

# Tanzania Youth Study: Productive Social Safety Net (PSSN) Impact Evaluation: Baseline Report

## Tanzania Social Action Fund (TASAF)

Social and Economic Policy Section, UNICEF Office of Research--Innocenti  
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## Acknowledgements

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## Acronyms

ADMARC	Agricultural Development and Marketing Corporation
AIDS	Acquired Immunodeficiency Syndrome
ARV	Antiretroviral
CCT	Conditional Cash Transfer Program
CES-D	Centre for Epidemiological Studies-Depression Scale
COSTECH	Tanzania Commission for Science and Technology
CSPro	Census and Survey Processing System
CT-OVC	Cash Transfer for Orphans and Vulnerable Children
DHS	Demographic and Health Survey
FCS	Food Consumption Score
HIV	Human Immunodeficiency Virus
IPV	Intimate partner violence
MCTG	Multiple Category Transfer Grant Programme
MDGs	Millennium Development Goals
MSPSS	Multidimensional scale of perceived social support
NBS	National Bureau of Statistics
NGO	Non-Governmental Organisation
PAA	Project Authority Areas
PMT	Proxy Means Test
PSSN	Productive Social Safety Net
PWP	Public Works Program
RCT	Randomised control trial
REPOA	Policy Research for Development
SCTP	Social Cash Transfer Programme
SSA	Sub-Saharan Africa
TACAIDS	Tanzania Commission for AIDS
TASAF	Tanzania Social Action Fund
TDHS	Tanzania Demographic and Health Survey
TZS	Tanzanian Shilling
UCT	Unconditional Cash Transfer
USD	US Dollar
UNICEF	United Nations Children's Fund
VACS	Violence Against Children Survey
WEAI	Women's Empowerment in Agriculture Index
WFP	World Food Programme
WHO	World Health Organization

## Executive Summary

This report provides the baseline results of the impact evaluation of the Government of the Republic of Tanzania's Productive Social Safety Net program (PSSN) on Tanzanian youth. The impact evaluation is an 18-month, mixed methods study to provide evidence on the effects that the programme has on youth wellbeing and the transition to adulthood. As of 2015, the programme reached 1.1 million households (6.5 million people) in Tanzania. Results of this evaluation inform design of future iterations of the Government's social protection and other complementary programming supporting the safe transition of Tanzanian youth. Insights from this evaluation will also enable the Government of Tanzania, Tanzania Social Action Fund (TASAF), and other stakeholders such as UNICEF Tanzania and Tanzania Commission for AIDS (TACAIDS) to assess other measures or interventions necessary to improve adolescent and youth wellbeing, and how these can complement and provide synergies with the government's institutionalized social protection strategy. A parallel impact evaluation is also being conducted by the World Bank with Tanzania's National Bureau of Statistics (NBS) and the Office of Chief Government Statistician (OCGS) to examine impacts on households related to poverty, food security, health utilization and related outcomes. In addition, Policy Research for Development (REPOA, Tanzania) is currently conducting a study to examine impacts of PSSN on women's empowerment. The current youth study is being conducted in conjunction with the latter, REPOA's empowerment study.

**UNICEF Office of Research - Innocenti and REPOA have designed a rigorous mixed-methods impact evaluation to estimate the effects of Tanzania's PSSN on youth wellbeing and the transition to adulthood.** The study builds on learnings from the Transfer Project, a multi-organization consortium providing evidence on government-run cash transfers in Africa, with a focus on safe transitions to adulthood for youth. The evaluation utilizes a cluster randomised control trial (RCT) design, where TASAF randomised a total of 102 villages (on the mainland and in Zanzibar) into three arms: 35 to receive the conditional cash transfer (CCT), 26 villages to receive the CCT plus Public Works Program (PWP), and 41 villages to the control (delayed entry after 18 months). The youth study sample consists of 1,357 youth in 801 households from this evaluation sample on the mainland only (not Zanzibar). Additionally, the qualitative study sample consists of 16 youth who were administered in-depth interviews.

**Analysis presented in this report demonstrates that the RCT design worked well, with outcomes of interest balanced between the treatment and controls groups, indicating a valid study design to measure programme impacts.** We performed approximately 150 statistical tests for mean (or proportional) differences between the treatment and control groups across impact domains ranging from mental health, schooling and sexual behaviours to violence, risk-taking and future aspirations. We examined differences between the control group and 1) the pooled treatment group and 2) the CCT only and combined CCT plus public works arms and found very few (less than five per cent) statistically significant differences across the two groups and conclude that the cluster RCT design was successful at creating a valid control group.

Key findings are highlighted here, and more details are presented in the report.

- ✓ Among youth (ages 14 to 28) interviewed, one in three had ever been married or cohabited with a partner (47 per cent of females and 17 per cent of males).
- ✓ There were low reported rates of having basic material needs met. Only one in four youth have all their basic material needs met (defined as a pair of shoes, blanket, and two set of clothes).
- ✓ Levels of completed schooling were as follows: 11 per cent of youth had no schooling, 28 per cent had some primary, 46 per cent had completed primary school, and only 15 per cent had some secondary schooling or above. Among those aged 14 to 17 years, 52 per cent were currently enrolled in school.
- ✓ A large proportion of the sample (63 per cent) exhibited depressive symptoms. This is higher than the proportions reporting depressive symptoms in other countries where the Transfer Project has assessed this measure among youth, including in Kenya, Malawi, Zambia, and Zimbabwe.
- ✓ Sixty-two per cent of youth report that their health was good, very good, or excellent.
- ✓ In terms of social support, the average youth had approximately 10 family members and three close friends to whom to turn. However, females reported lower social support than males, and over 20 per cent of females reported that they did not have any close friends (33 per cent among females ages 25 to 28).
- ✓ A majority of the sample (59 per cent) reported sexual debut. Among never married youth, 35 and 49 per cent of female and males, respectively, reported sexual debut, and average age at first sex was 16 years.
- ✓ We assessed a variety of HIV risk factors, including condom use, perceived risk, age-disparate sexual partners, and concurrent sexual relationships. Only 19 per cent of sexually experienced youth reported having used a condom at first sex, and 26 per cent reported condom use at last sex. Almost one in three sexually experienced youth reported concurrent sexual relationships in the previous 12 months. Thirty-one per cent of youth reported their most recent sexual partner was five or more years older (42 per cent among females). One in five youth in the sample reported transactional sex in the previous 12 months. Among all females, 18 per cent reported having received food, gifts, or money in exchange for sex, and among males, 26 per cent reported having given these in exchange for sex. Finally, one in five youth perceive their risk of contracting HIV of being moderate or high, and 43 per cent had received an HIV test in their lifetime.
- ✓ Contraceptive use was lower than regional prevalence rates. One in four youth in the sample reported current use of a modern method (27 per cent among females in our sample, compared to 35 per cent of all females ages 15-49 in Eastern Africa overall). Further, 52 per cent of females in the sample had ever been pregnant.



