

PROSPECTS

Impact Evaluation Endline Report

Innovations for Poverty Action



PROSPECTS

IMPACT EVALUATION ENDLINE REPORT

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EXECUTIVE SUMMARY

In July 2012, Mercy Corps Liberia launched a program titled Promoting Sustainable Partnerships for Economic Transformation (PROSPECTS). The aim of the program was to promote youth life skills development and to foster psychosocial support among young adults living in densely-populated communities of Monrovia. Through a randomized control trial, we focus on the evaluation of two primary components of the PROSPECTS program: 1) a cash-for-work program and 2) a sports group program. A central goal of this evaluation is to better understand the channels through which youth development programs can influence the ability of youth to pursue productive opportunities and build social support channels in their community. Through this report, we shed light on the effect of the PROSPECTS program on indicators of psychosocial welfare and economic activity. We observed that participation in the cash for work program was very low; individuals assigned to cash for work attended, on average, less than one quarter of the cash for work sessions. We do observe fairly substantial peer effects in cash for work participation with a 31% increase in participation among individuals with the greatest number of friends. Among those assigned to the sports group program, more than two-thirds of youth attended the majority of the group sessions. Follow-up surveys confirmed that the PROSPECTS sports program increase participation in sports by 10 percentage points. However, we do not find a change in involvement in other community group activities. While participation in the sport group program was considerably higher and stable throughout the course of the study, we do not observe detectable effects of the program on psychosocial outcomes. Our analysis suggests that likelihood of working increased among those that participated in the sports group program, however, we do not detect any further effect on economic activity.

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1

INTRODUCTION

1.1. MOTIVATION FOR YOUTH PSYCHOSOCIAL SUPPORT

In a post-conflict context like Liberia, growing populations of unemployed youth represent both an opportunity to develop and enhance the Liberian economy as well as a potential source of instability. Conflicts are fueled as youth compete for limited job opportunities. Youth with few job prospects are also vulnerable to influence by external forces—violence, drugs, crime, and political elites. In these environments, donors often utilize youth economic programs to foster economic productivity and stability, and support psychosocial programs to help youth reintegrate back into their communities. Despite high levels of investment in youth development programs in recent years, little evidence exists on which interventions are most effective in increasing economic opportunities for youth and reducing their risk of participating in violence and risky behaviors.

Mercy Corps employs a battery of programs for a comprehensive approach to youth development. The Mercy Corps “Youth Transformation Framework” motivates the youth programmatic design to focus on five core competencies: 1) global citizenship, 2) life skills, 3) negotiation and conflict management, 4) psychosocial support, and 5) social entrepreneurship.¹ This report concentrates on the implementation of Mercy Corps’ Youth Transformation Framework through a youth program in Monrovia, Liberia. The program was designed to promote youth development in the above five competencies through a cash for work and youth sports program. Such programs are widely popular in the development space. Mercy Corps, as well as many other development organizations employ cash for work in global programs.^[1, 2] Additionally, Mercy Corps is one of several organizations that promotes youth development through sports.² Mercy Corps uses the Sports for Change method in over 25 countries. Youth sports programs also attract widespread support through international funding sources.³ We thus approach this study with the objective of assessing how the Mercy Corps youth transformation framework, as applied through a particular implementation in Liberia, affects youth development outcomes.

1.2. PROGRAM OVERVIEW

In July 2012, Mercy Corps Liberia launched a program titled Promoting Sustainable Partnerships for Economic Transformation (PROSPECTS). After an initial round of the program with funding from Chevron, a second round of the program with funding from the Swedish International Development Agency was extended to a new target population of vulnerable youth in Monrovia in August 2013.

The PROSPECTS program contains several interventions aimed at youth development in Liberia. Youth is a widely defined concept in Liberia with the official age range including people up to 35 years old. Several components of PROSPECTS focus on assisting youth to find employment and/or pursue entrepreneurial opportunities. The components of the PROSPECTS program that we focus on in this study, however, target

¹<https://www.mercycorps.org/research-resources/youth-development-sector-approach>

²<https://www.mercycorps.org/tags/sport-for-change>,

<https://www.peaceplayersintl.org/>,

<http://www.grassrootsoccer.org/>

³<http://www.un.org/wcm/content/site/sport/home/resourcecenter/links/pid/6902>

vulnerable youth, that is those young adults between the ages of 18 and 25 that are unskilled and “unemployable.” The target individuals are no longer in school and have minimal formal work experience. The PROSPECTS components that we focus on utilize the primary Youth Transformation Framework competencies of life skills development, negotiation and conflict management, and psychosocial support in order to provide “pre-employment skills” to participants.

Through a randomized control trial, we focus on the evaluation of two primary components of the PROSPECTS program. The first program component, Cash for Work (CFW), entailed the coordination of organized youth to clean streets and markets and pilot recycling and composting programs in select communities of Monrovia. Mercy Corps, in coordination with the Liberian Agency for Community Empowerment (LACE), coordinated “Recycling Competitions”, which engaged young adults to collect waste (bottles, cans, plastic water sachets, scrap metal, etc.) available in their community. Participants sold the collected materials to a local depot at prevailing market prices. In addition, prizes were awarded to participants who met minimum goals for material collection and who sold the most materials during a given day or throughout the course of the three month competition period. The second program component, Sports for Change (SFC), organized young adults into teams that played sports and participated in complimentary sessions aimed at promoting life skills. Sports groups met twice a week for approximately three hours, during which time coaches would review programmatic materials designed by Mercy Corps, carry out related team and individual learning activities, and play sports (primarily soccer and kickball).

Mercy Corps worked in partnership with LACE to mobilize and recruit vulnerable Liberian youth in nine urban communities. Mercy Corps took the lead in determining eligible communities where there were a sufficient number of young adults to participate in the program and a sufficient amount of local need and capacity to conduct the programs. Ultimately, nine different communities around Monrovia were chosen for participation comprised of West Point, New Kru Town, Peace Island, Buzzy Quarter, Clara Town, Dry Rice Market, Banjor, Chicken Soup Factory, and Logan Town.

PROSPECTS is premised on the assumption that to effectively impact youth employability and reduce propensity towards violence in post-conflict environments, young people require a blend of life skills such as leadership, negotiation and communication, with psychosocial supports to learn coping mechanisms and self-control, coupled with market-driven technical skills. The PROSPECTS impact evaluation was designed in order to provide insight into the causal relationship between the Cash for Work and Sports for Change components on youth development outcomes. A central goal of this evaluation is to better understand the channels through which youth development programs can influence the ability of youth to pursue productive opportunities and build social support channels in their community. Through this report, we shed light on the effect of the PROSPECTS program on indicators of psychosocial welfare and economic activity.

A central motivation of this evaluation is a need to better understand the channels through which youth development programs can influence the ability of youth to pursue productive opportunities. The primary research questions that the impact evaluation set out to address are the following:

1. What is the effect of life skills training and psychosocial support offered through sports groups on risky and violent behaviors and economic activity among youth?
2. What is the effect of the cash for work components on youth’s risky and violent behaviors and economic activity?

1.3. RELATED WORK

While the PROSPECTS program model is in line with many large scale post-conflict programs, research on cash for work components is limited ([3]); to our knowledge no randomized trial of a psychosocial support program through sports groups exists. This evaluation aims to complement similar research in on the relationship between cash for work and sports programs on psychosocial and economic outcomes.[4]

[5] conducted an impact evaluation of the Economic Empowerment of Girls and Young Women (EPAG) in Liberia. Although EPAG excluded men, the targeting criteria were otherwise very similar. The age range was slightly older (from 16 up to 27 years old). They were similarly targeting out of school youth from nine communities around Monrovia. New Kru Town and West Point were included in both EPAG and the PROSPECTS program. However, they had a requirement of basic literacy and numeracy skills which were not required by PROSPECTS. EPAG’s intervention centered on life skills and livelihoods training for 2,500 young women around Monrovia and found substantial effects resulting from the program. While the populations

and project aims were similar, EPAG's intervention was considerably more intensive than PROSPECTS, consisting of six months of classroom training and six months of job placement and sustained support.

Research, primarily from the United States, examines the role of sports in psychosocial development [6]; however, investigation of the causal relationship between sports programs and psychosocial outcomes is not available. As recognized in a recent review of research on sports programs and youth psychosocial development, "sport may not produce positive outcomes; positive outcomes may be reported because youth in sport are already well-adjusted prior to their sport participation. The point here is that sport participants may be a self-selected sample" [7]. Through the evaluation of the PROSPECTS program, we set out to address the self-selection bias by conducting a randomized control trial that randomly assigns program applicants to three program groups, Cash for Work, Sports for Change, or a combination of the two components. An additional group is randomly assigned as the control group to estimate counterfactual outcomes.

2

METHODOLOGY AND DATA

2.1. RECRUITMENT AND ELIGIBILITY

Mercy Corps' PROSPECTS program began in August 2013, targeting 1,600 youth in nine communities in Montserrado County. The IPA-led impact evaluation included 3,000 youth as research participants. Recruitment was conducted by Mercy Corps, reaching out to community groups and publicizing the PROSPECTS program to interested youths. Each of the nine selected communities was designated a date for registration. On the registration date, youth from the community were invited to apply for the Mercy Corps/LACE program and a public lottery was conducted to randomly assigned to a program group.

Mercy Corps' eligibility criteria dictated that participants were between the ages of 16 and 25. Additionally, Mercy Corps sought to include an equal number of women and men. Although, in some communities, this balance was not perfectly achieved, the final numbers for participation were ultimately very close to equal. In communities following the initial two communities an additional criteria was added making explicit that the program was to target out-of-school youth. Thus, effort was taken to reduce the chance that program participants were enrolled in school.

2.2. IMPACT EVALUATION DESIGN

To conduct the impact evaluation of the PROSPECTS youth support program, Mercy Corps worked with Innovations for Poverty Action to randomly assign a pool of eligible youth to one of three programmatic arms in addition to a control group. The random assignment, conducted through a public lottery (see 2.3) was conducted on an individual-by-individual basis in order to ensure demographic variation in Cash for Work and Sports for Change cohorts. The random assignment allows us to analyze the impact of the PROSPECTS program by comparing key outcome variables after the program's conclusion across individuals assigned to Cash for Work, Sports for Change or a control group that remained outside of the PROSPECTS program.

2.3. PROGRAM ASSIGNMENT

Following a week of publicity and local recruitment, a one-day lottery was conducted in each community. In these communities it was made clear to registrants that there were four possible lottery outcomes. Participants could be selected for Cash for Work, for Sports for Change, for both program components, or for neither.¹ The lottery was conducted in collaboration with IPA and LACE as program choices were drawn by the eligible participant from a covered box.

The lottery was conducted so that groups of roughly 30 interested participants evenly split between men and women were first debriefed on the process they were about to go through. They were told of the two program components and of the possibility of getting either, both, or neither program so that the youth had clear expectations of the process. Next, they were registered with IPA enumerators who helped the youth to complete registration forms (see 2.4.1)

All youth that met the eligibility criteria proceeded to the lottery table where they would draw a ticket to determine their group assignment to SFC, CFW, the combined programs, or neither. In order to achieve

¹For the remainder of this report, we refer to the four study groups as (1) CFW for Cash for Work, (2) SFC for Sports for Change, (3) Both for the combination of SFC and CFW and (4) Control for the group that was not assigned to participate in PROSPECTS.

equivalent proportions of men and women in each group, the lottery was separated into gender-specific lotteries. Proportions were set such that approximately twenty percent of applicants were to be assigned to CFW, SFC, and the combined programs, respectively. Forty percent of applicants were assigned to the control group. Assignment was proportional to gender proportions within a given community's total pool of applicants.

Those that were not assigned to a program group, i.e. the control group, were met by IPA staff, explained that they were in a research group but unfortunately not a part of the programs and given a free mobile SIM card from Lonestar which could be used with mobile money. If they were drawn into either SFC or CFW, they then met by Mercy Corps staff, they were also given a free mobile SIM card from Lonestar, completed a clearance form for participation in the PROSPECTS program and were informed that they would be contacted at a later date about the program.

Table 2.1 gives the results from the randomization by community, the number of participants in each program category, as well as the breakdown of participants by gender. As demonstrated in Table 2.1, the proportion of men and women in each group is stable across all communities. In total, 3000 individuals were deemed to be eligible for the program. The number of applicants per community varied from 200 to 600. Women constituted 52% of the total applicants, however were in the minority in three of the nine communities. A total of 600 individuals were assigned to each of the three program groups (CFW, SFC, and Both), thus 1200 were assigned to participate in the CFW program and 1200 were assigned to a SFC group, with 600 of these individuals assigned to the combined program group. The remaining 1200 applicants were not invited to participate in the PROSPECTS program.

Table 2.1: Treatment Assignment

	CFW		SFC		Both		Control		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
West Point	46	34	45	35	45	35	91	69	400
New Kru Town	57	63	57	63	59	61	117	123	600
Peace Island	21	19	19	21	20	20	41	39	200
Buzzy Quarter	20	20	18	22	20	20	40	40	200
Clara Town	38	42	38	42	38	42	78	82	400
Dry Rice Market	20	20	20	20	20	20	40	40	200
Banjor	21	19	19	21	19	21	40	40	200
Chicken Soup Factory	35	45	34	46	34	46	67	93	400
Logan Town	35	45	34	46	35	45	65	95	400
Total	293	307	284	316	290	310	579	621	3000

2.4. DATA

Data for the impact evaluation of the PROSPECTS program was derived from a number of sources, including programmatic data, personal interviews of the entire applicant pool to PROSPECTS and qualitative data collection in the communities where PROSPECTS was implemented.

2.4.1. REGISTRATION FORMS

With the assistance of a field officer from IPA, registration forms were completed by the entire pool of 3000 PROSPECTS applicants. Data generated from the registration forms included basic demographic information: age, gender, and schooling. Following assignment of an individual into a PROSPECTS experimental group the resulting group was recorded on the forms. The registration forms also provided a key source of information that allowed IPA to contact applicants for the baseline personal interviews. Contact information and photos were collected in order to assist with identifying study participants after the registration event.

2.4.2. BASELINE PERSONAL INTERVIEWS

Following the registration event in each community, IPA conducted a baseline survey. Data was collected using computer assisted personal interview software in order to preload information from the registration forms and to facilitate modules that ask if study subjects knew other attendees at the PROSPECTS registration

event.²

IPA staff organized tracking sheets into randomly assigned interview groups. This was done in order to avoid any systematic bias that could occur if harder to track respondents were all interviewed furthest from the registration event (an event which may have, in itself, generated significant amounts of excitement and optimism). Field staff were divided into teams of four enumerators and one supervisor who was placed in charge of assigning enumerators to individual respondents and making sure that all youth were reached and interviewed. Respondents were interviewed individually, in an area where they felt comfortable and their responses could not be heard by anyone other than the enumerator.

The lottery and baseline were conducted according to the schedule shown in Table 2.2. Initial activities began on July 24, 2013 with the West Point community, shortly thereafter followed by New Kru Town. The final registration date was conducted on February 1, 2014. In each community, the baseline interviews initiated within a week of the registration date. Between completion of the registration/lottery days and administration of the baseline survey, there was very low attrition (see Section 3.1 for more about baseline response rates and attrition).

