 14	0	124	5.6	124	5.6***	0.008
	15 & over	0	106	6.6	106	6.6***	0.008
28) If you have a problem, do you have someone you can talk to about it? YES	12 & under	94.7	38	94.7	38	0	1.000
	13 – 14	94.1	118	95.8	118	1.7	0.482
	15 & over	88.5	104	94.2	104	5.8*	0.083
29_3) Who is the person you usually talk to when you have a problem – FRIEND OF OPPOSITE SEX	12 & under	4.9	41	2.4	41	-2.4	0.570
	13 – 14	4.0	124	8.9	124	4.8	0.109
	15 & over	8.5	106	8.5	106	0	1.000
29_4) Who is the person you usually talk to when you have a problem – TEACHER	12 & under	7.3	41	7.3	41	0	1.000
	13 – 14	5.6	124	12.9	124	7.3**	0.038
	15 & over	3.8	106	13.2	106	9.4***	0.001
29_5) Who is the person you usually talk to when you have a problem – TRAINER/ COACH	12 & under	0	41	7.3	41	7.3*	0.083
	13 – 14	4.0	124	5.6	124	1.6	0.566
	15 & over	3.8	106	9.4	106	5.7*	0.083
29_6) Who is the person you usually talk to when you have a problem – MOTHER	12 & under	46.3	41	31.7	41	-14.6	0.135
	13 – 14	24.2	124	35.5	124	11.3**	0.030
	15 & over	25.5	106	26.4	106	0.9	0.859
29_7) Who is the person you usually talk to when you have a problem – FATHER	12 & under	14.6	41	9.8	41	-4.9	0.421
	13 – 14	10.5	124	18.5	124	8.1**	0.041
	15 & over	8.5	106	11.3	106	2.8	0.441
29_8) Who is the person you usually talk to when you have a problem – ADULT FAMILY MEMBER	12 & under	22.0	41	19.5	41	-2.4	0.710
	13 – 14	25.8	124	26.6	124	0.8	0.874
	15 & over	14.2	106	27.4	106	13.2***	0.006
29_9) Who is the person you usually talk to when you have a problem – BROTHER OR SISTER	12 & under	7.3	41	19.5	41	12.2*	0.058
	13 – 14	11.3	124	17.7	124	6.5	0.117
	15 & over	18.9	106	17.0	106	-1.9	0.685
30_1) How do you view your teacher or coach – A FRIEND	12 & under	12.2	41	19.5	41	7.3	0.262
	13 – 14	23.4	124	27.4	124	4.0	0.319

	15 & over	17.0	106	30.2	106	13.2***	0.008
30_2) How do you view your teacher or coach – SOMEONE I AM AFRAID OF	12 & under	14.6	41	4.9	41	-9.8*	0.103
	13 – 14	19.4	124	13.7	124	-5.6	0.145
	15 & over	12.3	106	9.4	106	-2.8	0.470
30_4) How do you view your teacher or coach – TEACHER	12 & under	39.0	41	31.7	41	-7.3	0.412
	13 – 14	35.5	124	24.2	124	-11.3**	0.026
	15 & over	22.6	106	31.1	106	-8.5	0.106
30_5) How do you view your teacher or coach – ROLE MODEL	12 & under	14.6	41	29.3	41	14.6*	0.083
	13 – 14	16.1	124	33.9	124	17.7***	0.000
	15 & over	12.2	106	37.7	106	25.5***	0.000
30_6) How do you view your teacher or coach – SOMEONE WHO CARES FOR ME	12 & under	39.0	41	39.0	41	0	1.000
	13 – 14	58.1	124	67.7	124	9.7*	0.077
	15 & over	106	59.4	106	58.5	0.9	0.870
30_7) How do you view your teacher or coach – OTHER	12 & under	2.4	41	4.9	41	2.4	0.570
	13 – 14	5.6	124	4.8	124	-0.8	0.764
	15 & over	0.9	106	5.7	106	4.7*	0.058

Community Engagement:

Survey Question	Age	% Response Yes/Agree				% Change	p-value
		PRE	n	POST	n		
31) Do you participate in activities that help your community? YES	12 & under	73.7	38	89.5	38	15.8*	0.057
	13 – 14	76.5	119	87.4	119	10.9**	0.023
	15 & over	57.8	102	74.5	102	16.7***	0.003
32_1) If 'YES' what events/activities have you participated in during the last 6 months in your community – NONE	12 & under	2.4	41	7.3	41	4.9	0.323
	13 – 14	8.1	124	6.5	124	1.6	0.639
	15 & over	12.3	106	3.8	106	8.5**	0.019
32_2) If 'YES' what events/activities have you participated in during the last 6 months in your community – PEER EDUCATION	12 & under	17.1	41	26.8	41	9.8	0.210
	13 – 14	21.0	124	31.5	124	10.5**	0.032
	15 & over	17.9	106	29.2	106	11.3**	0.039
32_3) If 'YES' what events/activities have you participated in during the last 6 months in your community – HIV AWARENESS CAMPAIGN	12 & under	41.5	41	43.9	41	2.4	0.785
	13 – 14	20.2	124	40.3	124	20.2***	0.000
	15 & over	14.2	106	34.0	106	19.8***	0.000
32_5) If 'YES' what events/activities have you participated in during the last 6	12 & under	22.0	41	34.1	41	12.2*	0.096
	13 – 14	30.6	124	31.5	124	0.8	0.887

months in your community – SPORTING EVENT	15 & over	17.9	106	22.6	106	4.7	0.320
32_6) If ‘YES’ what events/activities have you participated in during the last 6 months in your community – DRAMA/THEATRE	12 & under	17.1	41	9.8	41	-7.3	0.323
	13 – 14	18.5	124	26.6	124	8.1**	0.050
	15 & over	14.2	106	19.8	106	5.7	0.158
35) I believe I have the skills to contribute to my community - YES	12 & under	91.9	37	89.2	37	2.7	0.711
	13 – 14	88.0	117	88.0	117	0	1.000
	15 & over	88.1	101	95.0	101	6.9*	0.071
36) I know how to use my skills to help my community - YES	12 & under	78.4	37	100.0	37	21.6***	0.003
	13 – 14	83.1	118	81.4	118	-1.7	0.700
	15 & over	80.0	100	85.0	100	5.0	0.320

HIV/AIDS Attitudes and Knowledge:

Survey Question	Age	% Response Yes/Agree				% Change	p-value
		PRE	n	POST	n		
37) The most effective way to avoid HIV infection is to not have sex at all - AGREE	12 & under	84.2	38	81.6	38	-2.6	0.711
	13 – 14	73.9	119	80.7	119	6.7	0.131
	15 & over	77.5	102	75.5	102	-2.0	0.733
38) The most common way HIV spreads in Africa is through unprotected sex with an HIV positive person - AGREE	12 & under	78.4	37	75.7	37	-2.7	0.711
	13 – 14	77.3	119	80.7	119	3.4	0.452
	15 & over	87.3	102	85.3	102	-2.0	0.672
39) I know how to support someone in my community who is HIV positive - AGREE	12 & under	64.1	39	82.1	39	17.9**	0.051
	13 – 14	56.3	119	74.8	119	18.5***	0.001
	15 & over	59.4	101	78.2	101	18.8***	0.001

Open-Ended: Identifying Strengths

Survey Question	Age	% Response Yes/Agree				% Change Pre to Post	p-value
		PRE	n	POST	n		
s2_response) Did respondent list a second strength?	12 & under	78.0	41	92.7	41	14.6**	0.032
	13 – 14	84.6	123	98.4	123	13.8***	0.000
	15 & over	90.6	106	96.2	106	5.7*	0.083
s3_response) Did respondent list a third strength?	12 & under	65.9	41	85.4	41	19.5***	0.003
	13 – 14	74.8	123	94.3	123	19.5***	0.000
	15 & over	77.4	106	89.6	106	12.3***	0.006
s_1) Home	12 & under	29.3	41	36.6	41	7.3	0.412
	13 – 14	20.3	123	27.6	123	7.3*	0.095
	15 & over	23.6	106	22.6	106	0.9	0.854
s_2) School	12 & under	61.0	41	43.9	41	-17.1**	0.051
	13 – 14	73.2	123	64.2	123	-8.9*	0.070
	15 & over	51.9	106	49.1	106	-2.8	0.640

s_3) Sport	12 & under	43.9	41	56.1	41	12.2	0.168
	13 – 14	54.5	123	59.3	123	4.9	0.332
	15 & over	48.1	106	56.6	106	8.5	0.106
s_4) Art	12 & under	14.6	41	19.5	41	4.9	0.421
	13 – 14	23.6	123	27.6	123	4.1	0.299
	15 & over	18.9	106	27.4	106	8.5*	0.060
s_6) HIV Prevention / GRS	12 & under	0	41	4.9	41	4.9	0.160
	13 – 14	0	123	6.5	123	6.5***	0.004
	15 & over	0	106	7.5	106	7.5***	0.004