- ✓ There were high levels of violence experienced and attitudes accepting domestic violence. Seventy per cent of females agreed that husbands were justified in beating their wives in at least one of five hypothetical circumstances presented. Among females, 55 per cent experienced emotional violence, 29 per cent experienced physical violence, and 21 per cent experienced sexual violence in the prior 12 months. The most common perpetrators were intimate partners and family members. Among victims of physical and/or emotional violence, only 27 per cent ever told anyone about their experiences, and only 2 per cent sought help from formal sources including social, judicial, police or health combined.

## 1. Introduction and Background

This is the baseline evaluation report of Tanzania's Productive Social Safety Net program (PSSN) and impacts on youth wellbeing and the transition to adulthood. This mixed methods evaluation is led by UNICEF's Office of Research – Innocenti and Policy Research for Development (REPOA Tanzania).

The impact evaluation presented here examines impacts of Tanzania's Productive Social Safety Net program (PSSN), which was initiated in 2013 by the Government of the United Republic of Tanzania and is implemented by the Tanzania Social Action Fund (TASAF). TASAF was established in 2000 as part of the Government of Tanzania's social protection strategy to reduce poverty and has since been expanded twice. Phase I (2000-2005) focused on improving social service delivery; capacity enhancement for communities, including overseeing community-run 1,704 sub-projects such as construction and rehabilitation of health care facilities, schools and other small-scale infrastructure; and a public works component with 113,646 direct beneficiaries. The second Phase (2005-2013) built on the Millennium Development Goals (MDGs) and expanded the first stage commitments to address a shortage of social services, capacity enhancement (including 12,347 community sub-projects), and income poverty, including a pilot of community-based conditional cash transfers (CCT) reaching 11,576 households in communities that were strengthened during the first phase<sup>1</sup>.

TASAF implements its interventions using Community Driven Development (CDD) approach and activities managed by communities including electing community teams during village assembly who identify potential beneficiary households, screening of potential beneficiaries using pre-determined criteria agreed, village/shehia council and village assembly play a key role in program oversight while Community Management Committee (CMC) playing key operational roles in program components, monitoring and supporting compliance with co-responsibilities, and transferring funds to beneficiaries.

Currently, the third phase of TASAF, the PSSN, which supports a national social protection programme aimed at putting in place the building blocks of permanent national social safety system, became effective. A key element of this programme was the CCT component complemented with Public Works and Livelihoods Enhancement. The PSSN aimed to reach 275,000 extreme poor households in 5 years. The PSSN provides cash to poor and vulnerable households in Tanzania conditional on their use of health and education services along with opportunities to earn additional income through public works and livelihood.

The objectives of this new phase, the consolidated PSSN, include: 1) increase consumption of the extremely poor on a permanent basis, 2) smooth consumption during lean seasons and shocks, 3) invest in human capital, 4) strengthen links with income generating activities, and 5) increase access to improved social services. It aims to improve consumption and human capital accumulation and to reduce the poverty headcount and poverty gap by 5per cent and 30per cent, respectively. The programme also aims to improve vulnerable populations' ability to cope with shocks, invest in human capital, and increase access to improved social services. The key element of the programme is a CCT provided to households living below the food poverty line, complemented with public works

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<sup>1</sup> Evans, D. K., Hausladen, S., Kosec, K., & Reese, N. (2013). *Community Based Conditional Cash Transfers in Tanzania: Results from a Randomized Trial*. Washington, DC: World Bank.

and livelihoods strengthening components. Participating households are required to comply with certain conditions related to children's school attendance and health care to receive payments, although a portion of the cash transfer is fixed and unconditional and relies only on eligibility of the household related to household poverty and number of children in the household. The current phase (TASAF III/PSSN) is being scaled up in six waves between 2013 and 2016. The programme has continued to make good progress in the implementation of its planned interventions and has achieved the massive scale-up plan. To date, the number of households targeted/enrolled in the program has increased from 39,473 in 8 Project Authority Areas (PAAs) (in 2013) to 1.1 million households in 161 Project Area Authorities and 9,976 villages, or approximately 15 per cent of the total population. Eventually, all eligible households nationwide are expected to receive the programme.

## 1.1 Programme Targeting

The programme utilizes a three-stage targeting process, including geographical targeting, community-based targeting, and a proxy-means test (PMT). In the first stage, national poverty maps were utilized to identify the poorest PAAs and villages. At the village level, orientation meetings were conducted to introduce the programme, wherein community members participated in discussing poverty criteria, and community teams were elected to prepare preliminary lists of the poorest households (the first village assembly). The households identified in this process were endorsed by the second village assembly. This followed by the administration of PMT questionnaire to the listed households to ensure they met the poverty criterion. The third village assembly then convened to validate the list produced by the PMT. Those that met the poverty criterion (that scored below the designated threshold), who were also approved by the Village Assembly, were then enrolled into the programme.

## 1.2 Programme Details

To accomplish the programme objectives, the PSSN has three planned components: 1) an unconditional cash transfer (UCT) paired with a variable CCT (the programme's core component), 2) a public works component, and 3) a livelihoods enhancement component. Primary recipients of the cash transfers are adult women (primarily mothers). See Figure 1.1 for programme details.

The UCT (Tsh 10,000) is provided to all enrolled households, with an additional transfer (Tsh 4,000) to households with children under 18. The CCTs offer (i) a grant (Tsh 4,000 per month) to households with children under 5 who are in compliance with post-natal exams and regular child health check-ups; (ii) a grant (Tsh 2,000) to households with children with demonstrating an 80per cent primary school attendance rate; (iii) an individual grant (Tsh 4,000) for children demonstrating an 80per cent lower secondary school attendance rate; and (iv) an individual grant (Tsh 6,000) for children demonstrating an 80per cent upper secondary school attendance rate where such services are available. Maximum total benefit per household excluding the public works component is set at Tsh 38, 000 per month, but the payments are done bimonthly. Additionally, workshops are planned specifically on beneficiaries' co-responsibilities and topics related to good childcare practices, sanitation and hygiene, education.