Table 2.2: Registration and Baseline Survey Dates

Community	Registration Date	Baseline Data Collection
West Point	24 Jul 2013	29 Jul - 8 Aug 2013
New Kru Town	7 Sep 2013	11 Sep - 24 Sep 2013
Peace Island	31 Oct 2013	3 Nov - 8 Nov 2013
Buzzy Quarter	7 Nov 2013	9 Nov - 16 Nov 2013
Clara Town	18 Nov 2013	22 Nov - 5 Dec 2013
Dry Rice Market	12 Dec 2013	15 Dec - 19 Dec 2013
Banjor	11 Jan 2014	13 Jan - 16 Jan 2014
Chicken Soup Factory	18 Jan 2014	23 Jan - 30 Jan 2014
Logan Town	1 Feb 2014	4 Feb - 12 Feb 2014

2.4.3. PROGRAMMATIC DATA

Programmatic data was collected by Mercy Corps and supplied to IPA. Data on attendance at Cash for Work and Sports for Change meetings were recorded by Mercy Corps. Additionally, payments to program beneficiaries were sent through mobile money and recorded by Mercy Corps.

2.4.4. ENDLINE PERSONAL INTERVIEWS

Due to restrictions in mobilizing survey teams during the Ebola crisis in Liberia, an endline survey was conducted through computer assisted telephone interviews.³ Due to low participation in the Cash for Work program, the endline survey was restricted to the study subjects assigned to the following groups: SFC, Both and Control. See Chapter 4 for more details about low participation in the Cash for Work program. Endline interviews began on April 3, 2015 and continued through May 9, 2015. A total of 2081 individuals were successfully interviewed over the phone for the endline survey (see Section 5.3 for more details about endline response rates.)

2.4.5. QUALITATIVE DATA

In tandem with the quantitative data collection, IPA oversaw qualitative data collection during the implementation period of PROSPECTS. A team of young adults in four communities were trained to complete ethnographic journals. Ethnographers were instructed to record information about events or activities that concern the youths in their respective communities. Our aim was to understand what youth were talking about in each of the week the diary was written and how events within the community were reflected through conversations.

The journals were written on a weekly basis for a period of nine weeks. The ethnographers were instructed to record events, disputes, conversations, and attitudes in the community. The purpose of the ethnographic journals was to provide qualitative context to the day-to-day lives of young adults in urban Monrovia. Each

²Computer-assisted personal interview (CAPI) software used for the baseline was SurveyCTO (<http://surveycto.com>). Forms and the database were developed by IPA and the survey was implemented using Google Nexus tablet devices.

³CATI programming was done by IPA with CSPro.

ethnographer wrote a three-page weekly journal and submitted them to an IPA field manager. A total of sixty-one journal entries were collected by the end of the nine week period. These diaries were scanned and transcribed by IPAL data entry personnel. A summary of the ethnographic journals is included in Appendix B.

2.5. ETHICAL APPROVALS

The study design and all of the information collected through the survey was designed according to strict human subjects protocols ensuring voluntary participation of respondents participating in the study. Absolute confidentiality of information collected has been maintained in order to protect respondent's privacy and anonymity. All respondents in the study sample were informed about their rights to withdraw from the study at any time during the questionnaire, and the guarantee of confidentiality for all responses provided. Explicit consent was provided by the respondents as well as a signed commitment to preserve anonymity on the part of the IPA enumerator. The study design, questionnaires, and data treatment protocols were approved by Human Subjects Committee at Innovations for Poverty Action, the University of Liberia Northwestern University, and the University of California, Berkeley. All participating research staff and principal investigators were required to pass ethical (CITI or NIH) certification and to sign confidentiality agreements assuring that information of the respondents will remain confidential.

3

BASELINE POPULATION CHARACTERISTICS

3.1. BASELINE SUMMARY STATISTICS

Extensive effort was taken to ensure that all of the 3000 individuals that attended a registration day were interviewed in the baseline survey. In total, 2,995 were successfully tracked by the IPA field teams and interviewed, leading to a tracking success rate of 99.8%.

3.1.1. HOUSEHOLD AND DEMOGRAPHIC CHARACTERISTICS

Overall, Mercy Corps' efforts to recruit and include women in the PROSPECTS program was extremely successful. The initial goal was to include 50% women among the program's participants. This target was surpassed, with women comprising of just under 52% of all participants. In addition, Mercy Corps' targeting of youth between the ages of 16 and 25 was effective. Across all nine communities, the average registrant's age was 20.9 years old (Table 3.1). The youngest community was West Point where the average age was just 18.8 years, while the oldest community was Logan Town with 21.7 years old. The lower age in West Point is largely due to the explicit change in targeting whereby school going participants were no longer recruited to participate in the programs. Female registrants were slightly older than males.

Few registrants (13.4%) were heads of their household. However, 64.8% of women and 21.5% of men stated that they had at least one child and the target population comes from rather large households, with a mean household size of 6.67 people (inclusive of adults and children). 86.4% of participants are Christian of some type while over 12.4% are Muslim. The remaining 2% is comprised of people who either reported having traditional beliefs, or not belonging to a religion. Banjor and Clara Town have the largest proportion of Muslims among their participants with 38% and 33% respectively.

Liberia's rapid urbanization and high level of geographic mobility are also reflected in respondents' individual characteristics. Only in West Point and New Kru Town (the two most youthful communities in PROSPECTS) did more than 50% of the participants report to having always lived in Montserrado. This is likely an outcome of Liberia's civil war when respondents were in their early childhood or teens and their families may have been forced to flee the fighting. In Peace Island a mere 17% of respondents have spent their whole lives in Montserrado. Finally, just 72% of participants know their father is alive, suggesting that 28% of participants' fathers either passed away or are missing from their lives. Mothers are generally more present in respondents' lives as the number climbs to 88%.

3.1.2. EDUCATION AND INCOME

Much bigger differences emerge when looking at educational background of women and men. Despite being older, women average almost two years less of schooling than men (12.3 versus 10.5). Women lag thirteen percentage points behind men in primary completion rates (90.2% and 77.5) and twelve percentage points behind men in secondary school completion rates (32.7% and 20.9%).

Approximately 60% of applicants reported receiving some source of income through some form of income-generating activity in that they personally were involved in during previous 3 months. 65% of male respondents reported income earning activities. Meanwhile, 55% of women reported a source of income. Mean income is the 7 days preceding the baseline interview was USD \$ 9.65 and, in the preceding 30 days, USD \$ 71.44. Consistent with the finding that men are more likely to report an income source, men tend to earn

close to twice the income of women (USD \$ 12.78 versus USD \$ 6.74 in the preceding 7 days). However, when asked to assess their subjective welfare, men and women report similar views of their personal position.¹ Views of current welfare were, on average, more positive than retrospective subjective welfare (i.e. one year prior to the baseline interview).

3.1.3. PSYCHOSOCIAL MEASURES

Several of our main outcomes of interest are drawn from internationally accepted psychosocial indicators. These indicators are the following: Locus of Control, Self Esteem Index, Aggression Index, and the the Depression, Anxiety and Stress Score (DASS21).

Locus of control, developed by [8] is a concept of internal versus external control. Low values of the Locus of Control Index signify that an individual believes that his or her actions determine the outcomes, whether positive or negative, in their life. Higher values indicate external locus of control, meaning that an individual believes that his or her behavior has little influence over the outcomes in life. The index involves a series of eight statements that the respondent is asked to identify with, e.g. "If you try hard you can make your life better." For each statement, the respondent is asked to state if they Agree, Somewhat Agree, Somewhat Disagree, or Disagree. To create the index, responses are sorted and scored from 1 to 4, with external control responses equaling 1 and internal control responses equaling 4. The values of the 8 responses are equally weighted and summed to create an index that ranges from 8 to 32. As observed in Table 3.1 the average individual in our population of interest has a Locus of Control score of 24, indicating a strong tendency towards internal locus of control.

The Rosenberg Self-Esteem Scale ([9]) measures positive and negative feelings about oneself. We implement the scale using 8 statements which the respondent is asked to use the Agree to Disagree scale. Negative statements are again reverse coded and a total score is calculated for each respondent by summing the responses to the 8 statements. Thus, as with the Locus of Control Index, the Self-Esteem Scale ranges from 8 to 32. We see that the average respondent tends to fall in the middle of the self-esteem spectrum. The median respondent has a Self-Esteem Score of 20. Men and women in our sample display similar Self-Esteem measures at the time of the baseline.

The Depression, Anxiety, and Stress Score (DASS21) is a series of 21 questions utilized to measure distress along the 3 axes of depression, anxiety and stress.[10] In the average youth from our sample, we find moderate to normal levels of depression, anxiety, and stress. However, among certain individuals the indicators suggest greater pressure. At the time of the baseline, depression was severe or extremely severe in 25% of the population. Anxiety was severe or extremely severe for 39% of the population. Stress was severe for 18% of the population. 6.9% of baseline respondents were categorized as severe or extremely severe in along all three axes and 15.6% were severe or extremely severe along two of the three dimensions.

In order to identify tendencies toward aggressive behavior, we presented seven distinct scenarios to respondents. Scenarios were framed over a 12 month recall period, e.g. "In the past 12 months have you had major disputes with a neighbor often, sometimes, rarely or never?" Responses were reverse coded, Never equals zero and often equals four. Scores for the seven questions were summed in order to create an Aggression Index ranging from 0 to 21. The vast majority of respondents do not report aggressive behavior, with a mean index score of 2.55 and median of 2.0. However, 10% of respondents have scores of 6 or more, suggesting that a small segment of individuals are involved in altercations within their community.

We also ask a series of six questions about risky behaviors (gambling, cigarette smoking, alcohol use, marijuana use, hard drug use, and drug selling). Each question is coded from Never (0) to Often (4) and all six are equally weighted and summed to create an index ranging from 0 to 18. As with the Aggression Index, risky behaviors are uncommon. However, risky behavior is more common among male respondents.

3.1.4. COGNITIVE MEASURES

We deployed four survey instruments to assess cognitive ability among the baseline respondents. We utilize three Raven progressive matrices to measure abstract reasoning. On average, baseline respondents identify the correct missing piece in the progressive matrix in 1.74 of the 3 cases. Male respondents tended to get more correct than female respondents. 33% of men answered correctly for all three matrices whereas 19% of women answered correctly.

To assess arithmetic skills, we posed 10 math problems to respondents at the time of the baseline. On av-

¹We asked respondents the following question to assess subjective welfare, "Please imagine a 6-step ladder where on the bottom, the first step, stand the poorest people, and on the highest highest step, the sixth, stand the rich. On which step are you today?"

erage, respondents got 5.85 of these questions correct. As with abstract reasoning, we find that men perform slightly better than women.

We also performed two sets of tests for memory and recall. In the first set of tests, enumerator read a series of numbers with increasing numbers of digits. The respondents was asked to repeat the number one digit at a time in the same order. Following this, the enumerator read an additional set of numbers and the respondent was asked to repeat the number one digit at a time in reverse order. On average, respondents get 5.15 of 8 digits forward questions correct and 1.95 of 8 digits backwards questions correct.

In the second set of memory and recall tests, enumerators read a set of 10 words and asked the respondent to repeat as many of the words as they could recall. Later is the interview, the respondent was asked again to repeat as many of the words as they could recall. In the first recall, an average of 3.1 words were correctly mentioned. In the second recall, an average of 2.6 world were recalled.

Table 3.1: Baseline Summary Statistics

	Male	Female	Total
Female	0 (0)	1 (0)	0.518 (0.500)
Age	20.57 (2.778)	21.10 (2.799)	20.85 (2.801)
Head of Household	0.162 (0.369)	0.109 (0.312)	0.134 (0.341)
Household Size	6.533 (3.602)	6.798 (3.466)	6.670 (3.534)
Mother known to be living	0.883 (0.322)	0.864 (0.343)	0.873 (0.333)
Father known to be living	0.718 (0.450)	0.710 (0.454)	0.714 (0.452)
Has at least one child	0.215 (0.411)	0.648 (0.478)	0.439 (0.496)
Matched connections in sample	2.293 (1.950)	2.481 (1.947)	2.390 (1.950)
Christian	0.839 (0.368)	0.887 (0.316)	0.864 (0.343)
Muslim	0.150 (0.357)	0.0999 (0.300)	0.124 (0.329)
Highest Grade Completed	12.28 (3.199)	10.51 (4.329)	11.36 (3.928)
Completed primary school	0.902 (0.297)	0.775 (0.418)	0.836 (0.370)
Completed secondary school	0.327 (0.469)	0.209 (0.407)	0.266 (0.442)
Any income	0.651 (0.477)	0.552 (0.497)	0.599 (0.490)
Total income last 7 days	12.77 (76.26)	6.748 (24.27)	9.651 (55.81)

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Table 3.1: Baseline Summary Statistics (continued)

	Male	Female	Total
Total income last 3 months	93.37 (553.1)	50.99 (137.1)	71.42 (397.0)
Subj. Welfare, today	2.260 (1.243)	2.341 (1.296)	2.302 (1.272)
Subj. Welfare, 1 yr ago	1.951 (1.104)	1.985 (1.170)	1.969 (1.139)
Risk Aversion	3.840 (2.514)	3.704 (2.601)	3.769 (2.560)
Locus of Control Index	24.22 (2.841)	23.93 (3.046)	24.07 (2.952)
Self-esteem Index	20.58 (4.159)	20.70 (4.099)	20.64 (4.128)
Agression Index	2.444 (2.930)	2.642 (2.778)	2.547 (2.853)
Risky behavior index	2.100 (2.239)	0.885 (1.233)	1.470 (1.889)
DASS21	21.18 (13.80)	24.17 (14.13)	22.73 (14.05)
Ravens Score (0-3)	1.911 (0.980)	1.575 (0.948)	1.737 (0.978)
Numeracy (0-10)	6.271 (1.841)	5.450 (2.069)	5.845 (2.005)
Digits Forward (0-8)	5.307 (1.598)	5.002 (1.572)	5.149 (1.592)
Digits Backward (0-8)	2.054 (1.192)	1.858 (1.171)	1.953 (1.185)
First Word Recall (0-10)	3.190 (2.746)	2.953 (2.831)	3.067 (2.792)
Second Word Recall (0-10)	2.635 (2.413)	2.500 (2.546)	2.565 (2.483)

Standard deviations in parentheses

3.2. RANDOMIZATION CHECKS

In Table 3.2 we check for balance across our four randomized groups. We see that the randomization performed as expected with no statistically significant differences in baseline characteristics. The exceptions are in the Self-Esteem Index and the DASS21 where the data suggests that baseline scores are not equivalent for all of the four randomized groups. Self-Esteem scores are slightly higher in the control group and the combined Depression, Anxiety, and Stress score is slightly lower in the control group. Considering the strong evidence for balance across all other key variables, we feel that the randomization performed as expected. However, we include model specifications with and without control variables to account for any baseline differences in all of our regressions for measuring participation and impact of PROSPECTS.