Open-Ended: Setting Goals

Survey Question	Age	% Response Yes/Agree				% Change Pre to Post	p-value
		PRE	n	POST	n		
2g2_response) Did respondent set a second goal?	12 & under	75.6	41	82.9	41	7.3	0.372
	13 – 14	70.7	123	88.6	123	17.9***	0.000
	15 & over	81.1	106	87.7	106	6.6	0.145
2g_1) HIV/AIDS	12 & under	2.4	41	2.4	41	0	---
	13 – 14	3.3	123	7.3	123	4.1*	0.096
	15 & over	2.8	106	6.6	106	3.8	0.158
2g_2) Education Prof	12 & under	4.9	41	12.2	41	7.3*	0.083
	13 – 14	22.8	123	22.8	123	0	1.000
	15 & over	17.9	106	16.0	106	-1.9	0.640
2g_7) GRS Life skills/Resiliency	12 & under	0	41	9.8	41	9.8**	0.044
	13 – 14	4.1	123	10.6	123	6.5**	0.020
	15 & over	5.7	106	11.3	106	5.7*	0.083
2g_10) Help/teach community	12 & under	4.9	41	9.8	41	4.9	0.323
	13 – 14	3.3	123	9.8	123	6.5**	0.032
	15 & over	3.8	106	4.7	106	0.9	0.707
2g_13) Self-change	12 & under	9.8	41	4.9	41	4.9	0.323
	13 – 14	3.3	123	8.1	123	4.9*	0.083
	15 & over	6.6	106	6.6	106	0	1.000
2g_14) Own house/car/business	12 & under	7.3	41	4.9	41	-2.4	0.570
	13 – 14	4.1	123	1.6	123	-2.4	0.259
	15 & over	5.7	106	1.9	106	3.8*	0.103

EVALUATION TOOLS

GRASSROOTS RESILIENCY PROJECT
Pre-Test Survey for Beneficiaries

Survey agreement or consent letter

We are collecting information about the Grassroots Soccer program, and we know that you have great ideas to share. The information you provide will help us make the program strong for children in your area.

Everything you write or say will be kept confidential. Your name will not in any way be associated with your responses.

Are you willing to participate in this survey? **TICK** _____ Yes or _____ No

If no, stop. Some students may not wish to complete the survey, they do not have to do it to be in the program

DATE __/__/__
PLACE OF SURVEY (SCHOOL CODE) _____
HOUR/TIME OF SURVEY _____
NAME/CODE FOR PERSON ADMINISTERED THE SURVEY _____(use code)

EXAMPLE INSTRUCTIONS

CIRCLE YOUR RESPONSE

What are your favorite kinds of relish?

(CIRCLE ALL THAT APPLY)

- 1= ocr
- 2= rape
- 3= visashi
- 4= chibwabwa
- 5= chicken
- 6= beans
- 7= other beef

I. BACKGROUND INFORMATION

Subject ID code _____

CIRCLE YOUR RESPONSES

1. Circle if you are a boy or girl

1= Boy
2= Girl

2. How old are you now?

Age: _____ Years

3. What grade/level in school are you in currently?

1=Grade/level	5
2=Grade/level	6
3=Grade/level	7
4=Grade/level	8
5=Grade/level	9

4. Have you ever had to withdraw from school for an extended period?

IF 'NO' GO TO QUESTION 6

1=YES
2=NO

5. If **'YES'**, what is the main reason you withdrew from school?

1=Family could not afford
2=Too many responsibilities at home
3=School was too far
4=Needed to care for ill family member
5=No school places were available
6=Other (specify) _____

6. Are both your parents alive?

1=YES
2= NO

7. Who do you live with?

- 1=Both parents
- 2=Mother only
- 3=Father only
- 4=Neither mother nor father
- 5=Other

8. Do you have a safe space to sleep every night?

- 1=YES
- 2=NO

We would now like to ask you some questions about things you like to do, friendship, strengths, goals, and future plans.