The cash transfer component aims to increase household income on a permanent basis, while the public works component aims to reduce negative coping decisions during the lean season by

providing a predictable income during this period<sup>2</sup>. Examples of public works programmes that PSSN beneficiaries may engage in include pavement of community rural roads and construction of charcoal dams, wahter ponds, and tree nurseries. Additionally, the public works component or ‘cash-for-work’ provides 2,300 TZS per day (approx. 1 USD) for one able-bodied adult per household age 18 and over for up to 60 days in four months.

Finally, at the time of the baseline survey, details for the livelihoods enhancement component were still being finalized. The objective of the livelihoods component is to enhance households’ income generation capacity so that vulnerable populations are better able to support themselves in the medium and long term. This objective will be accomplished through bridging the gap between PSSN beneficiaries and the supply of programmes that can help them increase their productive potential, increasing their self-reliance and income diversification. There is a strong emphasis on savings promotion, building on the experience of the Community Savings Groups implemented in TASAF II as well as with additional individual savings mechanisms.

**Figure 1.1 Programme Details<sup>3</sup>**

As of 2015, the **Conditional Cash Transfer** provides:

- 10,000 TZS fixed benefit (approx. 5 USD);
- 4,000 TZS fixed benefit for each if the household has a child under 18 years (approx. 1.80 USD);
- 4,000 TZS fixed additional for child under 5 conditional on health compliance (approx. 1.80 USD);
- 2,000 TZS additional for each child (up to four children) conditional on enrollment in primary school;
- 4,000-6,000 TZS additional for child conditional on enrollment of child in lower or upper secondary school (approx. 1.80-2.70 USD); and
- Maximum monthly transfer of TZS 38,000 (approx. 18.00 USD).

The **Public Works** component or ‘cash-for-work’ provides:

- 2,300 TZS per day (approx. 1 USD) for one able-bodied adult per household age 18 and over for up to 60 days in four months.

The **Livelihoods Enhancement** component provides:

- Basic training to help prepare beneficiaries to access existing productive oportunitites, including a strong emphasis on savings promotion; and
- Support to households’ income generating capacity and income diversification.
- A productive grant.

<sup>2</sup> World Bank. (2012). Tanzania Productive Social Safety Net: Project Appraisal Document *Report No. 67116-TZ*. Dar es Salaam.

<sup>3</sup> Aide Memoire of the TASAF/PSSN Mid-Term Review and Implementation Support Mission September 8-19, 2014.

### 1.3 Impact Evaluation

In the current scale-up, for evaluation purposes, a set of households have been randomized to delayed treatment (at the village-level), which allows the study of programme impacts. An impact evaluation measuring overall impact of the PSSN on key indicators is being conducted by the World Bank with the National Bureau of Statistics (NBS) and Office of Chief Government Statistician (OCGS). The evaluation covers the subset of 16 PAAs randomly selected from the 99 PAAs in Waves 4 and 5 of the PSSN scale-up out of a total of 161 PAAs covered by the programme; an additional PAA was covered by the evaluation in Zanzibar. The REPOA study examines PSSN impacts on women's empowerment and covers eight of these same Mainland PAAs (and 1 PAA in Zanzibar), randomly selected among the 16 mainland PAAs covered in the World Bank/NBS/OCGS impact evaluation, and the current youth impact evaluation is part of the REPOA study, examining a subset of the households. Communities not selected for the World Bank/NBS/OCGS impact evaluation were randomly selected for the REPOA study, and thus none of the communities or households included in the REPOA/UNICEF study overlap with the World Bank/NBS/OCGS study. This reduces the possibility of survey fatigue among participating households. The REPOA/UNICEF study is being conducted in eight mainland districts (Misungwi, Kahama, Kilosa, Kisarawe, Handeni, Mbogwe, Itilima, Uyui) and uses a longitudinal, experimental study design, combining quantitative surveys with qualitative in-depth interviews and is described in more detail below.

### 1.4 Focus on Adolescents

The impact evaluation described in this report focuses on impacts among adolescents and young people related to wellbeing and the transition to adulthood. The study builds on learnings from the Transfer Project, a multi-organization consortium providing evidence on government-run cash transfers in Africa, with a focus on safe transitions to adulthood for youth.<sup>4</sup> Adolescence is a critical period in which events and transitions have long-term impacts on an individual's health, wellbeing, and productivity. Decisions about sexual debut, schooling, and partnerships determine an individual's trajectory and can impact earning potential, agency in marriage, future experience of violence, and a range of outcomes that impact not only the individual, but their future children as well. In Tanzania, adolescents face barriers to a safe transition to adulthood in the form of early marriage and pregnancy, violence, HIV risk, and living without parents. Further, according to the 2010 Tanzania DHS report<sup>5</sup>, four per cent of women aged 25 to 49 had given birth by age 15, and according to our own calculations with these data, 6.7 per cent of women aged 15 to 49 in Tanzania were married or in union before age 15. According to the 2009 nationally-representative Violence Against Children (VAC) Survey, three in ten females and one in seven males report sexual violence before age 18; and three-quarters of males and females experienced physical violence by an adult or intimate partner before age 18<sup>6</sup>. Further, one quarter and one-fifth of girls and boys aged 10-14

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<sup>4</sup> The Transfer Project is currently operating in over 10 countries, including impact evaluations on youth in five countries. For further details see: <https://transfer.cpc.unc.edu/>

<sup>5</sup> National Bureau of Statistics (NBS) [Tanzania], & ICF Macro. (2011). Tanzania Demographic and Health Survey 2010. *Dar es Salaam, Tanzania: NBS and ICF Macro.*

<sup>6</sup> United Nations Children's Fund Tanzania Country Office, United States Centers for Disease Control and Prevention (CDC), Muhimbili University of Health and Allied Sciences. (2011). Violence against Children in

years live without their biological parents—and this proportion rises to half of girls aged 15-17 years in urban areas<sup>7</sup>.

Cash transfers have recently been highlighted as having the potential to facilitate safe transitions to adulthood. Evidence on government social cash transfer programmes across the region has demonstrated their ability to delay sexual debut<sup>8</sup>, first pregnancy<sup>9</sup> and reduce transactional and age-disparate sex<sup>10</sup>. Adolescents often transition to sexual debut, marriage, and pregnancy early in Tanzania, and to date, there is no evidence from this country on the transition to adulthood and the ability of cash transfers to offer protective impacts during this period (with the exception of schooling impacts, as a pilot CCT programme implemented by TASAF in Bagamoyo, Chamwino and Kibaha was shown to increase the likelihood of enrolment by four percentage points and probability of completing Standard 7 by 15 percentage points<sup>11</sup>). Over the next 10-15 years, Tanzania's largest ever youth population will enter their economically productive years<sup>12</sup>, and therefore it is important to examine the potential for social protection programmes to facilitate safe transitions and maximize youth's future productivity and wellbeing.