Table 3.2: Baseline Balance

	Treatment Group				P-value
	Control	SFC	CFW	Both	
Female	0.517 (0.500)	0.527 (0.500)	0.512 (0.500)	0.515 (0.500)	0.960
Age	20.93 (2.780)	20.76 (2.793)	20.77 (2.900)	20.83 (2.754)	0.561
Head of Household	0.131 (0.338)	0.134 (0.341)	0.123 (0.328)	0.152 (0.359)	0.517
Household Size	6.762 (3.520)	6.541 (3.524)	6.633 (3.497)	6.654 (3.613)	0.641
Mother known to be living	0.868 (0.339)	0.876 (0.329)	0.888 (0.315)	0.863 (0.344)	0.543
Father known to be living	0.713 (0.452)	0.705 (0.456)	0.710 (0.454)	0.729 (0.445)	0.822
Has at least one child	0.454 (0.498)	0.414 (0.493)	0.423 (0.494)	0.451 (0.498)	0.307
Matched connections in sample	2.390 (1.954)	2.451 (1.912)	2.333 (1.892)	2.387 (2.039)	0.780
Christian	0.876 (0.330)	0.870 (0.337)	0.842 (0.365)	0.856 (0.351)	0.226
Muslim	0.111 (0.314)	0.120 (0.325)	0.147 (0.354)	0.130 (0.337)	0.174
Highest Grade Completed	11.39 (3.963)	11.28 (3.915)	11.34 (3.811)	11.42 (3.995)	0.930
Completed primary school	0.835 (0.371)	0.840 (0.367)	0.838 (0.368)	0.833 (0.373)	0.989
Completed secondary school	0.276 (0.447)	0.260 (0.439)	0.247 (0.431)	0.270 (0.445)	0.598
Any income	0.603 (0.489)	0.596 (0.491)	0.583 (0.493)	0.611 (0.488)	0.782
Total income last 7 days	8.349 (29.17)	7.967 (23.32)	12.23 (87.27)	11.35 (75.54)	0.386
Total income last 3 months	75.36 (568.1)	67.03 (151.4)	69.26 (314.9)	70.14 (146.3)	0.975
Subj. Welfare, today, (0-6)	2.292 (1.246)	2.326 (1.326)	2.283 (1.246)	2.316 (1.294)	0.925
Subj. Welfare, 1 yr ago, (0-6)	1.949 (1.116)	2.022 (1.194)	1.928 (1.104)	1.997 (1.162)	0.429
Ravens Score (0-3)	1.753	1.768	1.727	1.684	0.440

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Table 3.2: Baseline Balance (continued)

	Treatment Group				P-value
	Control	SFC	CFW	Both	
	(0.988)	(0.984)	(0.963)	(0.969)	
Numeracy (0-10)	5.951 (1.998)	5.746 (2.027)	5.758 (2.012)	5.821 (1.982)	0.112
Risk Aversion (0-6)	3.785 (2.588)	3.669 (2.578)	3.760 (2.526)	3.846 (2.523)	0.680
Locus of Control Index	24.09 (2.899)	24.04 (2.945)	24.11 (2.986)	24.02 (3.036)	0.944
Self-esteem Index	20.88 (4.061)	20.43 (4.147)	20.65 (4.215)	20.35 (4.133)	0.033
Agression Index	2.603 (2.897)	2.586 (2.907)	2.435 (2.798)	2.506 (2.768)	0.654
Risky behavior index	1.501 (1.957)	1.499 (1.979)	1.413 (1.826)	1.437 (1.717)	0.756
Depression, Anxiety and Stress Score (DASS21)	21.99 (13.68)	23.63 (14.20)	23.09 (14.35)	22.93 (14.28)	0.096
Digits Forward (0-8)	5.176 (1.567)	5.130 (1.570)	5.145 (1.622)	5.117 (1.634)	0.877
Digits Backward (0-8)	1.981 (1.198)	1.928 (1.185)	1.953 (1.180)	1.920 (1.165)	0.709
First Word Recall (0-10)	3.059 (2.800)	3.073 (2.822)	3.073 (2.785)	3.070 (2.761)	0.999
Second Word Recall (0-10)	2.578 (2.498)	2.563 (2.484)	2.552 (2.469)	2.554 (2.473)	0.995

Standard errors in parentheses
P-value for F Test of joint hypothesis for treatment groups reported.

4

IMPLEMENTATION

4.1. PROJECT COMPONENTS

Through an integrated approach to youth economic empowerment which combines life skills training, psychosocial support, and workforce development via apprenticeships, technical training, financial education and mentoring, the PROSPECTS program strives to enable participants to find gainful employment, while developing positive social ties with their communities. PROSPECTS is a 12-month, \$1.8 million program funded by the Swedish International Development Cooperation Agency (SIDA) and a Chevron philanthropic entity. Mercy Corps, through consultation with Government of Liberia partners set out to equipped young Liberians with the skills, information, and opportunities to find meaningful and sustainable employment or self-employment. The entire PROSPECTS program included a diverse set of activities ranging from support to entrepreneurs, support to youth seeking employment, support to youth through training and vocational education, and support through psychosocial and pre-employment skill development. This final set of activities is the focus of this impact evaluation.

As a first objective, PROSPECTS was designed to provide vulnerable young Liberians with the psychosocial and pre-employment skills necessary for future employment or self-employment. Mercy Corps focused its activities in areas defined by high urbanization and peri-urban settlements. Specifically, the PROSPECTS program for vulnerable youth was implemented in Montserrado County, with most of the nine selected communities found within urban Monrovia. Particularly vulnerable youth were deemed to be those that were out-of-school and/or illiterate, youth with disabilities, and orphans or youth living without parents.

The PROSPECTS activities targeting vulnerable young Liberians consisted of the following two components designed to be complimentary in order to support psychosocial skills and pre-employment skills.

- **Cash for Work (CFW)** - Youth participants participate in cash for work activities in their communities. Following the national guidelines for cash for work programs, the Liberian Agency for Community Empowerment (LACE) and Mercy Corps organized youth to clean streets and markets and pilot recycling and composting programs for their community. These activities were intended to provide PROSPECTS participants with additional income from the sale of collected materials. Mercy Corps and LACE sought to give vulnerable your an opportunity to learn important employment skills while also helping them connect with their communities.
- **Sports for Change (SFC)** - Youth participants receive life skills training and psychosocial support through organized sports groups. This training entailed the following six curriculum modules: Identity; making a living; good governance; peace and conflict; environment; and, healthy living. The knowledge and skills gained were expected to enable participants to make positive life decisions regarding the livelihoods, health, and actions as citizens.

4.1.1. CASH FOR WORK

After consultation with international and Liberian stakeholders, the CFW component was designed to motivate vulnerable youth to participate in community activities. While the nature of the activities, collecting recyclable materials, was inherently required individual motivation, Mercy Corps and LACE sought to promote participation through group camaraderie and competitive spirit. The CFW program, therefore, used

a hybrid form of traditional CFW (piece rate labor for community work) and a competition approach. The CFW component was designed to incentivize youth participation by compensating them at a standard rate for achieving a minimum required work output. At the same time, the competition component aimed to incentivize performance by encouraging participants to compete for cash prizes awarded on the bases of highest daily and overall output.

To be eligible to participate in the CFW activity, youth had to be of Liberian nationality, 18 to 25 years of age, unemployed, out of school. The intention was to target young adults with poor employment prospects as indicated by low education level, low literacy/numeracy level, or absence of vocational skills.

Mercy Corps and LACE established partnerships with ten local depots to arrange for the purchase of recyclable materials. The depots, many of which were run by community based organizations, served as “collection centers” for the CFW program.

ORIENTATION

Initially, youth assigned to CFW (the randomly assigned CFW and Both groups) were invited to an orientation session. This first meeting served to both provide orientation to the CFW program as well as train individuals in the practice of collecting recyclable materials. The orientation session took place at the designated collection center for their community. At the orientation, LACE program staff informed the participants of the following:

1. Objective of the program
2. Conditions of their participation
3. Benefits of participation
4. How to obtain payments for recycleables
5. Rules and guidelines for competitions
6. Program timeline

Furthermore, a representative from the purchaser of the recyclables instructed participants on the type of materials to collect, typical redemption values associated with each material, and common strategies for maximizing their output and revenue. In the process of establishing these conditions of participation, the CFW was meant to introduce youth to critical employment readiness skills including: creativity, initiative, and communication. Thus, building negotiation and agreement skills between the youth and the collection centers was desired. At the conclusion of the orientation, LACE distributed tools to aid participants in the collection activity. These tools included heavy duty work gloves, a dust mask, rubber boots, woven sacks, and a wheelbarrow.

GUIDELINES

The program encouraged participants to collect recyclable materials individually or in groups by searching streets, alleyways, and dumpsites within their communities. Additionally, youth could negotiate arrangements with local businesses including grocery stores, markets, restaurants, and entertainment centers to collect recyclable materials. Primary materials that qualified for redemption at the collection centers included plastic bottles, plastic bags, aluminum cans, tin cans, glass bottles, batteries, and assorted scrap metal. Redemption values were priced as either weight based (per kilogram) or unit based (per can/bottle) and each collection center advertized the going rate for each recyclable material.

Participants could sell recyclables to the designated collection center at any time during the CFW competition. However, for the sale to contribute towards the CFW competition, it must adhere to the following criteria:

- Recyclables must be sold to the designated collection center.
- Must occur on and during the hours of a specified competition day, which is described to the participants during the orientation meeting.
- Must be recorded in a Daily Performance Tracking sheet – each entry on this sheet is signed and dated, and time stamped by the LACE supervisor and the participant.

- Recyclables sold must not be obtained in an illegal or unethical way.

Participants were supposed to receive all revenue from the sale of recyclables. No minimum or maximum restrictions were placed on the amounts that participants sold to the collection center on any given day or throughout the CFW competition. The amount of revenue that participants earn would not directly impact the remuneration they receive from PROSPECTS or the prize they might win. However, active collection was correlated by design with an increased probability of winning additional remunerations and prizes through PROSPECTS.

COMPETITION DAYS

Mercy Corps determined that a reasonable minimum output for each day of active recyclable collection was 10 kg of weight-based recyclables or 150 units of count-based recyclables. These quantities correspond to the expected output from one individual working continuously during a four-hour period.

Because youth will collect a combination of weight-based and count-based recyclables, PROSPECTS established a conversion equivalency where one competition point equalled 1 kilogram of weight-based recyclables or 15 units of count-based recyclables. Therefore, if a youth collected 6 kilograms of weight-based recyclables and 60 units of count-based recyclables, she would meet the minimum output to obtain the base CFW remuneration for a given competition day. The base CFW remuneration was USD \$2 for every day that the minimum output goal is met. For any day that a participant did not achieve the minimum output, she earned no remuneration beyond what was received from redeeming recyclables at the collection center. The actual sale value of the recyclable materials had no bearing on the PROSPECTS point system. As such, participants were incentivized to collect higher value recyclables for the collection center payments, but higher volume recyclables to qualify for the PROSPECTS remuneration.

The points earned each day of the PROSPECTS competition period contributed towards competition cash prizes. Among the 40 participants in each CFW group, the three highest scorers on each competition day earned a cash prize, in addition to recyclable payments from the collection center and the PROSPECTS bonus for meeting the minimum goal. Daily cash prizes were USD \$5 for the top producer, and USD \$3 and USD \$2 for the individuals earning the second and third most points on a given day.

At the end of the CFW competition period, the scores earned by each participant on each competition day were summed to produce a total score for each participant. The five top scorers earned a cash prize ranging from USD \$100 for the top point winner reducing in increments of USD \$20 until the fifth highest point winner who received a USD \$20 prize.

Revenue from the sale of recyclables to the collection centers was paid in cash (in Liberian dollars) directly from the collection center to the CFW competition participants. PROSPECTS payments - daily bonuses and prizes - were transmitted through mobile money. During the orientation meeting, a representative from a mobile phone company was present to introduce mobile money. All those who do not have a SIM card with the mobile provider were provided a SIM card (at PROSPECTS expense) and were registered for mobile money.

4.1.2. SPORTS FOR CHANGE

The Sports for Change program, which adapted a Mercy Corps method of engaging youth in post-conflict settings to the Liberian context, sought to organize 1,200 participants into 30 sports clubs of approximately 40 members each. One coach/mentor was assigned to each sports club and individual youth were randomly assigned to a sports group within their community. While the club members engage in sporting activities like football and kickball, the coaches were instructed to provide educational teaching activities that would support psychosocial skill development among participating youth.

Through the PROSPECTS program, Mercy Corps provided support and monitoring to coaches to deliver structured instructions and learning activities. The SFC program sought to provide the basic sports and protective equipment and first-aid supplies so that beneficiaries can engage safely in athletic activities.

Following the community registration and random assignment to teams Mercy Corps recruited and trained 30 coach-mentors and assigned one to each sports club. Coach-mentors were selected from the local community members and evaluated on their aptitude in youth interactions, team-building skills, and sports aptitude.

Mercy Corps trained coach-mentors to inject positive messages and life-skills techniques into sports activities. As an example, coach-mentors were trained to apply conflict resolution methods and to share these methods with youth.

Once the sports clubs were formed and under the guidance of a coach-mentor, Mercy Corps provided each club with sporting equipment, protective gear, and first-aid supplies. Coaches were responsible for the safekeeping of equipment and supplies during the program.

Coaches were instructed to organize two sports group meetings per week and a total of 16 group sessions. Each meeting of sport groups, Coaches engaged beneficiaries in sports-based life skills training. Using the skills and curricula they acquire during their training, coaches led youth through structured meeting schedules. The typical meeting schedule consisted of one hour of introduction and warm ups, one hour of instructional activities, and one hour of sports. Sessions integrated five core life skills: constructive communication, self-esteem, resilience and problem solving, teamwork and trust building, and strategy making and planning (see Appendix A for an example of a session schedule). In order to make these topics more tangible to youth participants, the five life skills were labelled as “Communicate!”, “Celebrate the Positive”, “Stay in the Game”, “Build Your Team”, and “Be the Leader”. By focusing on several of these skills each SFC session, the PROSPECTS program sought to encourage young adults to apply these skills to their sports play as well as daily life.

For attendance at the SFC sessions, participants received USD \$2 for each session that they attended. Payments were sent by mobile money to the SIM card registered to the participant.