II. Strengths

9. List three things you do well.

- 1. _____
- 2. _____
- 3. _____

10. How do you know that you are good at these things?

(CIRCLE ALL THAT APPLY)

- 1= My friends tell me
- 2= I just know
- 3= I feel good when I do them
- 4= My mother/father/family member told me
- 5= Teacher, coach. told me
- 6= Other (specify) _____

11. For each of the statements please circle **AGREE** if you think the statement is true or **DISAGREE** if you think the statement is not true.

(11a-11i)

I believe I am responsible for my own decisions.	AGREE	DISAGREE
I believe I am able to make my own decisions.	AGREE	DISAGREE
I know how to stand up to peer pressure.	AGREE	DISAGREE
When I make a decision to do something:		
I think about all of my choices carefully.	AGREE	DISAGREE
I do the first thing that comes into my mind	AGREE	DISAGREE
I don't even think about it; I just do it.	AGREE	DISAGREE
I take my time to carefully decide what to do.	AGREE	DISAGREE
I make a list of positive and negative consequences.	AGREE	DISAGREE
I do whatever feels good at the moment.	AGREE	DISAGREE

III. Goal Setting//Making the Next Move

12. What are your goals for your future?

1.

2.

3.

CIRCLE YOUR RESPONSES

13. Have you made any plans to help you reach your goals?

1=YES

2=NO

IF 'NO' GO TO QUESTION 15

14. If 'YES' what do you do if your plan to reach your goal does not work?
(CIRCLE ALL THAT APPLY)

- 1=Ask for help
- 2=Nothing
- 3=Make a back up plan
- 4=Try again
- 5=Other (specify) _____

15. Is anyone helping you to reach your goals?

- 1=YES
- 2=NO

16. Do you think it is important to have a plan to reach your goal?

- 1=YES
- 2=NO

17. Do you think it is important to make lists?

- 1=YES
- 2=NO

Now, let's talk about the near future.

18. Do you have any plans for what you will do when school is out for this year?

- 1=YES
- 2=NO

19. What kinds of things will you do when school is out?
(CIRCLE ALL THAT APPLY)

- 1=Hangout with friends
- 2=Chores/housework
- 3=Play sports
- 4=Do nothing
- 5=Teach others about AIDS
- 6=Work for pay
- 7=Other (specify) _____

20. What is the highest level of education you would like to complete some day?
(CIRCLE ONE)

- 1=Primary
- 2=Secondary
- 3=Technical/vocational school
- 4=Religious school
- 5=University/college
- 6=Post- university
- 7=Don't know

21. What work or career would you like to have in the future?

- 1=Medical person (doctor, nurse)
- 2=Farmer
- 3=Business person
- 4=Entertainer (singer, etc)
- 5=Sports/coach career
- 6=Teacher
- 7=Don't Know
- 8=Other (specify) _____

IV. Social Networks, Peer Support, Safe Environment

22. Have you made any new friends in the past one year?

- 1=YES
- 2=NO

IF 'NO' GO TO QUESTIONS 24

23. If **'YES'** where did you meet them?
(CIRCLE ALL THAT APPLY)

- 1=School
- 2=Grassroot Soccer Program
- 3=Neighborhood**
- 4=Workplace
- 5=Church
- 6=Youth group
- 7=Other (specify)_____

24. Are there people in your life that praise or compliment you for your accomplishments?

- 1=YES
- 2=NO

25. Do you know how to praise and compliment others for their accomplishments?

- 1=YES
- 2=NO

Safety, Social Cohesion Index

Now, we wish to know about your surroundings and where you live. For each of the statements please circle **AGREE** if you think the statement is true or **DISAGREE** if you think the statement is not true.