## 2. Conceptual Framework

This section describes the conceptual framework for the PSSN impact evaluation on youth wellbeing and the transition to adulthood. It identifies the relevant outcome indicators among youth and hypothesizes potential pathways of impact in a framework linking with cash transfer programming.

The overarching research questions guiding the youth study are: Does the PSSN positively impact youth wellbeing and the transition to adulthood, and if so, through what pathways?

*Primary questions of interest include:*

1. Does the programme delay sexual debut, marriage, and/or pregnancy?
2. Does the programme improve youth mental health?
3. Does the programme increase youth schooling attendance and attainment?
4. Does the programme reduce youth's participation in labour and productive activities?

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Tanzania: Findings from a National Survey, 2009. Summary Report on the Prevalence of Sexual, Physical and Emotional Violence, Context of Sexual Violence, and Health and Behavioural Consequences of Violence Experienced in Childhood. *Dar es Salaam, Tanzania: United Nations Children's Fund Tanzania.*

<sup>7</sup> Population Council, Tanzania Commission for AIDS (TACAIDS), Zanzibar AIDS Commission (ZAC), & UNICEF Tanzania. (2015). The adolescent experience in-depth: Using data to identify and reach the most vulnerable young people, Tanzania 2009-2012. *Dar es Salaam: Population Council, TACAIDS, ZAC and UNICEF Tanzania.*

<sup>8</sup> Handa, S., Halpern, C. T., Pettifor, A., & Thirumurthy, H. (2014). The government of Kenya's cash transfer program reduces the risk of sexual debut among young people age 15-25. *PLoS One, 9*(1), e85473-e85473.

<sup>9</sup> Handa, S., Peterman, A., Huang, C., Halpern, C. T., Pettifor, A., & Thirumurthy, H. (2015). Impact of the Kenya Cash Transfer for Orphans and Vulnerable Children on Early Pregnancy and Marriage of Adolescent Girls. *Social Science & Medicine, 141*, 36-45.

<sup>10</sup> Cluver, L., Boyes, M., Orkin, M., Pantelic, M., Molwena, T., & Sherr, L. (2013). Child-focused state cash transfers and adolescent risk of HIV infection in South Africa: a propensity-score-matched case-control study. *The Lancet Global Health, 1*(6), e362-e370.

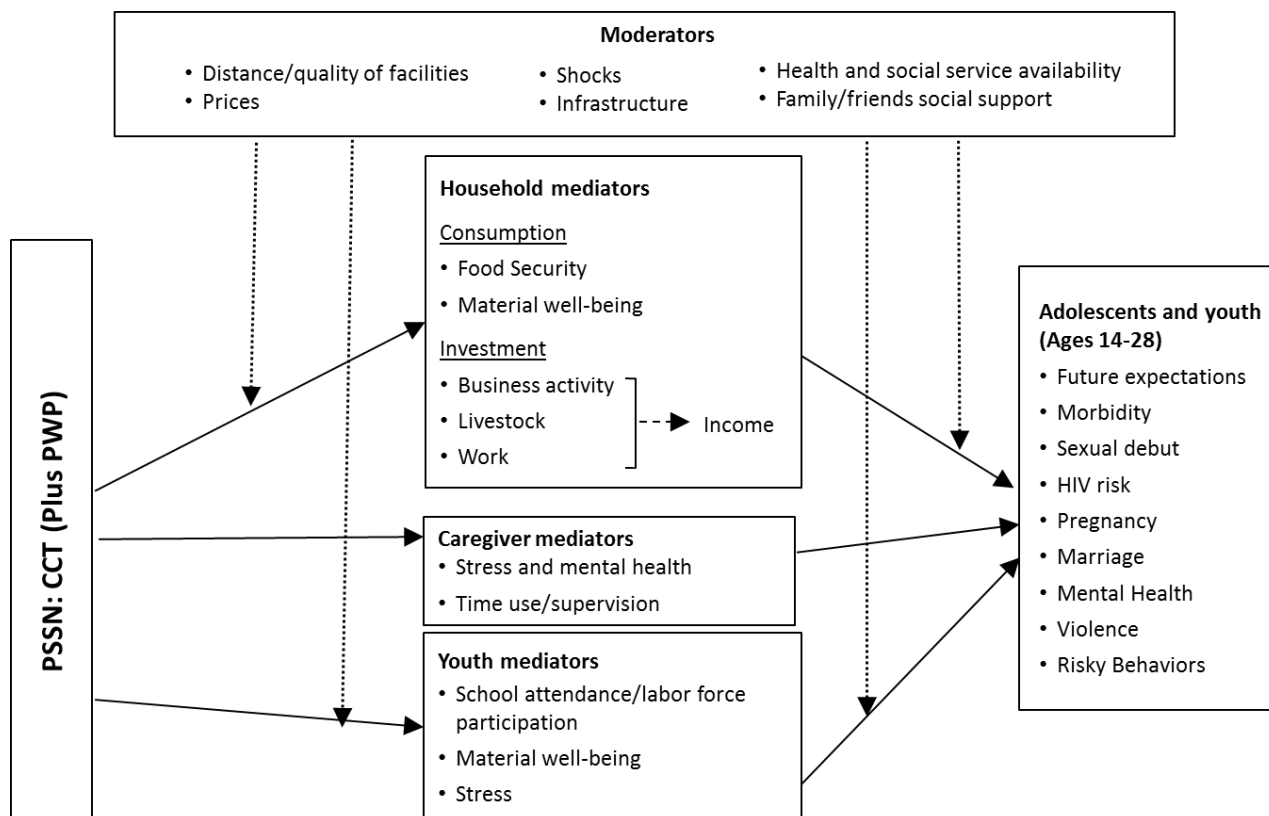
<sup>11</sup> Evans, D. K., Hausladen, S., Kosec, K., & Reese, N. (2013). *Community Based Conditional Cash Transfers in Tanzania*. Retrieved from Washington, DC:

<sup>12</sup> Jenkins, A., Bangser, M. (2015). The promise of adolescence: UNICEF Tanzania Country Office adolescent strategy to guide the 2016-2012 country programme. *Dar es Salaam, Tanzania: UNICEF Tanzania.*

5. Does the programme reduce risky sexual behaviours?
6. Does the programme reduce emotional, physical and sexual violence (including intimate partner violence – IPV), experienced by female youth?