4.2. TIMELINE

Figure 4.1 shows the timeline of the PROSPECTS project. The program was implemented on a phased schedule one community at a time. The registration day, as described in 2.3, first took place in a community on a single day. IPA then carried out the baseline survey over a one to two week period following the registration day. Once the baseline was complete PROSPECTS implementation could begin. In some communities, such as Clara Town, Chicken Soup Factory, and Banjor implementation of the cash for work program began within one week of baseline completion. However, implementation start dates varied from community to community. Some of the delayed start dates was due to changes in implementation management on the part of Mercy Corps and challenges in coordinating efforts with LACE. Additionally, SFC coaches needed to complete training prior to starting the SFC component. However, all communities received the full SFC program, 16 sessions per sports group prior to April 2014. For reasons discussed in the next section, the CFW program was delayed and had to be re-started in a few communities (West Point, New Kru Town, Peace Island) and was cancelled in one community (Logan Town). The endline survey was conducted simultaneously, over the phone, for participants in all nine communities

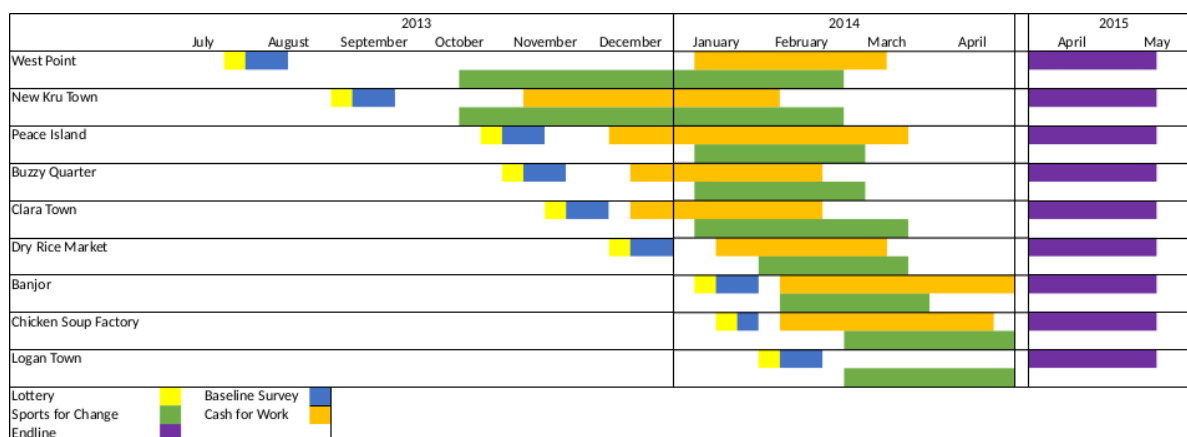


Figure 4.1: PROSPECTS Timeline

4.3. PARTICIPATION

4.3.1. CASH FOR WORK

ATTENDANCE

Participation in the CFW component of PROSPECTS was far below expectations. On average, across all nine communities, youth assigned to the CFW activities participated in one quarter (5.7) of the 22 PROSPECTS recycling competition days. Median payments for the entire period were USD \$4.00 with mean payments

at USD \$16.22. Only 37.2% of those assigned to CFW attended at least 25% of the PROSPECTS recycling competition days and less than one-fifth attended 70% of the CFW days.

Table 4.1: CFW Participation

Variable	Obs	Mean	Std. Dev.	Min	Max	Median
A. All						
Total Days Attended	1040	5.7	6.78	0	22	2
Total Payment (USD)	1040	16.22	27.87	0	215	4
B. CFW Only						
Total Days Attended	520	5.39	6.6	0	21	2
Total Payment (USD)	520	15.75	27.92	0	215	4
C. Both						
Total Days Attended	520	6.02	6.94	0	22	2
Total Payment (USD)	520	16.69	27.83	0	200	4

In some communities, CFW participation was more encouraging. However, participation remained below 50% for more than half of the participants in all but two communities, Banjor and Chicken Soup Factory, likely due to improved implementation and management at the later stages of the project. In West Point, the average attendance was less than 2 days. Less than 5% of those assigned to CFW attended 70% of the PROSPECTS competition days in three communities (West Point, Buzzy Quarter, Clara Town).

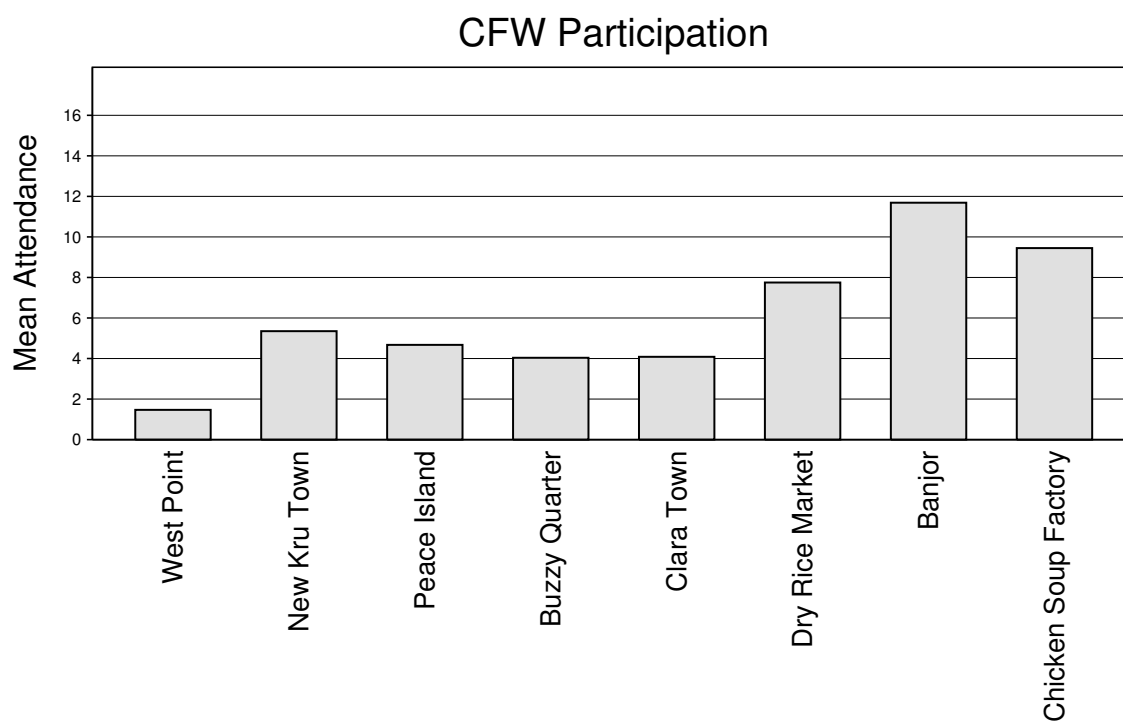


Figure 4.2: CFW Attendance, by Community

Table 4.2: CFW Participation, by Community

	Community							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total CFW Attendance (0-22)	1.469 (2.937)	5.350 (6.406)	4.675 (4.927)	3.987 (5.656)	4.088 (4.841)	7.750 (8.989)	11.69 (6.850)	9.450 (7.594)
At least 25% of CFW days	0.0625 (0.243)	0.354 (0.479)	0.375 (0.487)	0.250 (0.436)	0.325 (0.470)	0.412 (0.495)	0.738 (0.443)	0.613 (0.489)
At least 50% of CFW days	0.0312 (0.175)	0.242 (0.429)	0.212 (0.412)	0.200 (0.403)	0.181 (0.386)	0.400 (0.493)	0.662 (0.476)	0.519 (0.501)
At least 70% of CFW days	0.0250 (0.157)	0.179 (0.384)	0.138 (0.347)	0.0750 (0.265)	0.0437 (0.205)	0.362 (0.484)	0.475 (0.503)	0.419 (0.495)
Total CFW Payment (USD)	5.969 (21.93)	14.85 (25.87)	14.65 (27.30)	14.56 (30.62)	14.17 (26.90)	21.40 (34.97)	25.73 (16.97)	24.86 (32.07)

(1) West Point, (2) New Kru Town, (3) Peace Island (4) Buzzy Quarter, (5) Clara Town, (6) Dry Rice Market (7) Banjor, (8) Chicken Soup Factory

No Cash For Work program was implemented in Logan Town (Community 9).

Mercy Corps cited three main source of challenges in the CFW that led to low rates of participation¹:

1. The recycling competition approach was not scalable or sustainable due to a lack of appropriate collection centers, unstable prices and demand, a lack of recyclable materials in communities, and complexity of managing competitions at scale
2. Collecting recycleable materials was found to be unappealing to most Liberian youth. Those assigned through the randomization to CFW groups expressed disinterest in the CFW program citing that picking up recycleables and garbage was an undesirable activity.
3. Delayed payments and challenges with the collection centers diminished interest in the program. Due to the complexity of the CFW component, LACE struggled to manage the CFW intervention at scale. Oversight of the project was insufficient and PROSPECTS payments to participants were often delayed substantially. Participants often cited the late payments as a reason for their absense. Without assurance that they would receive the PROSPECTS bonuses and prizes, youth were less likely to participate.

PARTICIPATION ACROSS TREATMENT GROUPS

Figure 4.3 shows that the attendance distribution for CFW and Both treatment groups was similar and Table 4.3 shows that threshold attendance rates were similar for the two groups.

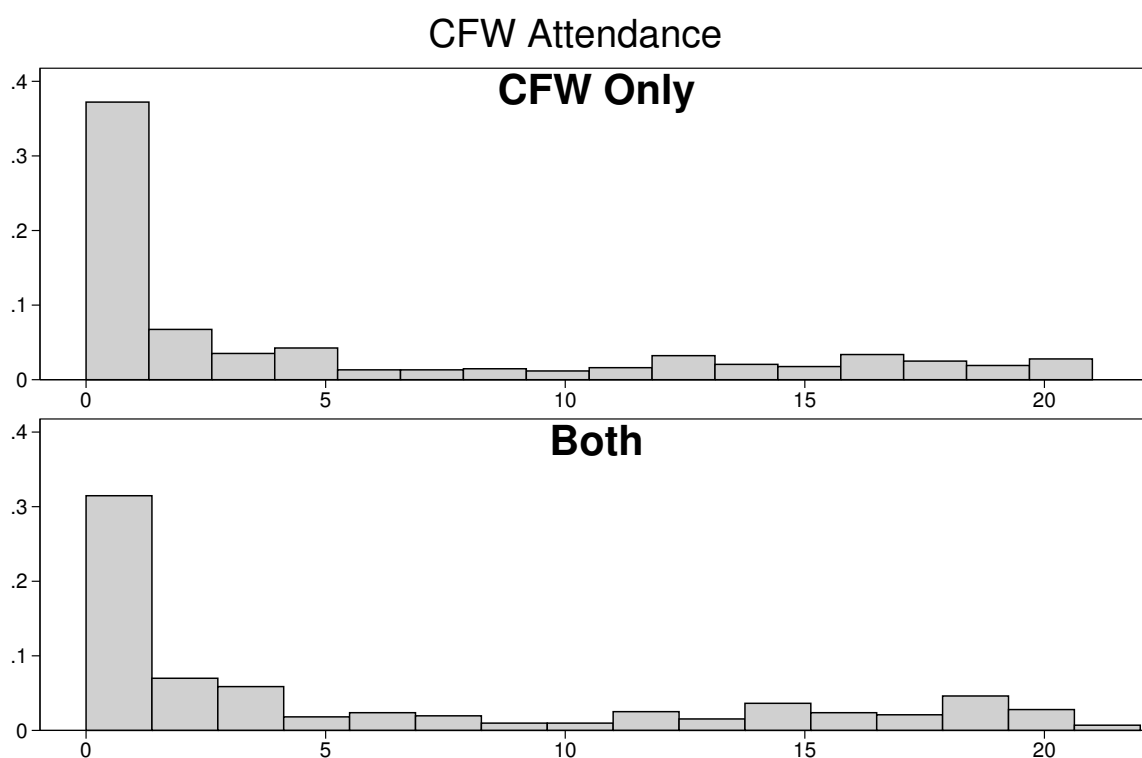


Figure 4.3: CFW Attendance, by Treatment Group

The multiple regression results displayed in Table 4.4 confirms that there was no observable difference in participation between individuals that were assigned to CFW only and those that were assigned to both CFW and SFC. We do observe in Table 4.4 that women were more likely to participate in CFW. Women attended, on average, 1.7 more CFW days than men, receive USD \$5.35 more in PROSPECTS payments, and were almost 10 percentage point more likely to attend at least 70% of the CFW days.

Individuals from larger households were more likely to attend CFW days, suggesting that participation in CFW may be a function of intra-household labor substitution. More educated individuals were less likely to participate in CFW, which is not surprising since educated youth are likely to have higher returns to outside labor options.

¹Direct communications with Mercy Corps, 27 February 2014.

Table 4.3: CFW Participation, by treatment group

	CFW	Both	Total
Attended at least 25% of CFW days	0.350 (0.477)	0.394 (0.489)	0.372 (0.484)
Attended at least 50% of CFW days	0.271 (0.445)	0.292 (0.455)	0.282 (0.450)
Attended at least 70% of CFW days	0.183 (0.387)	0.212 (0.409)	0.197 (0.398)

We see a mixed relationship between psychosocial measures and CFW participation. Higher aggression is correlated with higher attendance, while lower scores on the risky behavior index and depression, anxiety, and stress score are associated with higher attendance. Thus, our analysis of CFW participation provides a mixed review of the success of the program in reaching at risk youth. CFW participants appear to have been more engaged in fighting and violent activities, but less likely to participate in risky behavior and display characteristics of psychosocial stress.

Interestingly, we see in Table 4.4 that participation was considerably higher among individuals that had more friends at the time of the baseline. When we asked about friends in the community at the time of the baseline, we were able to match youth with other friends in the community baseline survey. Table 4.4 demonstrates that having one additional friend in the community increases CFW participation by 0.354 days. Considering that the mean participation rate was 5.7 days (standard deviation 6.78 days) this means that an individual in the 90th percentile of number of friendships, i.e. an individual with 5 confirmed friends, attended 1.77 more meetings than an individual in the 10th percentile of friendships (0 confirmed friends). This is a 31% increase in participation among individuals with the greatest number of friends, suggesting a very strong peer effect.

4.3.2. SPORTS FOR CHANGE

ATTENDANCE

Across all nine PROSPECTS communities, participation in SFC was considerably higher than that observed in CFW. The average attendance in 8 of the nine communities was above 8 sessions (out of a total of 16 SFC sessions). Table 4.5 shows that, on average, the 1200 individuals assigned to SFC attended 10.35 SFC sessions and received USD \$20.64 in attendance stipends. Only in Peace Island was average attendance below the 50% threshold. As with Cash for Work, we observe higher attendance in communities that were scheduled later in the implementation schedule, potentially due to improved implementation as the PROSPECTS experience grew and management strengthened.

We also find that the SFC program was successful in retaining participants. Once individuals attended one SFC session, they were very likely to attend at least half of the sessions. This suggests that early attendance was crucial. In total, 70.1% attended at least half of the SFC sessions and 67.1% attended at least three-quarters of the SFC sessions. Based on attendance, Banjor was the most successful community implementation, with 83.8% of those assigned to SFC attending at least 12 sessions.