26 (26a-26j)

I have many friends in my neighborhood.	AGREE	DISAGREE
I feel safe walking around in my neighborhood during the day.	AGREE	DISAGREE
There is a lot of crime in my neighborhood.	AGREE	DISAGREE
I have heard that girls have been raped in my neighborhood.	AGREE	DISAGREE
I am scared of some of the people in my neighborhood.	AGREE	DISAGREE
People in my neighborhood trust one another.	AGREE	DISAGREE
I have been harassed by someone of the opposite sex.	AGREE	DISAGREE
There is a place other than my house or school where I can meet my friends of the same sex.	AGREE	DISAGREE
If I needed money urgently, there is someone I could borrow money from.	AGREE	DISAGREE
If I didn't have a place to stay at night, there is someone that I trust that would take me in.	AGREE	DISAGREE

CIRCLE YOUR RESPONSES

Problem-solving and Help Seeking Behavior

27. What do you do if you have a problem?
(CIRCLE ALL THAT APPLY)

- 1=Nothing
- 2=Try to resolve it myself
- 3=Seek Help from someone
- 4=Try to stop thinking about it
- 5=Pray
- 6=Other (specify)_____

28. If you have a problem, do you have someone you can talk to about it?

1=YES

2=NO

29. Is that person usually:

(CIRCLE ONE)

1=No one

2=Same sex friend

3=Friend of opposite sex

4=Teacher

5=Trainer/Coach

6=Mother

7=Father

8=Aunt, Uncle or adult family

member

9=Brother or sister

10=Other (specify) _____

30. How do you view your teacher or coach?

(CIRCLE ALL THAT APPLY)

I see him/her as:

1=A friend

2=Someone I am afraid of

3=Someone I like

4=Teacher

5=Role Model

6=Someone who cares for me

7=Other (specify) _____

V. Community Engagement

31. Do you participate in activities that help your community?

1=YES

2=NO

32. If 'YES' what events/activities have you participated in during the last 6 months in your community?

(CIRCLE ALL THAT APPLY)

1=None

2=Peer education

3=HIV Awareness Campaign

- 4=Clean UP
- 5=Sporting Event
- 6=Drama/theatre
- 7=Other (specify)_____

33. In those activities were you:

- 1= I did not participate
- 2= An observer (Watching)
- 3= Doer (Helping)
- 4= Teacher (showing someone how to do something)
- 5= Peer Educator
- 6= Organizer (getting people together)
- 7= Other (Specify) _____

34. I believe that helping to improve my community is important.

- 1=YES
- 2=NO

35. I believe I have skills to contribute to my community.

- 1=YES
- 2=NO

36. I know how to use my skills to help my community.

- 1=YES
- 2=NO

VI. HIV/AIDS Questions

Please circle AGREE if you think the statement is true. Circle DISAGREE if you think the statement is untrue. Circle DO NOT KNOW if you are not sure.

37. The most effective way to avoid HIV infection is to not have sex at all.	AGREE	DISAGREE	DO NOT KNOW
38. The most common way HIV is spread in Africa is through unprotected	AGREE	DISAGREE	DO NOT KNOW

sex with an HIV positive person.			
39. I know how to support someone in my community who is HIV positive.	AGREE	DISAGREE	DO NOT KNOW

THANK YOU FOR YOUR PARITCIPATION.

I. BACKGROUND INFORMATION

CIRCLE YOUR RESPONSES

E1. Circle if you are a boy or girl

1= Boy
2= Girl

E42. Four Ways to Stay Strong

List the four ways to stay strong.

- 1. _____
- 2. _____
- 3. _____
- 4. _____

We would now like to ask you some questions about things you like to do, friendship, strengths, goals, and future plans.

II. Strengths

E9. List three things you do well.

- 1. _____
- 2. _____
- 3. _____

E10. How do you know that you are good at these things?
(CIRCLE ALL THAT APPLY)

- 1= My friends tell me
- 2= I just know
- 3= I feel good when I do them
- 4= My mother/father/family
- 5= Teacher, coach. told me
- 6= Other (specify)

member told me

E11. For each of the statements please circle AGREE if you think the statement is true or DISAGREE if you think the statement is not true.

(E11a-11i)

I believe I am responsible for my own decisions.	AGREE	DISAGREE
I believe I am able to make my own decisions.	AGREE	DISAGREE
I know how to stand up to peer pressure.	AGREE	DISAGREE
When I make a decision to do something:		
I think about all of my choices carefully.	AGREE	DISAGREE
I do the first thing that comes into my mind	AGREE	DISAGREE
I don't even think about it; I just do it.	AGREE	DISAGREE
I take my time to carefully decide what to do.	AGREE	DISAGREE
I make a list of positive and negative consequences.	AGREE	DISAGREE
I do whatever feels good at the moment.	AGREE	DISAGREE

III. Goal Setting//Making the Next Move

E12. What are your goals for your future?