Figure 2.1 illustrates the pathways through which the PSSN can impact the primary adolescent and youth outcomes of the study, by first traveling through mediators and eventually resulting in program impacts. Households first receive programme inputs in the form of cash from the CCT and/or the public works component. Immediate programme impacts will work through investment of consumption at the household level (including time allocation decisions). Since cash is given to primarily adult females, increased cash flow can result directly in increased household food security or material wellbeing for the youth and their households. Once immediate needs are met, the regular influx of cash may begin to affect additional outcomes, including investment and other productive activity, the use of services, and the ability to free up older children to attend school. Following along the causal pathway, these mediators may, in turn, lead into the outcomes of interest for this study related to youth wellbeing. In addition to being an important mediating indicator of interest, schooling is also hypothesized as a protective pathway for other positive outcomes, including delayed sexual debut, marriage, and pregnancy. The ultimate outcome impacts among youth likely take longer to materialize as compared to household-level impacts such as increased food security and consumption. Further, effects of the PSSN may be moderated by household-level factors (family/social support) or local conditions in the community (access to markets and other services, prices, shocks, and distance to schools or health facilities). Moderating effects are shown with dotted lines that intersect with the solid lines to indicate that they can influence the strength of the direct effect. The main outcomes of interest to be studied among youth are school attendance, aspirations, mental health, sexual debut, pregnancy, marriage, violence, and future expectations.

**Figure 2.1. The Impact of Cash Transfers on Adolescents and Youth: A Conceptual Framework**



### 3. Study Design and Sampling

#### 3.1 Study Design

The study utilizes a cluster sample design, whereby clusters (communities) were randomized to one of three study arms, and households are nested within communities. In this rigorous study design, communities and households were randomly selected in a multi-stage process. There are 102 communities in the REPOA women’s empowerment study, with 35 CCT only treatment communities, 26 CCT plus Public Works Program treatment communities, and 41 control communities. The REPOA women’s empowerment study utilizes the Women’s Empowerment in Agriculture Index (WEAI) monitoring and evaluation methodology, developed by the International Food Policy Research Institute and partners. Following the WEAI guidelines, the study categorized households into three types: 1) Dual adult households (with both a male and female aged 18 and over); 2) Female adult households (with females aged 18 and over but no males aged 18 and over); and 3) Male adult households (with households with males aged 18 and over but no females aged 18 and over).<sup>13</sup> Guided

<sup>13</sup> Alkire, S., Malapit, H., Meinzen-Dick, R., Peterman, A., Quisumbing, A., Seymour, G. and A. Vaz. (2013). Instructional Guide on the Women’s Empowerment in Agriculture Index.



by the WEAI requirements, the REPOA study only sampled two of these categories (dual adult and female adult households). The ratio for dual over female households was estimated at two thirds to one third (ranging between 60-80per cent: 40-20per cent respectively) per village. Thus, in relation to the full sample of eligible households, the REPOA sample (and youth sample) exclude households in category 3 (male adult households only).

Logistically, the sampling was completed as follows: TASAF provided the list of targeted households for each village. Two enumerator supervisors (one for the Northern districts and the other for Southern) arrived in a village one day before the rest of the team arrived to finalize local government survey permits. While in the village and after attaining all permits, supervisors worked with the village leader to conduct a simple random sampling of the listed households. Once a household was sampled the leaders helped to identify if the household was a dual adult or female adult household. The process was repeated until the correct ratio sample between dual and female adult households was obtained. If a member (female or male) of a dual adult household was not home, a second attempt to interview both was made before replacing it with another dual adult household. Similarly, this was the process for obtaining a sample of female adult households. For polygamous households (especially Muslim households), the male was interviewed as a dual household in the household where he was during interview. In the occasion where an additional wife was present, a special code was created and this 'second' wife was interviewed as well. Only one extra wife was allowed per male. However, in practice, this was rarely encountered because of the geographical distance between dwelling locations of wives.

For the REPOA/UNICEF youth study, which is nested within the aforementioned REPOA empowerment study, youth were interviewed in mainland communities only, resulting in youth interviewed in 36 control and 48 treatment communities (28 CCT only and 20 CCT plus PWP communities). This process of randomization produces groups (treatment and control) with a high probability of being statistically identical—that is, the groups will have statistically equivalent averages for individual- and household-level characteristics at baseline. This results in what is referred to as “balanced” study arms, and this baseline report presents findings related to tests of balance between household- and individual-level characteristics. If we find balance between treatment and control groups, we can conclude that the randomization was successful and that the study design is valid to examine impacts attributable to the PSSN programme.

### 3.2 Sample Design

The youth survey for the current study has been incorporated into REPOA’s existing impact evaluation of the programme on women’s empowerment. At baseline, a separate youth survey was conducted among youth in households in the REPOA study two months after REPOA’s household surveys were completed (July 2015). The 18-month follow-up survey for youth will be integrated within REPOA’s empowerment study and thus administered at the same time as the household surveys for the overall empowerment impact evaluation. In total, the REPOA study has been conducted in 8 PAAs from Tanzania Mainland and 1 PAA from Zanzibar (102 communities). There are two key differences in the youth sample for the current study and that of REPOA’s overall impact evaluation sample: 1) the youth module has not been conducted in Zanzibar, and 2) nor will it be