Table 4.4: CFW Participation

	(1)	(2)	(3)	(4)
	Total Days Attended	At least 25%	At least 70%	TotalPaymentUSD
CFW	-0.556 (0.381)	-0.0390 (0.0280)	-0.0252 (0.0231)	-1.429 (1.679)
Female	1.701*** (0.447)	0.103*** (0.0338)	0.0975*** (0.0269)	5.353** (2.108)
Age	0.755 (1.003)	0.0486 (0.0794)	0.0316 (0.0623)	-2.831 (6.185)
Age squared	-0.0108 (0.0244)	-0.000877 (0.00192)	-0.000350 (0.00152)	0.110 (0.155)
Household Size	0.132** (0.0641)	0.00926** (0.00426)	0.00735** (0.00373)	0.477* (0.282)
Matched connections in sample	0.354*** (0.110)	0.0170** (0.00831)	0.0231*** (0.00687)	1.207** (0.488)
Highest Grade Completed	-0.185*** (0.0601)	-0.0127*** (0.00426)	-0.00696* (0.00370)	-0.741** (0.373)
Log Income	-0.153* (0.0918)	-0.00700 (0.00682)	-0.00813 (0.00551)	-0.578 (0.412)
Risk Aversion	0.00759 (0.0775)	0.00147 (0.00565)	-0.00109 (0.00470)	-0.246 (0.352)
Locus of Control Index	-0.0756 (0.0655)	-0.00488 (0.00503)	-0.00379 (0.00402)	-0.486 (0.343)
Self-esteem Index	-0.0181 (0.0467)	0.000116 (0.00346)	-0.00125 (0.00287)	0.188 (0.233)
Agression Index	0.222*** (0.0721)	0.0114** (0.00512)	0.0171*** (0.00429)	0.814** (0.347)
Risky behavior index	-0.245** (0.112)	-0.0113 (0.00852)	-0.0111* (0.00664)	-1.214*** (0.426)
Depression, Anxiety and Stress Score (DASS21)	-0.0396*** (0.0145)	-0.00271** (0.00107)	-0.00219** (0.000871)	-0.136** (0.0618)
Constant	-5.248 (10.31)	-0.272 (0.822)	-0.315 (0.639)	30.81 (63.00)
Comm. FE	Yes	Yes	Yes	Yes
Baseline Controls	Yes	Yes	Yes	Yes
Method	OLS	OLS	OLS	OLS
Observations	978	978	978	978

Standard errors in parentheses

Community fixed effects and order of registration included but suppressed from table.

Baseline controls include household size and baseline cognition measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

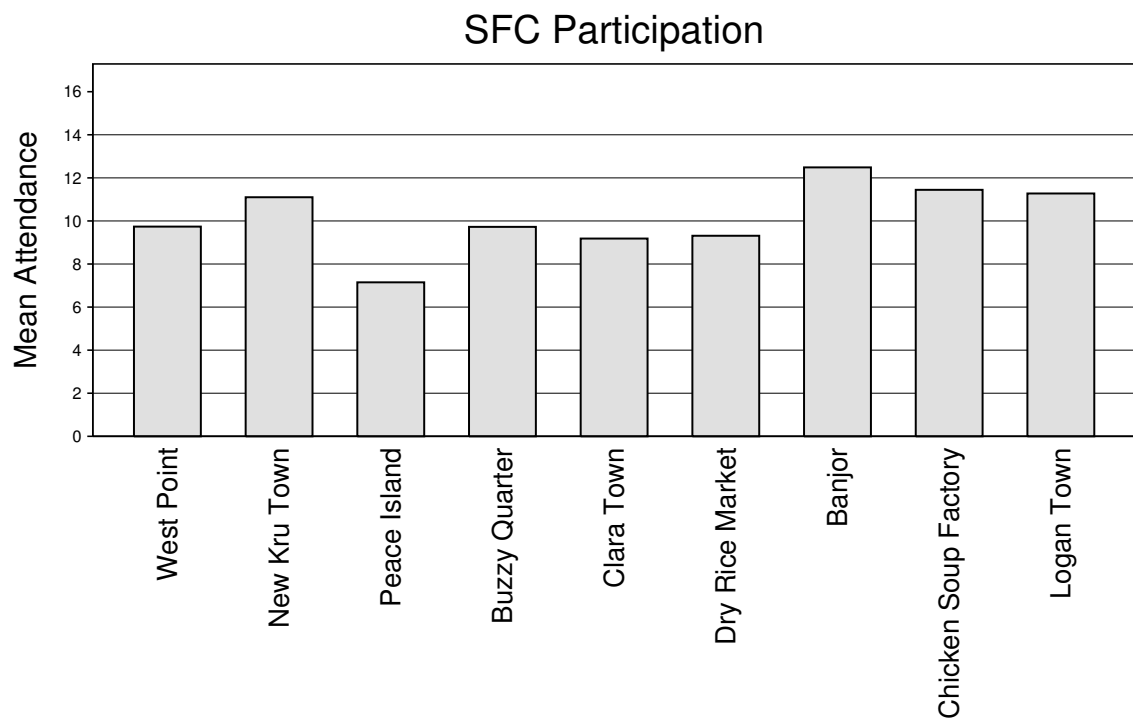


Figure 4.4: SFC Attendance, by Community

Table 4.5: SFC Participation

Variable	Obs	Mean	Std. Dev.	Min	Max	Median
A. All						
Total Attendance	1200	10.35	6.84	0	16	14
Total Payment (USD)	1200	20.64	13.64	0	32	28
B. SFC Only						
Total Attendance	600	10.5	6.74	0	16	14
Total Payment (USD)	600	20.95	13.45	0	32	28
C Both						
Total Attendance	600	10.21	6.94	0	16	15
Total Payment (USD)	600	20.34	13.83	0	32	28

Table 4.6: SFC Participation, by community

	Community								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total SFC Attendance (0-16)	9.738 (7.184)	11.10 (6.039)	7.150 (7.080)	9.725 (7.208)	9.181 (7.329)	9.312 (7.115)	12.49 (5.616)	11.44 (6.471)	11.28 (6.800)
At least 25% of SFC meetings	0.662 (0.474)	0.783 (0.413)	0.512 (0.503)	0.650 (0.480)	0.619 (0.487)	0.637 (0.484)	0.838 (0.371)	0.762 (0.427)	0.738 (0.441)
At least 50% of SFC meetings	0.656 (0.476)	0.775 (0.418)	0.512 (0.503)	0.650 (0.480)	0.619 (0.487)	0.637 (0.484)	0.838 (0.371)	0.762 (0.427)	0.738 (0.441)
At least 75% of SFC meetings	0.600 (0.491)	0.713 (0.454)	0.475 (0.503)	0.650 (0.480)	0.581 (0.495)	0.637 (0.484)	0.838 (0.371)	0.750 (0.434)	0.731 (0.445)
Total SFC Payment (USD)	19.48 (14.37)	22.20 (12.08)	14.22 (14.09)	19.39 (14.37)	18.18 (14.50)	18.48 (14.10)	24.82 (11.16)	22.89 (12.94)	22.54 (13.60)

(1) West Point, (2) New Kru Town, (3) Peace Island (4) Buzzy Quarter, (5) Clara Town, (6) Dry Rice Market (7) Banjor, (8) Chicken Soup Factory, (9) Logan Town

PARTICIPATION ACROSS TREATMENT GROUPS

We observe that participation was the same for individuals assigned to the SFC only and the SFC plus CFW (Both) treatment group. Thus, participating in the CFW program, despite its implementation challenges neither encouraged nor discouraged youth participation in the SFC component. Figure 4.5 displays the importance of initial program attendance. In both the SFC and Both treatment groups, 30% of individuals assigned to SFC groups never attended a session.

Table 4.7: SFC Participation, by treatment group

	SFC	Both	Total
Attended at least 25% of SFC meetings	0.716 (0.451)	0.692 (0.462)	0.704 (0.457)
Attended at least 50% of SFC meetings	0.716 (0.451)	0.687 (0.464)	0.701 (0.458)
Attended at least 75% of SFC meetings	0.686 (0.464)	0.657 (0.475)	0.671 (0.470)

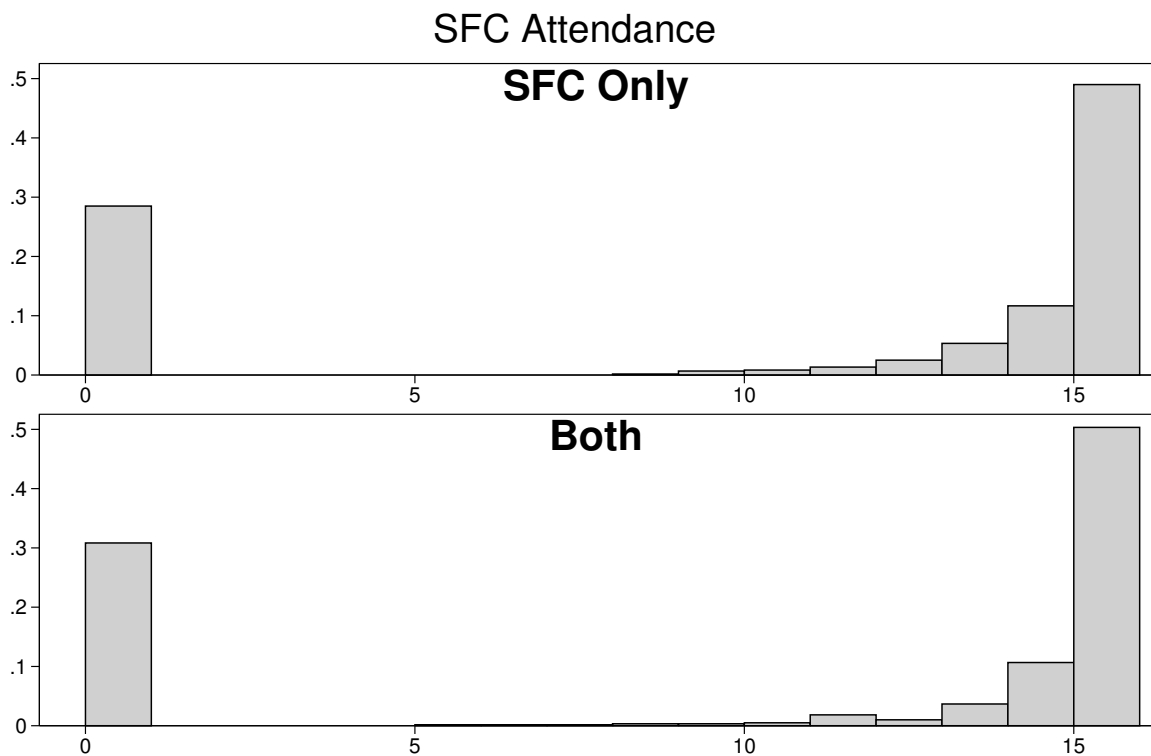


Figure 4.5: SFC Attendance, by Treatment Group

Table 4.8 shows the relationship between treatment group and attendance in a multiple regression framework. Here, again, we do not find any relationship between SFC attendance and the treatment group to which an individual was assigned. This adds to our analysis that the CFW program was an undesirable activity for many. Those that were assigned to both CFW and SFC were no more likely to participate in either CFW or SFC than those assigned to one of the components.

With the exception of the number of friendships an individual reported at baseline, we do not observe any relationship between SFC attendance and baseline characteristics of those assigned to SFC. As with CFW attendance, however, we find a statistically significant relationship between the number of friends identified

at the time of the baseline and SFC attendance. Individuals with more friends were more likely to attend the SFC sessions. In expectation, having five friends (90th percentile of friendships) versus zero friends (10th percentile of friendships) equates to attending 1.44 more SFC sessions or a 14% increase in attendance.

Table 4.8: SFC Participation

	(1)	(2)	(3)	(4)
	Total Attendance	Attend 25%	Attend 75%	Total Payment (LD)
SFC	0.304 (0.401)	0.0263 (0.0268)	0.0273 (0.0275)	0.636 (0.799)
Female	0.575 (0.478)	0.0290 (0.0321)	0.0386 (0.0328)	1.137 (0.954)
Age	0.0986 (1.233)	0.0194 (0.0825)	-0.00363 (0.0853)	0.155 (2.459)
Age squared	0.00101 (0.0299)	-0.000223 (0.00200)	0.000283 (0.00206)	0.00296 (0.0596)
Head of Household	0.0582 (0.625)	0.0128 (0.0419)	-0.00899 (0.0435)	0.103 (1.244)
Matched connections in sample	0.288*** (0.109)	0.0194*** (0.00728)	0.0172** (0.00746)	0.578*** (0.217)
Highest Grade Completed	0.0238 (0.0579)	0.000858 (0.00390)	0.00192 (0.00396)	0.0465 (0.115)
Log Income	-0.0270 (0.0966)	-0.00297 (0.00650)	-0.000501 (0.00670)	-0.0559 (0.193)
Risk Aversion	-0.0108 (0.0797)	-0.000235 (0.00535)	0.000773 (0.00549)	-0.0271 (0.159)
Locus of Control Index	-0.0437 (0.0704)	-0.00200 (0.00471)	-0.00445 (0.00488)	-0.0937 (0.141)
Self-esteem Index	-0.0475 (0.0512)	-0.00250 (0.00343)	-0.00301 (0.00351)	-0.0944 (0.102)
Agression Index	0.00868 (0.0779)	0.000342 (0.00520)	0.00253 (0.00535)	0.0187 (0.156)
Risky behavior index	0.0273 (0.124)	0.00179 (0.00830)	0.000356 (0.00867)	0.0533 (0.248)
Depression, Anxiety and Stress Score (DASS21)	-0.0175 (0.0158)	-0.00131 (0.00106)	-0.00165 (0.00109)	-0.0365 (0.0314)
Constant	8.165 (12.70)	0.392 (0.849)	0.589 (0.875)	17.03 (25.34)
Comm. FE	Yes	Yes	Yes	Yes
Additional Controls	Yes	Yes	Yes	Yes
Method	OLS	OLS	OLS	OLS
Observations	1121	1121	1121	1121

Standard errors in parentheses

Community fixed effects and order of registration included but suppressed from table.

Baseline controls include household size and baseline cognition measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5

OUTCOME ANALYSIS

5.1. ALTERATIONS TO IMPACT EVALUATION

Given the low attendance and challenges to implementation of the Cash for Work component of PROSPECTS. IPA, in discussion with Mercy Corps, opted to discontinue the CFW portion of the research. Given that the theory of change relied upon a well-functioning and desirable CFW program and that statistical power was severely cut with participation rates below 50%, the impact evaluation team decided to focus on the SFC impact evaluation in follow-up data collection.

In addition, at the time when the SFC program was concluding concerns about the spread of Ebola in Liberia spread throughout the country. The first cases were reported in Liberia in late March 2014; as shown in Figure 4.1, the PROSPECTS program was still active in three communities. PROSPECTS had concluded and program activities scaled back by the time of the first recorded Ebola deaths in Monrovia in June 2014. Over the course of the following year, a total of 10675 cases of Ebola in Liberia with 4809 resulting in death, with nearly a third of deaths occurring in Montserrado Country.¹

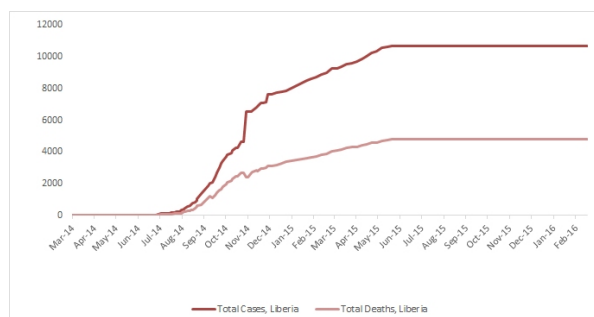


Figure 5.1: **Ebola Cases and Deaths, March 2014 - Feb 2016z:** Figure from the Center for Disease Control.

Between June 2014 and January 2015, all of Liberia was under a state of emergency with borders shut down and domestic travel severely restricted. Recent reports from the World Bank found that labor activity contracted considerably during the Ebola crises; 58 percent of urban household heads in a nationally representative poll stated that they were out of work. The World Bank estimated that prior to the onset of Ebola, 98 percent of household heads were either employed in wage labor or self-employed. According to the poll run in January 2015, the proportion of heads of household without work in urban Liberia dropped to 46 percent. [11] Surveys suggested a continued and substantial loss of economic activity among Liberians. Food insecurity and concerns peaked with more than 60 percent of respondents in Monrovia stating that they were worried in the previous week that they would not have enough to eat.