1. _____

2. _____

CIRCLE YOUR RESPONSES

E13. Have you made any plans to help you reach your goals?

1=YES
2=NO

IF 'NO' GO TO QUESTION 15

E14. If 'YES' what do you do if your plan to reach your goal does not work?
(CIRCLE ALL THAT APPLY)

- 1=Ask for help
- 2=Nothing
- 3=Make a back up plan
- 4=Try again
- 5=Other (specify) _____

E15. Is anyone helping you to reach your goals?

- 1=YES
- 2=NO

E16. Do you think it is important to have a plan to reach your goal?

- 1=YES
- 2=NO

E40. Do you make lists (either in your head or on paper) when making decisions?

(CIRCLE ONE)

- 1= Never
- 2= Sometimes
- 3= Always

E41. Can you list 3 words you have learned from the GRS Resiliency games?
(No words from energizers)

- 1. _____
- 2. _____
- 3. _____

Now, let's talk about the near future.

E18. Do you have any plans for what you will do when school is out for this year?

- 1=YES
- 2=NO

E19. What kinds of things will you do when school is out?
(CIRCLE ALL THAT APPLY)

- 1=Hangout with friends
- 2=Chores/housework
- 3=Play sports
- 4=Do nothing
- 5=Teach others about AIDS

6=Work for pay
7=Other (specify)_____

IV. Social Networks, Peer Support, Safe Environment

E22. Have you made any new friends in the past one year?

1=YES
2=NO

E25. Do you know how to praise and compliment others for their accomplishments?

1=YES
2=NO

Problem-solving and Help Seeking Behavior

E27. What do you do if you have a problem?

(CIRCLE ALL THAT APPLY)

1=Nothing
2=Try to resolve it myself
3=Seek Help from someone

4=Try to stop thinking about it
5=Pray
6=Other (specify)_____

E28. If you have a problem, do you have someone you can talk to about it?

1=YES
2=NO

E29. Is that person usually:

(CIRCLE ONE)

1=No one
2=Same sex friend
3=Friend of opposite sex
4=Teacher
5=Trainer/Coach
6=Mother
7=Father
8=Aunt, Uncle or adult family

9=Brother or sister

member

10=Other (specify) _____

E30. How do you view your teacher or coach?
(CIRCLE ALL THAT APPLY)

I see him/her as:

- 1=A friend
- 2=Someone I am afraid of
- 3=Someone I like
- 4=Teacher
- 5=Role Model
- 6=Someone who cares for me
- 7=Other (specify) _____

V. Community Engagement

E31. Do you participate in activities that help your community?

- 1=YES
- 2=NO

E32. If 'YES' what events/activities have you participated in during the last 6 months in your community?

(CIRCLE ALL THAT APPLY)

- 1=None
- 2=Peer education
- 3=HIV Awareness Campaign
- 4=Clean UP
- 5=Sporting Event
- 6=Drama/theatre
- 7=Other (specify)_____

E35. I believe I have skills to contribute to my community.

- 1=YES
- 2=NO

E36. I know how to use my skills to help my community.

- 1=YES
- 2=NO

VI. HIV/AIDS Questions

Please circle AGREE if you think the statement is true. Circle DISAGREE if you think the statement is untrue. Circle DO NOT KNOW if you are not sure.

E37. The most effective way to avoid HIV infection is to not have sex at all.	AGREE	DISAGREE	DO NOT KNOW
E38. The most common way HIV is spread in Africa is through unprotected sex with an HIV positive person.	AGREE	DISAGREE	DO NOT KNOW
E39. I know how to support someone in	AGREE	DISAGREE	DO NOT KNOW

my community who is HIV positive.			
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City Year GRS Resiliency Course Evaluation

Name: _____ School: _____

GENDER _____ Age _____

Please circle the answer that is YOUR opinion.

1) Participating in Grassroot Soccer was helpful in developing my skills as a trainer.

Strongly Agree Agree Neither Disagree Strongly Disagree

2) If I return to City Year next year I would like to participate in the Grassroot Soccer program again.

Strongly Agree Agree Neither Disagree Strongly Disagree

3) Participating in the Grassroot Soccer program has helped me to be a better role model in my community.