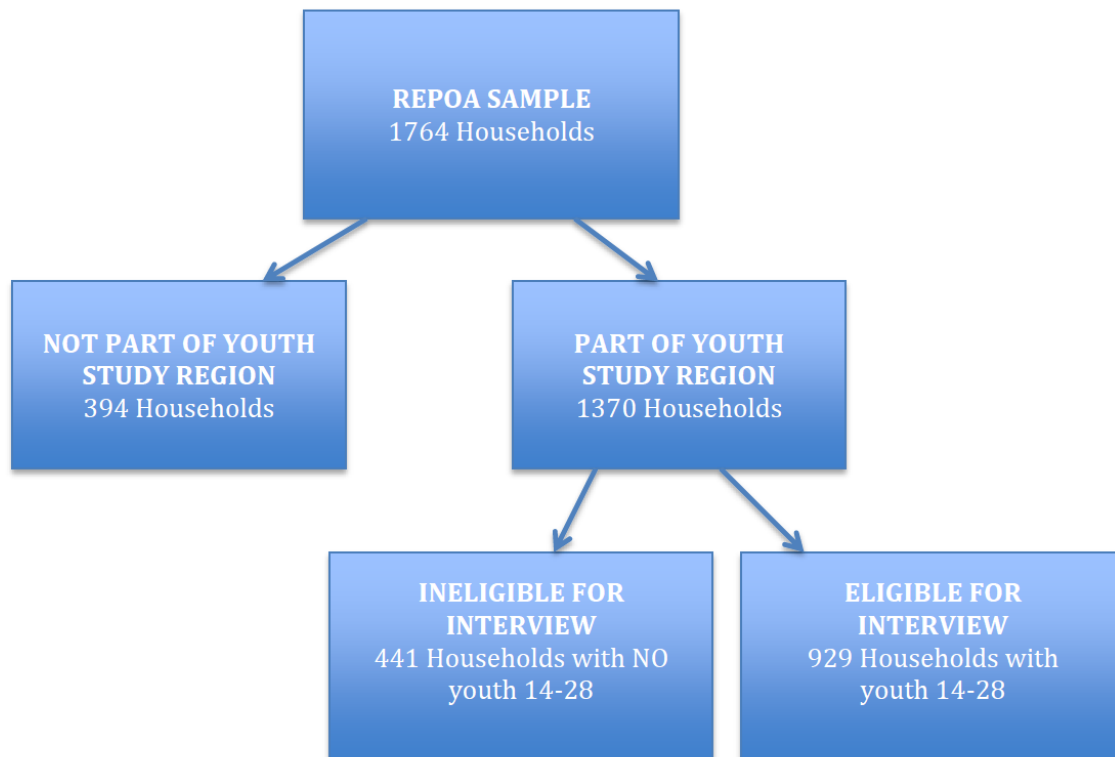
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[https://www.ifpri.org/sites/default/files/Basic%20Page/weai\\_instructionalguide\\_1.pdf](https://www.ifpri.org/sites/default/files/Basic%20Page/weai_instructionalguide_1.pdf), accessed on April 23, 2016.

conducted in TASAF II households (households were part of the previous evaluation, and thus at the time of the REPOA baseline would have been already receiving transfers for several years). Thus, the youth impact evaluation spans 8 Mainland PAAs: Misungwi DC, Kahama TC, Kilosa DC, Kisarawe DC, Handeni DC, Mbogwe DC, Itilima DC, Uyui DC (see Appendix A for a map of the youth study communities by treatment arm).

The sample size for the youth study is all youth ages 14-28 in the sampled households as described above (Figure 3.2.1). Interviewing all youth within the age range in participating households, is a strength of the current study compared to many existing studies, which select a sub-set of youth in the target age range; in this way we reduce the possibility of selection bias and risk of a non-representative sample. Although the age definition of 'youth' varies by country, this age range was chosen based on past experience of the Transfer Project in collecting data on youth in SSA, and to ensure a large enough sample size to be able to detect statistically significant differences in control and treatment group, as indicated by power calculations. Appendix B shows the household demographics and housing characteristics by eligibility (defined by having any youth aged 14-28 in household) for all households in the youth study regions. Households with youth in our target age range, and thus eligible for the current study on youth wellbeing, were more likely to be Christian (44 per cent versus 40 per cent in empowerment study) or non-religious (20 per cent v. 15 per cent) and less likely to be Muslim (35 per cent v. 44 per cent) as compared to household without eligible youth. These households were also on average larger (6.6 persons v. 4.1 persons in ineligible households) and higher educated as compared to households without eligible youth.

**Figure 3.2.1: Description of Study Sample**



### 3.3 Data Collection

Youth surveys were conducted among household members aged 14-28 years (N=1357) at baseline in 2015, and will be administered again at 18 months follow-up (in 2017). Due to the sensitive nature of many topics, interviews were conducted private locations (in Swahili) where other household members could not hear what was being discussed and were administered by same-sex enumerators. Based on the conceptual framework, the quantitative survey was multi-topical and included outcomes such as sexual debut and risky sexual behaviour, pregnancy, marriage, school attendance, aspirations, mental health, violence, and future aspirations. Furthermore, data were collected on potential moderators of programme impacts, including propensity to take risks and perceived social support. Wherever possible survey items were pulled from existing national survey instruments such as Violence Against Children Survey (VACS), Demographic and Health Surveys (DHS), and WHO Multi-Country Study on Domestic Violence and Women’s Health. In addition, similar youth modules have been previously implemented by the Transfer Project in countries such as Kenya, Malawi, Zambia, and Zimbabwe and questionnaire design reflected learning from these evaluation experiences.

We conducted in-depth, semi-structured surveys with approximately 16 youth who were purposively chosen from 8 PAAs to explore mechanisms and pathways for impacts on outcomes of interest. Interviews were conducted in Swahili, digitally recorded, transcribed, and translated to English. Since the sample is ‘embedded’ the full range of information from the household survey is also available and their responses and narratives as reported in the in-depth interviews can be compared to the quantitative data to understand a fuller picture in relation to study objectives.

Finally, data collection supervisors administered one community questionnaire to knowledgeable individuals in each community to assess topics such as access to markets, health facilities, schools; prices; village customs surrounding marriage and caregiving arrangements (who would be expected to take in a child if the parent dies); and shocks.

Enumerator training was carried out over a five day period in August 2015, led by researchers at UNICEF Office of Research—Innocenti and REPOA. The training consisted of both paper and portable tablet training, and a pilot near Dar es Salaam, and including training on questionnaire modules, research ethics, and on collecting data on gender-based violence. Both quantitative and qualitative surveys were pre-translated into Swahili and pilot tested as well as discussed extensively during enumerator training to ensure common understanding of terminology.

Data collection was carried out between August and October 2015 by 28 REPOA enumerators (including two overall supervisors) using portable tablets and Census and Survey Processing System (CSPRO) data entry programming. Fieldwork was split into the main data collection (25 August- 18 September 2015), followed by a ‘mop-up’ data collection (14-27 October 2015).

### *Ethical Guidelines*

The research team adhered to the Ethical Principles and Guidelines for the Protection of Human Subjects of Research as outlined in the Belmont Report. Enumerators received instruction on ethical data collection and informed consent at data collection trainings. Informed consent was obtained from all youth aged 18-28 years, and caregiver/parental consent and youth assent was obtained for all youth aged 14-17 years. Sensitive questions in the violence module were only asked of females (all females aged 14 to 28 in the household), and not to males, to avoid potentially asking both partners of a couple questions about violence. Ethics approval for the study was granted by the Tanzania Commission for Science and Technology (COSTECH).