While concerns about the Ebola crisis increased, IPA carried out qualitative research to better understand how lives of youth in Monrovia were shifting and the main topics of conversation at that time. Follow-up

¹Information on Ebola cases from the Center for Disease Control. <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html>.

quantitative surveys were put on hold until the Ebola crises was passed. Ultimately, the follow-up survey was conducted by phone in April and May of 2015 in order to minimize risk to respondents and survey staff.

5.2. FINDINGS FROM ETHNOGRAPHIC RESEARCH

As discussed in Section 2.4.5, IPA carried out qualitative data collection by training youth in four PROSPECTS communities to write ethnographic journals. The ethnographers were instructed to write weekly diaries in which they described contemporaneous events and conversations within the community. A total of nine young adults (22 to 24 years old) completed journals over a nine week period from April to June 2014.

Main topics of the ethnographic journals include:

- Music and entertainment venues
- Land disputes
- Physical violence
- Drug use
- Ebola
- HIV/AIDS
- Lack of empowerment among the youth
- Lack of services and infrastructure (roads, garbage management)

5.3. ENDLINE ATTRITION

Starting in early April 2015, IPA carried out phone interviews with PROSPECTS impact evaluation research subjects. A list of 2400 youth from the SFC, Both, and control groups in all nine PROSPECTS communities were contacted and asked to participate in the follow-up survey. Ordering of the calls was randomly assigned so that response rates by community or impact evaluation group were uncorrelated with the timing of the follow-up survey call.

In total, IPA successfully interviewed 2081 (86.7%) of the target 2400 follow-up respondents. Figure 5.2 shows that response rates were fairly consistent across all communities, with attrition rates kept below 20%. Table 5.1 shows that attrition rates were not correlated with treatment group or participation in SFC (column 3). Table 5.2 demonstrates that among the 2081 respondents in the follow-up the three impact evaluation groups remain comparable across nearly all baseline characteristics. Therefore, we find no reason for concern about non-random attrition from the follow-up phone survey.

Table 5.2: Balance Check of Baseline Characteristics for Follow-up Respondents

	Treatment Group			Total
	Control	SFC	Both	
Female	0.525 (0.500)	0.536 (0.499)	0.525 (0.500)	0.528 (0.499)
Age	20.99 (2.794)	20.86 (2.748)	20.93 (2.718)	20.94 (2.763)
Head of Household	0.134 (0.341)	0.139 (0.347)	0.162 (0.369)	0.143 (0.350)
Household Size	6.825 (3.533)	6.693 (3.629)	6.658 (3.644)	6.750 (3.584)
Matched connections in sample	2.403 (1.959)	2.464 (1.920)	2.408 (2.087)	2.420 (1.981)

Continued on next page

Table 5.2: Balance Check of Baseline Characteristics for Follow-up Respondents (continued)

	Treatment Group			
	Control	SFC	Both	Total
Christian	0.881 (0.324)	0.869 (0.337)	0.854 (0.354)	0.871 (0.335)
Highest Grade Completed	11.58 (3.872)	11.51 (3.800)	11.72 (3.820)	11.60 (3.840)
Risk Aversion (0-6)	3.789 (2.583)	3.664 (2.567)	3.819 (2.539)	3.765 (2.567)
Locus of Control Index	24.06 (2.925)	24.16 (2.873)	24.09 (3.009)	24.09 (2.932)
Self-esteem Index	20.90 (4.083)	20.50 (4.109)	20.49 (4.116)	20.70 (4.101)
Aggression Index	2.570 (2.811)	2.582 (2.951)	2.446 (2.695)	2.542 (2.818)
Risky behavior index	1.466 (1.870)	1.530 (2.015)	1.446 (1.716)	1.477 (1.870)
DASS21	22.15 (13.69)	23.26 (14.06)	22.70 (14.42)	22.57 (13.97)
Ravens Score (0-3)	1.752 (0.979)	1.781 (0.989)	1.688 (0.961)	1.743 (0.977)
Digits Forward (0-8)	5.226 (1.534)	5.184 (1.568)	5.140 (1.610)	5.194 (1.562)
Digits Backward (0-8)	1.994 (1.205)	1.965 (1.205)	1.958 (1.156)	1.978 (1.193)
Numeracy (0-10)	6.019 (1.974)	5.772 (2.023)	5.923 (1.931)	5.933 (1.977)
Standard errors in parentheses				

5.4. PROGRAM IMPACTS

5.4.1. COMMUNITY PARTICIPATION

In the follow-up survey, we asked respondents about their involvement in sports groups and other community groups within their community. Table 5.3 displays first order effects of the PROSPECTS SFC program. We observe that approximately 70% of youth that were assigned to the SFC program played some form of sports in the previous 12 months. This suggests that sports participation remained high, even after the PROSPECTS program concluded. In comparison, less than 60% of youth in the control group reported playing sports in the previous 12 months. Thus, we see a 10 percentage point increase in sports involvement among those assigned to SFC. We do not observe any difference in involvement in other youth groups; across all impact evaluation groups approximately 40% of youth mentioned that they had been a member of a youth group in the previous 12 months.

Also highlighted in Table 5.3, we see that the vast majority (97%) of youth assigned to the SFC program enjoyed the sports for change program. Moreover, 92% stated that they liked their coach. The primary skill that youth mentioned that they took from the SFC program was the importance of communication - 52% of respondents mentioned this as the most important skill when working with others and 47% mentioned it as the most important skill when faced with serious problems.

Table 5.1: Endline Survey Rates

	Follow-up Interview completed		
	(1)	(2)	(3)
SFC	0.00417 (0.0168)	0.000727 (0.0172)	
Both	0.000833 (0.0170)	0.0000950 (0.0172)	
SFC Attended			0.000596 (0.0200)
Female		0.0178 (0.0143)	0.0178 (0.0143)
Age		0.0260 (0.0389)	0.0260 (0.0389)
Age squared		-0.000469 (0.000940)	-0.000469 (0.000940)
Head of Household		0.0448** (0.0204)	0.0447** (0.0204)
Constant	0.808*** (0.0230)	0.433 (0.398)	0.433 (0.398)
Model	OLS	OLS	2SLS
Observations	2400	2262	2262

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5.3: Reported Group Involvement and PROSPECTS Satisfaction

	SFC	Both	Total
Sports Group Member	0.701 (0.458)	0.690 (0.463)	0.695 (0.461)
Community Group Involvement	0.374 (0.484)	0.432 (0.496)	0.403 (0.491)
Liked PROSPECTS	0.971 (0.169)	0.961 (0.194)	0.966 (0.182)
Liked Coach	0.916 (0.278)	0.931 (0.253)	0.924 (0.266)

Standard deviations in parentheses

Responses to endline survey questions.

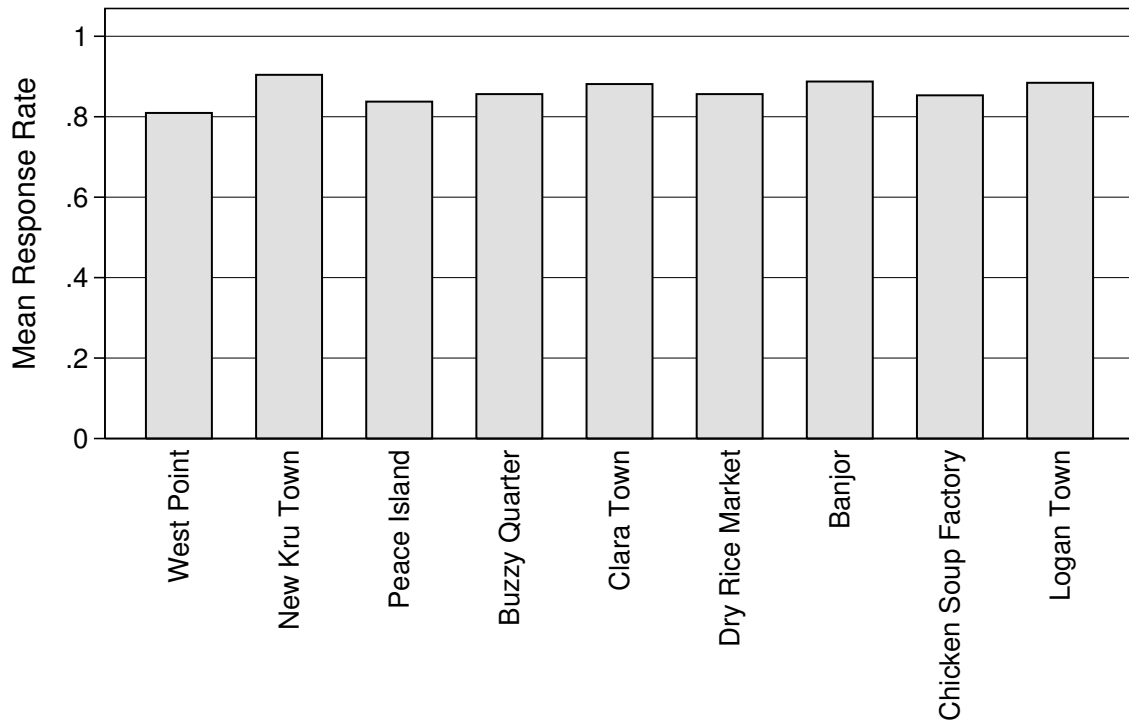


Figure 5.2: Endline Response Rates, by Community INSERT CAPTION.

5.4.2. LIFE EVENTS

A key factor in the PROSPECTS theory of change is the ability of youth to handle adversity during times of difficulty both within the household and in the community. Life in Monrovia’s urban communities is, in general rough. Table 5.4 shows that life before and after the Ebola crisis was tough. More than 50% of respondents report a serious illness within the household, 60% report a death of a family member or close friend (interestingly, the reported deaths was higher *before* Ebola). Difficulties in finding work are pervasive. Alcohol and drug-related problems within the household, while less common, are observed in one-quarter of households. Across a host of potential adverse life events, we see that prevalence of such events was no more common after the Ebola crisis (column 4) than before (column 5). Thus, even considering the trauma of the Ebola crisis, our survey data suggests that life in Monrovia placed youth in a vulnerable environment throughout the course of the impact evaluation.

Table 5.5 displays life event statistics by community. Peace Island community demonstrates the highest incidence of drug and alcohol related problems, highest crime and trouble with police, as well as family members sent to jail. West Point suffers from similarly high levels of disturbance within the community. Reported deaths among family or friends were most frequent in Buzzy Quarter, Clara Town, West Point, and Banjor.

Table 5.4: Endline Life Events, previous 12 months

	Treatment Group				
	(1) Control	(2) SFC	(3) Both	(4) Total	(5) Baseline
Serious illness	0.527 (0.500)	0.522 (0.500)	0.514 (0.500)	0.522 (0.500)	0.646 (0.478)
Serious accident	0.273 (0.446)	0.301 (0.459)	0.243 (0.429)	0.273 (0.445)	0.290 (0.454)
Death of family member or close friend	0.625 (0.484)	0.601 (0.490)	0.571 (0.495)	0.606 (0.489)	0.741 (0.438)
Divorce or separation	0.246 (0.431)	0.248 (0.432)	0.228 (0.420)	0.242 (0.428)	0.238 (0.426)
Lost job	0.468 (0.499)	0.456 (0.499)	0.469 (0.500)	0.465 (0.499)	0.399 (0.490)
Not able to get a job	0.762 (0.426)	0.731 (0.444)	0.763 (0.426)	0.754 (0.431)	0.727 (0.446)
Alcohol related problems	0.250 (0.433)	0.247 (0.431)	0.267 (0.443)	0.253 (0.435)	0.282 (0.450)
Drug related problems	0.156 (0.363)	0.156 (0.363)	0.180 (0.384)	0.162 (0.368)	0.144 (0.352)
Seeing fights or people beaten up	0.352 (0.478)	0.332 (0.471)	0.371 (0.484)	0.352 (0.478)	0.306 (0.461)
Abuse or violent crime	0.285 (0.452)	0.258 (0.438)	0.266 (0.443)	0.274 (0.446)	0.247 (0.431)
Trouble with the police	0.210 (0.408)	0.202 (0.402)	0.208 (0.407)	0.208 (0.406)	0.215 (0.411)
Gambling problem	0.196 (0.397)	0.187 (0.390)	0.185 (0.389)	0.191 (0.393)	0.175 (0.380)
Member of family sent to jail	0.199 (0.400)	0.204 (0.403)	0.186 (0.389)	0.197 (0.398)	0.217 (0.413)
Overcrowding at home	0.294 (0.456)	0.308 (0.462)	0.284 (0.451)	0.295 (0.456)	0.288 (0.453)
Discrimination/Racism	0.253 (0.435)	0.281 (0.450)	0.228 (0.420)	0.254 (0.435)	0.237 (0.425)
Vandalism or malicious damage to property	0.202 (0.401)	0.228 (0.420)	0.215 (0.411)	0.212 (0.409)	0.149 (0.356)

Standard deviations in parentheses

Table 5.5: Life Events, by community

	Community								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Serious illness	0.537 (0.500)	0.480 (0.500)	0.537 (0.500)	0.559 (0.498)	0.555 (0.498)	0.504 (0.502)	0.514 (0.502)	0.560 (0.497)	0.493 (0.501)
Serious accident	0.247 (0.432)	0.254 (0.436)	0.321 (0.469)	0.324 (0.470)	0.267 (0.443)	0.234 (0.425)	0.289 (0.455)	0.315 (0.465)	0.252 (0.435)
Death of family member or close friend	0.625 (0.485)	0.573 (0.495)	0.582 (0.495)	0.721 (0.450)	0.669 (0.471)	0.518 (0.502)	0.620 (0.487)	0.597 (0.491)	0.574 (0.495)
Divorce or separation	0.216 (0.412)	0.222 (0.416)	0.388 (0.489)	0.257 (0.439)	0.235 (0.425)	0.190 (0.394)	0.277 (0.449)	0.271 (0.445)	0.206 (0.405)
Lost job	0.479 (0.501)	0.430 (0.496)	0.530 (0.501)	0.441 (0.498)	0.498 (0.501)	0.380 (0.487)	0.514 (0.502)	0.505 (0.501)	0.434 (0.497)
Not able to get a job	0.757 (0.430)	0.762 (0.426)	0.754 (0.432)	0.743 (0.439)	0.740 (0.439)	0.679 (0.469)	0.782 (0.415)	0.776 (0.418)	0.762 (0.426)
Alcohol related problems	0.236 (0.426)	0.242 (0.429)	0.328 (0.471)	0.353 (0.480)	0.256 (0.437)	0.235 (0.426)	0.246 (0.432)	0.250 (0.434)	0.213 (0.410)
Drug related problems	0.162 (0.369)	0.150 (0.358)	0.291 (0.456)	0.154 (0.363)	0.125 (0.331)	0.131 (0.339)	0.169 (0.376)	0.165 (0.372)	0.167 (0.373)
Seeing fights or people beaten up	0.432 (0.496)	0.342 (0.475)	0.440 (0.498)	0.419 (0.495)	0.335 (0.473)	0.241 (0.429)	0.317 (0.467)	0.349 (0.478)	0.309 (0.463)
Abuse or violent crime	0.344 (0.476)	0.279 (0.449)	0.403 (0.492)	0.279 (0.450)	0.270 (0.445)	0.182 (0.388)	0.246 (0.432)	0.243 (0.429)	0.22 (0.420)
Trouble with the police	0.278 (0.449)	0.162 (0.369)	0.328 (0.471)	0.191 (0.395)	0.221 (0.415)	0.117 (0.322)	0.204 (0.405)	0.218 (0.413)	0.188 (0.391)
Gambling problem	0.239	0.180	0.261	0.235	0.178	0.162	0.141	0.213	0.138