Strongly Agree Agree Neither Disagree Strongly Disagree

4) Participating in this program helped me learn what my strengths and weaknesses are as a trainer.

Strongly Agree Agree Neither Disagree Strongly Disagree

5) What advice/tips about facilitating the games did you find most helpful in the training of trainers courses?

6) What are your strengths as a trainer?

7) What are your weaknesses, or things you can still improve on, as a trainer?

8) What activities did you find most enjoyable and most important in terms of key messages? Why?

9) What activities did you find your students were most engaged in? What did they learn the most from?

10) What non-game activities (Contract, Coach's Story, 4 Ways to Stay Strong, Coach's Voice, Celebration Circle) were most helpful to you as a trainer? Why? Which were least helpful? Why?

11) Are there any ways that you feel that the Grassroot Soccer program could be improved within City Year?

12) Please give feedback on Kirk, Jeff, and Paola's facilitation during this program. For each, give a ranking from 1-10 (ten being the best) and answer the following questions on the back of this page: What did they do well? Where could they improve? *Please answer on reverse.*

Interview Guide

The purpose of this study is to explore the relevance of resiliency training in the lives of boys and girls in Zambia.

Objectives:

To understand if resiliency skills can be taught through a sport-based model.

- What are the key messages that boys and girls remember?
- What games and activities do they enjoy the most?

Questions:

1. Could you please tell me your full name?
2. What lesson did you learn from the resiliency activities?
3. Which games did you learn this message from?
4. The games that you learned, how can they help you?
5. What was your favorite game?
6. What can you learn from your favorite game?
7. Do you remember the take action game?
8. Since you have graduated now, what are you going to do the information?
9. Do you remember the Celebration Circle?
10. Did anyone praise you?

GRS Trainer: _____

School: _____

Grassroots Soccer Demographic Data Form

GRS Data Collector: _____

Date of School Visit: _____

School Name: _____

Number of students: _____

Students per Class (average): _____

School Location: _____

Distance from City Center: _____

Area Served: _____

Heads of Households (% or #): Single parent: _____ Grandparent: _____ Child: _____

Does GRS Trainer live in the area served? (Circle one) YES NO

Rate of Disease in area served: HIV: _____

STD's: _____

Rate of Poverty: _____

Average economic income of area served: _____

Physical Description of School (students, size, quality of resources, infrastructure, and building):

Physical Description of Surrounding Area:

Grassroot Soccer Observational Assessment
Resiliency Pilot Project

Instructions:

- **This tool should be filled out during and after each session.**
- **The observer should write notes and fill in data as it is observed, not necessarily in the order it appears on this tool.**
- **The observer should not in any way interfere with the lesson while it is being given.**
- **The observer can review notes with the Trainer after the session.**
- **The observer should pay special attention to the use of key resiliency messages.**
- **The observer should also pay close attention to the participation of both boys and girls (if applicable). The observer should record any factors that limit a student's participation based on their gender.**

Grassroot Soccer Observational Assessment

Resiliency Pilot Project

Date:	
Observer:	
Trainer:	
School:	

Activities Completed: _____

Session/Week of the Program: _____

Total Number of Students: _____ #Boys: _____ #Girls: _____

Observation

1. Are both contracts up on the wall? (circle)	YES	NO	
2. Is there an Assistant Coach? (circle)	YES	NO	None Required
3. Number of times Trainer praises students:			
4. Number of times lists were celebrated:			
5. Did the trainer facilitate Fact Nonsense? (circle)	YES	NO	
6. Did the trainer end the session with the Praise Circle? (circle)	YES	NO	
7. Is the trainer conducting the activities in order? (circle)	YES	NO	

*Use additional space if answers require explanation.

Trainer

8. What did the teacher do well? _____

9. What did the teacher do poorly? _____

10. Did teacher use Resiliency Vocabulary? List: _____

—

11. If GRS staff attended, what interventions did they make?

—

Students

12. Did all students participate in activities? Explain:

—

13. Was there equal opportunity for boys and girls to participate in the lessons? Explain:

—

Overview

14. What problems is the trainer having with the program in general? _____

—

15. What solutions did you come up with together? _____

—

Overall, how would you rate the quality of the facilitation? [CIRCLE] 1 2 3 4 5

Date for follow-up Site Visit: _____

Date of *Graduation*: _____

Additional comments: _____