Following WHO guidelines<sup>14</sup>, because of the sensitive nature of violence-related questions and because females may be in continued danger from perpetrators, we provided anonymized referral information to females participating in our surveys. This referral information included contact numbers for district social welfare officers, and, in districts where NGOs are available which provide additional services for gender-based violence survivors, females were provide contact information for these NGOs. Social welfare officers in the districts were contacted in advance to ensure they were aware of these referrals and to verify the services available. All females interviewed were offered by enumerators the two numbers without further identifying information, but clearly indicated which organizations and agencies the numbers are for and what services they provide. In total, 42 per cent of female youth accepted the offer of information and were provided referral numbers. In addition, enumerators also offered the option of taking down the youth’s information directly and sharing with appropriate personnel if they either needed immediate assistance or if they did not feel comfortable keeping the paper with the referral information (anonymized phone numbers); four out of the 706 interviewed females chose this option. We also followed WHO guidelines for research on violence against women by training enumerators on gender-based

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<sup>14</sup> WHO and Path. (2005). Researching violence against women: a practical guide for researchers and activists. WHO and PATH: Geneva. <http://www.who.int/reproductivehealth/publications/violence/9241546476/en/>

violence, conducting the interviews in a private setting, and skipping violence-related questions if a private setting could not be ensured.

### 3.4 Data Analysis

The objective of the baseline analysis is twofold. The first aim is to present baseline values of key outcomes, and the second aim is to assess the degree of balance between the treatment and control groups. In other words, we aim to evaluate whether the randomization resulted in statistically equivalent treatment and control groups. We tested all primary outcome measures and control variables for statistical differences between the treatment and control groups using ordinary least squares (OLS) regression with standard errors adjusted for clustering to account for the nested nature of our data because the survey design clustered households within communities (i.e., the unit of randomization). We therefore present baseline indicator values for control and treatment group separately, and for each indicator a p-value of the mean comparison test (OLS regression described above). We define statistical significance as a p-value lower than 0.05 ( $p < 0.05$ ). In addition, because there may be heterogeneous programme impacts, we will examine impacts at follow-up separately by age and gender, and thus we further ran balance tests separately for those under 25 years of age (a key period of rapid transitions including sexual debut, marriage, pregnancy and HIV infection risk).

After follow-up data have been collected (planned for 18 months after baseline data collection), we will analyse programme impacts by comparing baseline data to data collected at follow-up using a difference-in-differences (DD) approach. Data from the control group allows us to identify which impacts over time are attributable to the PSSN programme, controlling for outside influences and trends over time. This is done by taking the overall changes experienced by the beneficiaries and subtracting the changes also experienced by control households. The difference in these two are attributed to the programme and are considered programme impacts. Finally, in the text below, we present comparison figures of national data from the Tanzania Demographic and Health Survey (TDHS) 2010 for each indicator where possible. In the TDHS, we utilize a weighted comparison sample of all households in the lowest wealth quintile in regions where our study is being implemented.

Qualitative analysis was conducted in two phases: 1) rapid initial analysis to document observations during fieldwork and 2) in-depth analysis to increase overall understanding of participants' lives and the transition to adulthood. Data were coded by drawing on salient themes in narrative summaries, and create a list of codes to be developed collaboratively by the research team. Transcribed texts were entered into the NVivo electronic program to acquire a more accurate and transparent picture of the data and hence improving the rigor of the analysis process<sup>15</sup>. To enhance understanding of the data, a combination of both NVivo and manual methods was applied so as to achieve the best results.

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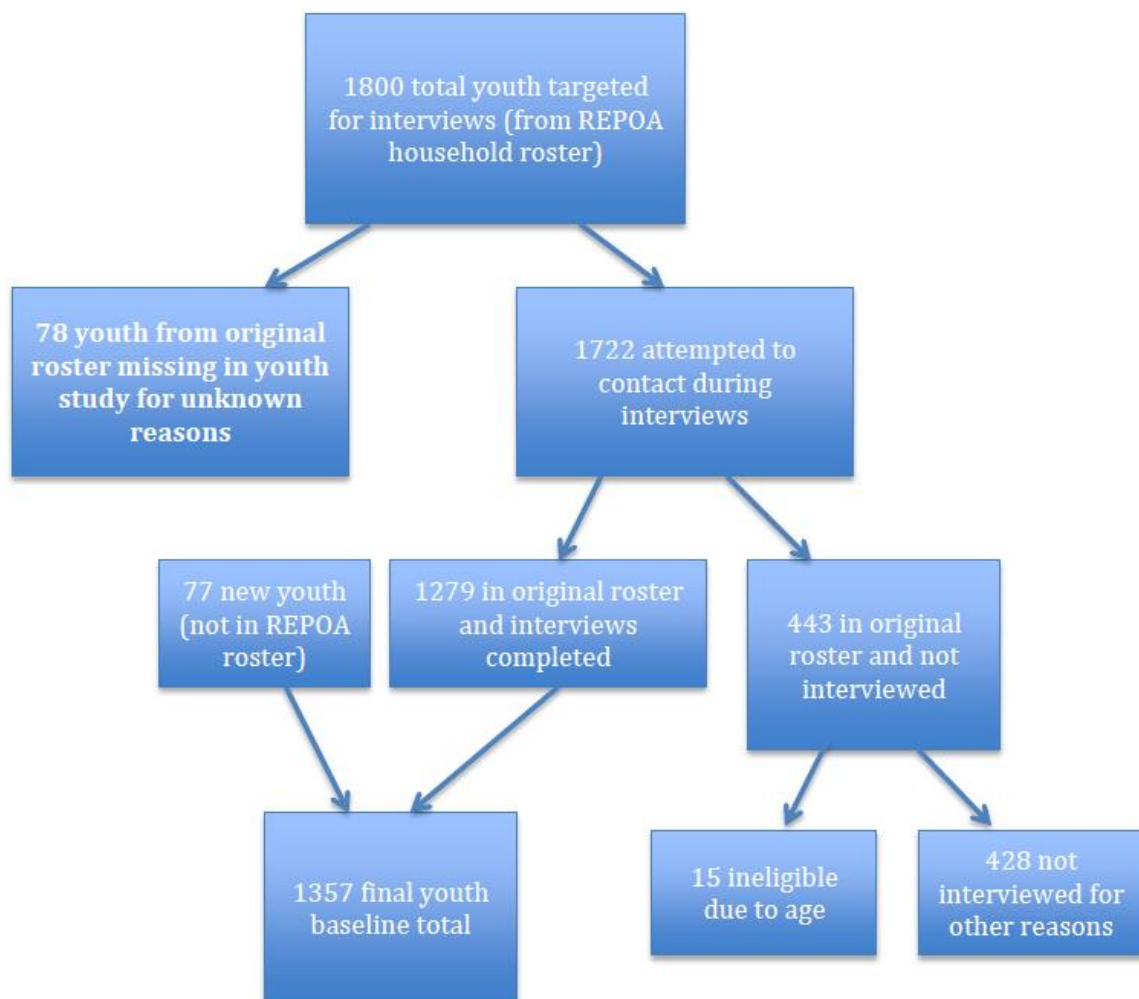
<sup>15</sup> Welsh, E. (2002). Dealing with Data: Using NVivo in the Qualitative Data Analysis Process. *Forum: Qualitative Social Research* (Volume 3, No. 2, Art. 26).