Continued on next page

Table 5.5: Life Events, by community (continued)

	Community								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(0.428)	(0.385)	(0.441)	(0.426)	(0.383)	(0.370)	(0.349)	(0.410)	(0.346)
Member of family sent to jail	0.228 (0.420)	0.185 (0.389)	0.284 (0.452)	0.228 (0.421)	0.161 (0.368)	0.175 (0.382)	0.211 (0.410)	0.199 (0.400)	0.170 (0.376)
Overcrowding at home	0.297 (0.458)	0.282 (0.450)	0.351 (0.479)	0.265 (0.443)	0.310 (0.463)	0.248 (0.434)	0.275 (0.448)	0.316 (0.466)	0.298 (0.458)
Discrimination/Racism	0.266 (0.443)	0.247 (0.432)	0.313 (0.466)	0.301 (0.461)	0.253 (0.435)	0.169 (0.376)	0.211 (0.410)	0.301 (0.460)	0.220 (0.415)
Vandalism	0.241 (0.429)	0.225 (0.418)	0.239 (0.428)	0.230 (0.422)	0.196 (0.397)	0.154 (0.363)	0.218 (0.415)	0.217 (0.413)	0.177 (0.383)
(1) West Point, (2) New Kru Town, (3) Peace Island (4) Buzzy Quarter, (5) Clara Town, (6) Dry Rice Market (7) Banjor, (8) Chicken Soup Factory, (9) Logan Town									

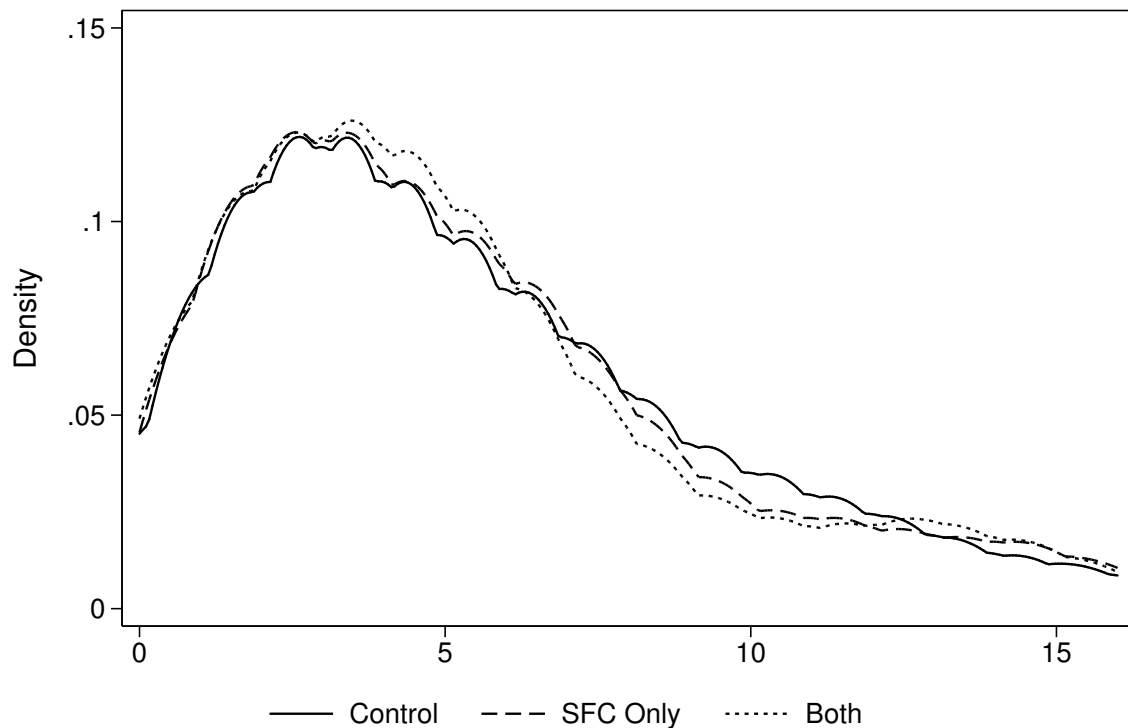


Figure 5.3: **Distribution of Life Event Index, by treatment group** INSERT CAPTION.

For each individual, we construct an index of the 16 life events listed in Table 5.4. Each life event is equally weighted and all 16 binary values for events (0 if an event did not occur and 1 if the event occurred) are summed. Thus the Life Event Index ranges from 0 (none of the events occurred, 5% of respondents) to 16 (all events occurred, 1.7% of respondents). Figure 5.3 shows the distribution of the Life Event Index by impact evaluation group. Table 5.6 displays the multiple regression analysis of treatment effects. Column 1 is the pure effects regression by assigned treatment group. We observe that the mean value of the Life Event Index for the control group is 5.632. No statistically significant difference is observed for the SFC or Both SFC/CFW program groups. In column 2, we explore gender differences in Life Events. While the Life Event Index is lower, on average, among women, we do not observe any difference in negative life events across treatment groups when examined for men and women separately, i.e. we fail to reject the joint significance test with hypothesis of SFC plus FemaleSFC equals zero.

Column 3 of Table 5.3 adds individual-level controls to the regression in Column 1. Again, we fail to reject the hypothesis that frequency of negative life events was equivalent for the control, SFC, and Both SFC/CFW groups.

Finally, column 4 of Table 5.3 shows regression where we check the treatment on the treated estimates. Using two-stage least squares regression, we first regress assignment to SFC and SFC/CFW treatment groups on a dummy for whether or not the respondent participated in SFC. In the second stage we regress predicted values of the first stage, on our outcome of interest controlling for individual-level characteristics, as in column 3. As in the other columns of Table 5.3, we find no relationship between SFC attendance and the Life Event Index.

5.4.3. COPING STRATEGIES

Given the high level of adverse events in the lives of youth in Monrovia, we examined coping strategies among the PROSPECTS impact evaluation research subjects in order to investigate responses to adverse events in Liberia, including the Ebola crisis. Around the same time as the follow-up phone interviews for PROSPECTS, the World Bank carried out similar phone surveys with a nationally representative sample of respondents. [11] This report from the World Bank found a heightened degree of food insecurity as measured through coping strategies. In general, we find lower rates of individual coping strategies, compared to the World Bank figures

Table 5.6: Life Event Index

	Life Event Index			
	(1)	(2)	(3)	(4)
SFC	-0.052 (0.201)	0.035 (0.315)	0.038 (0.209)	
Both	-0.142 (0.203)	-0.335 (0.297)	-0.160 (0.207)	
SFC Attended				-0.079 (0.231)
Female*SFC		-0.151 (0.406)		
Female*Both		0.368 (0.406)		
Female		-0.579** (0.235)	-0.571*** (0.195)	-0.570*** (0.195)
Constant	5.632*** (0.248)	5.897*** (0.275)	4.111 (4.867)	4.144 (4.869)
Comm. FE	Yes	Yes	Yes	Yes
Additional Controls	No	No	Yes	Yes
Method	OLS	OLS	OLS	2SLS
Observations	2081	2081	1950	1950

Standard errors in parentheses

Baseline controls include age, age squared, dummy for head of household, HH size, religion, highest grade completed, number of friends, log income, psychosocial measures, and cognitive measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

(see notes in Table 5.7), the difference is likely due to the national coverage of the World Bank survey versus the PROSPECTS sample, which is urban and less subject to food shortages compared to rural areas of Liberia.

Table 5.7) shows that the average respondent in the follow-up sample had 2.4 days out of the last 7 where their household had to rely on less preferred or less expensive foods (similar figure to the World Bank estimates for the country). For an average of 2.2 days, meal portion sizes were limited, for 1.78 days the number of meals were reduced, 1.33 days of reduced meals for adults to feed small children, and 0.82 days of borrowing food.

Table 5.7: Coping Strategies

	(Treatment Group)			
	Control	SFC	Both	Total
rely on less preferred and/or less expensive foods	2.349 (2.073)	2.478 (2.077)	2.495 (2.065)	2.418 (2.073)
limit portion size at meals	2.074 (1.928)	2.282 (2.088)	2.299 (2.040)	2.182 (1.999)
reduce number of meals eaten in a day	1.701 (1.907)	1.789 (1.991)	1.923 (1.950)	1.779 (1.940)
restrict consumption by adults in order for small children to eat?	1.298 (1.835)	1.344 (1.885)	1.380 (1.864)	1.330 (1.855)
borrow food, or rely on help from a friend or relative	0.782 (1.419)	0.795 (1.387)	0.904 (1.529)	0.816 (1.440)
Coping Strategy Index	13.42 (11.25)	14.16 (10.57)	14.70 (11.13)	13.92 (11.06)

Standard deviations in parentheses

Question text: In the past 7 days, how many days have you or someone in your household had to...

World Bank comparisons:

rely on less preferred and/or less expensive foods (WB round4 = 2.4)

limit portion size at meals (WB round4 = 2.5)

reduce number of meals eaten in a day (WB round4 = 2.2)

restrict consumption by adults in order for small children to eat (WB round4 = 2.5)

borrow food, or rely on help from a friend or relative (WB round4 = 2.2)

We construct a Coping Strategy Index following the method from [12]. Given the goal of the PROSPECTS program of building resilience, we sought to test the effect of the program on the Coping Strategy Index. Table 5.8 displays the estimated treatment effect of the SFC program on the index. We observe positive coefficients for both the SFC and SFC/CFW treatment groups. However, this effect is statistically significant only for the joint treatment group. In the heterogeneous effects regression (column 2), we see that the treatment effect is primarily observed among women. The joint significance tests for the female treatment effects suggests a statistically significant effect among women in the joint treatment (P-value = 0.0999) and an attenuate effect among women in the SFC treatment (P-value = 0.1528).

Focusing on the treatment on the treated, we observe that among those that participated in SFC, the program increased the coping strategy index (statistically significant at the 10% level).

While the coping strategy index is not a primary outcome of this impact evaluation, these results provide some evidence that the PROSPECT program had a causal impact on the ability of PROSPECTS participants to respond to adverse shocks. These results, combined with the analysis of CFW attendance (see Section 4.3.1) suggests that women, who were more active in CFW, when participating in the Sports for Change program, were less prepared for negative shocks, thus forced to use a wider set of coping strategies.

Table 5.8: Coping Strategy Index

	Coping Strategy Index			
	(1)	(2)	(3)	(4)
SFC	0.742 (0.576)	0.303 (0.844)	0.745 (0.604)	
Both	1.274** (0.599)	1.165 (0.861)	1.068* (0.616)	
SFC Attended				1.231* (0.686)
Female*SFC		0.825 (1.156)		
Female*Both		0.207 (1.198)		
Female		-0.320 (0.702)	-0.837 (0.587)	-0.845 (0.586)
Constant	14.410*** (0.731)	14.573*** (0.820)	4.513 (15.634)	4.649 (15.603)
Observations	2078	2078	1947	1947
Comm. FE	Yes	Yes	Yes	Yes
Baseline Controls	No	No	Yes	Yes
Method	OLS	OLS	OLS	2SLS

Standard errors in parentheses

Baseline controls include age, age squared, dummy for head of household, HH size, religion, highest grade completed, log income, psychosocial measures, and cognitive measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5.4.4. PSYCHOSOCIAL OUTCOMES

5.4.5. SELF-ESTEEM

In Table 5.9, we examine the effects of SFC on the Rosenberg Self-Esteem Scale. Without any controls, we do not observe any effect of the program. In the heterogeneous treatment effects regression (column 2), we find that the joint SFC and CFW program improved self-esteem among men, but non among women (joint test p -value = 0.74). Controlling for baseline characteristics, including participant gender and baseline self-esteem scale measure, we see a positive effect of the joint program. Column 3 of Table 5.9, suggest that the effect of the join program was 0.10 standard deviations increase in the self-esteem index. Women appear to have a higher self-esteem measure and the baseline index is positively correlated with the endline self-esteem measure.

We, however, believe that the effect on self-esteem are tenuous. The inconsistency between the SFC and Both treatment groups as well as the absence of any measurable treatment on the treated (column 4) we do not see strong evidence of the effect of the SFC component of PROSPECTS on this psychosocial measure.

Table 5.9: Self-Esteem Index

	Self-Esteem Index			
	(1)	(2)	(3)	(4)
SFC	-0.0835 (0.230)	-0.0253 (0.354)	-0.0873 (0.233)	
Both	0.263 (0.222)	0.669** (0.315)	0.433** (0.220)	
SFC Attended				0.225 (0.252)
Female*SFC		-0.124 (0.463)		
Female*Both		-0.773* (0.442)		
Female		0.765*** (0.256)	0.489** (0.215)	0.486** (0.215)
Baseline Self-esteem Index			0.190*** (0.0232)	0.191*** (0.0233)
Constant	20.88*** (0.264)	20.52*** (0.301)	18.03*** (5.641)	17.95*** (5.646)
Comm. FE	Yes	Yes	Yes	Yes
Baseline Controls	No	Yes	Yes	Yes
Method	OLS	OLS	OLS	2SLS
Observations	2081	2081	1950	1950

Standard errors in parentheses

Baseline controls include age, age squared, dummy for head of household, HH size, religion, highest grade completed, number of friends, log income, psychosocial measures, and cognitive measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5.4.6. LOCUS OF CONTROL

Table 5.10 shows treatment effect estimates on the Locus of Control Index. We observe a positive correlation between baseline locus of control measures and endline measures, however, there is no evidence of an effect of the SFC or Joint program on the Locus of Control Index.

Table 5.10: Locus of Control Index

	Locus of Control Index			
	(1)	(2)	(3)	(4)
SFC	-0.0862 (0.153)	0.0140 (0.240)	-0.0570 (0.160)	
Both	0.0277 (0.152)	0.264 (0.214)	0.0383 (0.154)	
SFC Attended				-0.0148 (0.173)
Female*SFC		-0.191 (0.310)		
Female*Both		-0.450 (0.303)		
Female		0.181 (0.174)	0.196 (0.149)	0.196 (0.149)
Baseline Locus of Control Index			0.113*** (0.0216)	0.112*** (0.0216)
Constant	24.18*** (0.182)	24.09*** (0.204)	21.41*** (3.363)	21.39*** (3.358)
Comm. FE	Yes	Yes	Yes	Yes
Baseline Controls	No	Yes	Yes	Yes
Method	OLS	OLS	OLS	2SLS
Observations	2081	1957	1937	1937

Standard errors in parentheses

Baseline controls include age, age squared, dummy for head of household, HH size, religion, highest grade completed, number of friends, log income, psychosocial measures, and cognitive measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5.4.7. RISKY AND AGGRESSIVE BEHAVIORS

Table 5.11 shows treatment effect estimates on our risky behaviors index (See 3.1.3). We observe a positive correlation between the baseline and endline risk index and women tend to have a lower risky behaviors index. Our analysis suggests that there is no effect of the PROSPECTS program on youth propensity to take part in risky behavior.

We do, however, observe evidence of reduced aggression among men. Coefficients for the average effects of SFC and the Joint program are negative, but statistically insignificant. In column 2 of Table 5.12, we observe a 0.18 standard deviation decrease in the aggression index among men that were assigned to the Joint SFC and CFW program. No observable effect can be measured among men in the SFC only treatment group or among women in either group. In column 4, using two-stage least squares we estimate a 0.10 standard deviation drop in the aggression index among those that participated in the SFC component.

Table 5.11: Risky Behavior Index

	Risky Behaviors Index			
	(1)	(2)	(3)	(4)
SFC	-0.024 (0.103)	0.137 (0.179)	-0.084 (0.092)	
Both	0.010 (0.108)	-0.218 (0.158)	0.017 (0.107)	
SFC Attended				-0.048 (0.112)
Female*SFC		-0.278 (0.202)		
Female*Both		0.435** (0.212)		
Female		-1.051*** (0.118)	-0.663*** (0.094)	-0.663*** (0.094)
Baseline Risky Behavior Index			0.272*** (0.032)	0.271*** (0.032)
Constant	1.382*** (0.129)	1.859*** (0.147)	3.205 (2.520)	3.175 (2.523)
Comm. FE	Yes	Yes	Yes	Yes
Baseline Controls	No	No	Yes	Yes
Method	OLS	OLS	OLS	2SLS
Observations	2081	2081	1950	1950

Standard errors in parentheses

Baseline controls include age, age squared, dummy for head of household, HH size, religion, highest grade completed, number of friends, log income, psychosocial measures, and cognitive measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5.4.8. ECONOMIC AND WELFARE OUTCOMES

Table 5.13 provides summary statistics of endline economic measures from the follow-up phone survey. Mean values of subjective welfare are higher in the endline than they were at the baseline. We observe that average income over the previous 3 months is lower than baseline average income. 40% of respondents report borrowing money from others in the previous 12 months. 54% report having spent savings and 51.5% report delaying investments over that period.

Table 5.12: Aggression Index

	Aggression Index			
	(1)	(2)	(3)	(4)
SFC	-0.222 (0.139)	-0.298 (0.210)	-0.236* (0.142)	
Both	-0.215 (0.137)	-0.518** (0.207)	-0.160 (0.142)	
SFC Attended				-0.282* (0.159)
Female*SFC		0.153 (0.279)		
Female*Both		0.578** (0.275)		
[1em] Female		-0.532*** (0.166)	-0.471*** (0.139)	-0.469*** (0.139)
Baseline Aggression Index			0.175*** (0.030)	0.175*** (0.030)
Constant	2.970*** (0.196)	3.222*** (0.217)	3.567 (3.725)	3.505 (3.724)
Comm. FE	Yes	Yes	Yes	Yes
Baseline Controls	No	No	Yes	Yes
Method	OLS	OLS	OLS	2SLS
Observations	2081	2081	1937	1937

Standard errors in parentheses

Baseline controls include age, age squared, dummy for head of household, HH size, religion, highest grade completed, number of friends, log income, psychosocial measures, and cognitive measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5.13: Endline Welfare Measures

	(1)			
	Control	SFC	Both	Total
Welfare Ladder - today	2.625 (1.352)	2.706 (1.350)	2.653 (1.408)	2.653 (1.366)
Welfare Ladder - one year ago	2.056 (1.194)	2.192 (1.296)	2.154 (1.247)	2.115 (1.234)
Total income last 3 months	66.39 (135.0)	62.29 (114.0)	60.66 (104.5)	63.93 (122.8)
household had to sell/slaughter livestock	0.163 (0.369)	0.202 (0.402)	0.192 (0.394)	0.180 (0.384)
household had to sell other assets	0.138 (0.345)	0.145 (0.352)	0.141 (0.349)	0.140 (0.348)
household had to borrow money from others	0.392 (0.488)	0.413 (0.493)	0.404 (0.491)	0.401 (0.490)
household had to lend money to others	0.290 (0.454)	0.283 (0.451)	0.314 (0.465)	0.294 (0.456)
household had to send children to live elsewhere	0.209 (0.407)	0.233 (0.423)	0.221 (0.415)	0.218 (0.413)
household had to spend savings	0.528 (0.499)	0.560 (0.497)	0.546 (0.498)	0.540 (0.498)
household had to delay investments	0.507 (0.500)	0.517 (0.500)	0.532 (0.499)	0.515 (0.500)
Amount Borrowed (USD)	99.91 (2319.5)	171.3 (3279.3)	175.1 (3282.4)	136.5 (2839.5)
Amount Loaned (USD)	142.9 (2635.9)	283.7 (3722.2)	96.76 (2157.6)	166.6 (2846.4)
Net Borrowed Amount (USD)	-43.12 (3497.1)	-112.9 (4969.6)	78.29 (3899.5)	-30.27 (4009.8)

Standard deviations in parentheses

SUBJECTIVE WELFARE

In Table 5.14, we see that there is no effect of the PROSPECTS program on subjective welfare. We find that there is a positive effect among women in the SFC-only program, however, do not observe the effect in the Joint treatment group nor do we see an effect in our treatment on the treated estimate (column 4).

Table 5.14: Subjective Welfare

	On which step of a 6 step ladder are you today?			
	(1)	(2)	(3)	(4)
SFC	0.081 (0.073)	-0.094 (0.095)	0.070 (0.074)	
Both	0.026 (0.075)	0.013 (0.096)	0.019 (0.076)	
SFC Attended				0.062 (0.084)
Female*SFC		0.320** (0.142)		
Female*Both		0.025 (0.148)		
Female		0.201** (0.084)	0.410*** (0.069)	0.409*** (0.069)
Baseline Subjective Welfare			0.136*** (0.026)	0.136*** (0.026)
Constant	2.669*** (0.090)	2.584*** (0.097)	5.141*** (1.793)	5.166*** (1.795)
Comm. FE	Yes	Yes	Yes	Yes
Additional Controls	No	No	Yes	Yes
Method	OLS	OLS	OLS	2SLS
Observations	2078	2078	1947	1947

Standard errors in parentheses

Full question text: Please imagine a 6-step ladder where on the bottom, the first step, stand the poorest people, and on the highest highest step, the sixth, stand the rich. On which step are you today?

Baseline controls include age, age squared, dummy for head of household, HH size, religion,

highest grade completed, number of friends, log income, psychosocial measures, and cognitive measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

BORROWING

Table 5.15 summarizes the effects of the PROSPECTS program on borrowing activity of respondents. We do not observe any effects of the program on net borrowing. Given that there is no differences in life events, this null effect is not a surprise, however, we confirm that the PROSPECTS program did not change borrowing behavior due to the extra cash from the program nor through encourage resilience strategies.

LABOR AND INCOME

We find that the PROSPECTS program increased labor activity. PROSPECTS SFC participants were 6.8 percentage points more likely to have worked in the previous 7 days when surveyed in the follow-up phone survey (column 4 in Table 5.16). From the intent-to-treat regressions (columns 1 to 3), we see that the main effect is observed in the SFC-only group. On average, youth that participated in SFC worked 1.87 hours more than non-participants (statistically significant at the 10% level).

Despite the evidence of increased labor, the effects do not manifest in the income of participants. The coefficient for the treatment on the treated estimate in column 4 of Table 5.17 points to positive relationship

Table 5.15: Net Borrowing

	Net Borrowing (USD)			
	(1)	(2)	(3)	(4)
SFC	-72.881 (243.048)	-43.298 (467.983)	-201.080 (209.263)	
Both	120.319 (203.448)	357.076 (364.833)	150.129 (207.255)	
SFC Attended				-43.039 (225.816)
Female*SFC		-54.637 (506.583)		
Female*Both		-451.827 (414.401)		
Female		-56.601 (221.332)	-208.763 (197.173)	-209.194 (197.135)
Constant	-177.167 (186.422)	-158.710 (228.184)	-2930.623 (3653.955)	-3050.222 (3690.354)
Comm. FE	Yes	Yes	Yes	Yes
Additional Controls	No	No	Yes	Yes
Method	OLS	OLS	OLS	2SLS
Observations	2071	2071	1941	1941

Standard errors in parentheses

Baseline controls include age, age squared, dummy for head of household, HH size, religion, highest grade completed, log income, psychosocial measures, and cognitive measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5.16: Labor Outcomes

	Worked in the past 7 days				Hours worked in past 7 days			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SFC	0.057** (0.024)	0.057* (0.032)	0.059** (0.025)		1.315 (0.939)	0.480 (1.380)	1.252 (0.964)	
Both	0.038 (0.025)	0.016 (0.034)	0.039 (0.025)		1.677* (0.979)	1.176 (1.480)	1.495 (1.015)	
SFC Attended				0.068** (0.028)				1.872* (1.094)
Female*SFC		0.002 (0.048)				1.640 (1.884)		
Female*Both		0.043 (0.049)				0.982 (1.964)		
Female		-0.127*** (0.029)	-0.101*** (0.023)	-0.102*** (0.024)		-3.088*** (1.044)	-2.751*** (0.871)	-2.765*** (0.873)
Age			0.123** (0.057)	0.121** (0.057)			5.616*** (1.961)	5.582*** (1.969)
Age squared			-0.003* (0.001)	-0.003* (0.001)			-0.116** (0.048)	-0.116** (0.048)
Constant	0.652*** (0.031)	0.710*** (0.033)	-0.818 (0.581)	-0.803 (0.582)	9.767*** (1.038)	11.213*** (1.170)	-57.569*** (20.297)	-57.253*** (20.379)
Comm. FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baseline Controls	No	No	Yes	Yes	No	No	Yes	Yes
Method	OLS	OLS	OLS	2SLS	OLS	OLS	OLS	2SLS
Observations	2081	2081	1950	1950	2056	2056	1927	1927

Standard errors in parentheses

Baseline controls include age, age squared, dummy for head of household, HH size, religion, highest grade completed, log income, psychosocial measures, and cognitive measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

between participating in SFC and income, however, this estimate is not statistically significant, therefore we fail to reject the hypothesis that the program effect on income was null.

Table 5.17: Income

	30 day income (log)			
	(1)	(2)	(3)	(4)
SFC	0.091 (0.080)	0.042 (0.110)	0.120 (0.080)	
Both	-0.019 (0.084)	-0.029 (0.118)	-0.014 (0.084)	
SFC Attended				0.076 (0.093)
Female*SFC		0.096 (0.158)		
Female*Both		0.019 (0.168)		
Female		-0.248** (0.098)	-0.138* (0.077)	-0.138* (0.078)
Age			0.498*** (0.181)	0.493*** (0.181)
Age squared			-0.010** (0.004)	-0.010** (0.004)
Baseline Log Income (3m)			0.080*** (0.016)	0.079*** (0.016)
Constant	2.937*** (0.098)	3.051*** (0.106)	-3.575* (1.855)	-3.530* (1.854)
Comm. FE	Yes	Yes	Yes	Yes
Baseline Controls	No	No	Yes	Yes
Method	OLS	OLS	OLS	2SLS
Observations	2075	2075	1944	1944

Standard errors in parentheses

Baseline controls include dummy for head of household, HH size, religion, highest grade completed, number of friends, psychosocial measures, and cognitive measures.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Taken together, we find weak evidence of the effect of PROSPECTS on economic outcomes. While there is some evidence that the program increase the likelihood of working, such effects are limited in that they do not carry over into observed effects on income or borrowing.

6

POLICY RECOMMENDATIONS

This impact evaluation of the PROSPECTS program for vulnerable youth in Monrovia found little evidence of a statistically significant effect across a host of psychosocial and economic outcomes. Given the challenges of implementing the cash for work component of the PROSPECT program, the impact evaluation is unable to provide insight on the effect of the cash for work component. However, the low take up of the CFW component provides lessons for considering similar social programs.

We acknowledge that the program design and implementation may have been suboptimal due to the challenges with partner coordination, the inclusion of a randomized control trial, and the crisis of the Ebola epidemic. As such, the recommendations below are posed in order to highlight topics that our analysis suggest should be given consideration when designing similar programs for vulnerable youth.

1. **Beneficiary Selection** - The PROSPECTS program sought to reach 1200 vulnerable youth with a cash for work program and 1200 with a sport for change program. Our analysis suggests that living conditions in the selected communities of Monrovia are fragile and tenuous. However, a host of psychosocial measures from the baseline suggest that not all youth in these areas can or should be assessed as vulnerable in the psychosocial sense. Similarly, most of the young adults surveyed are economically active, thus are able to find sources of income, even if they are not considered ready for the formal labor market. Social programs that seek to reach vulnerable youth should either be more limited in scope. This can be done by conducting screening prior to the start of a program in order to identify individuals with low psychosocial scores and low employment opportunity. Inevitably, this is likely to limit the number of individuals that such a program can reach. As such programming presents a palpable trade-off between breadth in reaching more youth and depth in focusing on topics that support the most vulnerable youth. Our analysis suggests that attempting to reach a large number of individuals with a program designed for vulnerable youth is not effective.
2. **Implementation Design** - The experience of the cash for work component suggests that the selection of the cash for work activity. Participation in the CFW component was extremely low. Women were more likely than men to participate and many of those assigned to CFW expressed disinterest in collecting recycling materials. Targeting the most vulnerable youth through an unconditional cash transfer may be a more efficient means of providing assistance, without the risk of forcing an undesirable, laborious activity on individuals.
3. **Payment Infrastructure** - Frustration with the cash for work program was clearly related to slow and inaccurate payments. The use of mobile money, while meant to streamline payments, introduced a complexity to an already difficult-to-manage cash for work program. Mobile money payments for the sports for change program were considerably more effective, likely due to the fact that only Mercy Corps was involved in sending the payment instructions whereas the payments for cash for work required processing of information from the collection center, review by LACE, and authorization from Mercy Corps. Simplifying payment calculations and centralizing payments may assist with the program implementation and satisfaction.
4. **Program Expectations** - Our analysis suggests that expectations for a psychosocial development through a sports program should be re-considered. While the sports for change component of the PROSPECTS

program was popular and attendance was high, the effects of the program one year out were very limited. We find suggestive evidence of reduced aggression among men, improved self-esteem among women, and some improvement in labor force participation. However, these effects are limited and not robust in our opinion. Future expectations of similar sports programs should be couched. We do not find the program, as implemented, to be transformative, rather an enjoyable activity for youth to take part in.

5. **Leveraging Social Connections** We find that more connected youth are also more likely to participate in the PROSPECTS program. Such peer effects should be considered when designing similar social programs. If a social element of a program is desired, it may exclude the most vulnerable youth, who may inherently be isolated or depressed due to limited social interactions. As such, additional efforts to include youth that have few friends may be necessary or more one-on-one mentoring may be necessary to reach un-connected youth.

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