## 4. Youth Response

Of the 1,800 youth identified from the REPOA empowerment evaluation household roster, a total of 1,357 youth were interviewed between the main data collection and the subsequent mop-up. Figure 4.1 shows details of the Youth Impact evaluation sample. Approximately one in four identified youth (27 per cent) were not available for interview, but there is no evidence to suggest that this response rate has affected the internal validity of the study. Because the youth study was an add-on to the REPOA WEAI study, the interviews took place one to three months later than household surveys. Therefore, some youth who were identified during the REPOA WEAI study baseline data collection were no longer part of the household at the time of the youth study. Additionally, some youth may still have been part of the household but were not available at the time of interview. This is expected, given that adolescents and youth are a highly mobile population.

Understanding levels and reasons for youth response is important for two reasons: 1) Losing youth reduces the sample size of the study resulting in a loss of statistical power (ability detect significant changes in outcomes) and 2) If the nonresponse is selective (different types of youth are more likely to stay or leave) it can result in sample bias. Selection bias may result in the remaining sample not being representative of the population it was originally selected from, particularly in relation to the different study arms. This can lead to incorrect impact estimates and can change the overall characteristics of the sample, affecting the generalizability of the findings. First we will discuss the response rate in terms of our overall eligible sample, then we will investigate if there is evidence of response bias by testing the difference of background characteristics for the eligible youth who were not interviewed for the youth study between treatment and control.

**Figure 4.1: Sample Details for Youth Survey**



Furthermore, Figure 4.2 shows distribution of the response rate by district according to the original eligible sampling frame from the REPOA empowerment study. The largest number of respondents coming from Musingwe. Kilosa had the lowest percentage of eligible youth interviewed (65 per cent) and Kisarawe had the highest percentage tracked and interviewed (82 per cent).

**Figure 4.2: Number of Youth Interviewed by District**

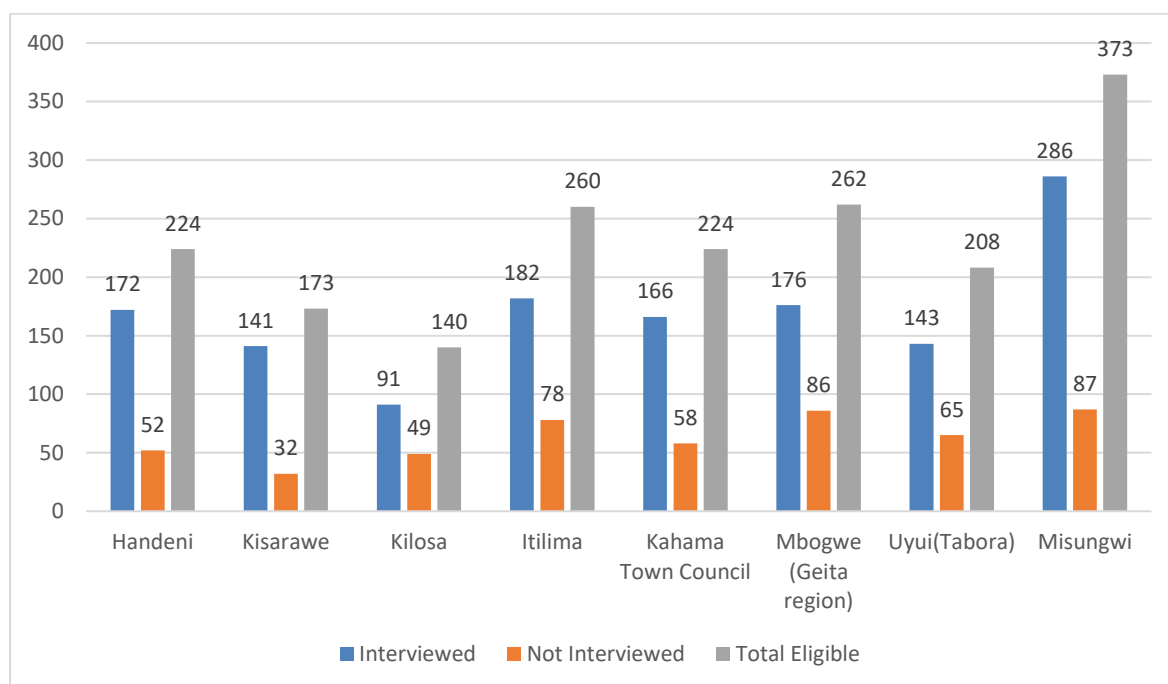


Table 4.1 shows the response rate by treatment status, with a higher percentage of non-response for treatment youth than for control youth (29 per cent versus 25 per cent, difference not statistically significant).

**Table 4.1: Response Rate, by Treatment Status**

	Control	Treatment	<i>n</i>
<b>Interviewed</b>	75%	71%	1357
<b>Not interviewed</b>	25%	29%	506
<b><i>n</i></b>	796	1068	1863

Table 4.2 shows the reason for not being interviewed among youth, overall and by treatment status<sup>16</sup>. Among those not interviewed, a third of youth are missing due to visiting relatives, and nearly one in five have moved out of the household since the REPOA household survey. Additionally, 78 eligible youth (15 per cent) were not interviewed for unknown reasons.

<sup>16</sup> All reasons come from the main mop-up data collection, except for in the case that there was no reason listed at the main data collection, or if the youth was listed as out of age range or deceased at the later date.



**Table 4.2: Reason for Nonresponse, by Treatment Status**

	Control	Treatment	N	Percent
Visiting relatives	74	97	171	33%
Temporarily away for school	12	22	34	7%
Temporarily away for work	14	24	38	7%
Initiation ceremonies	3	5	8	2%
Refusal	4	9	13	3%
Temporarily out of household for other reasons	14	23	37	7%
Youth incorrect age range	7	8	15	3%
Died	1	4	5	1%
Moved out of household	33	54	87	17%
Other	16	19	35	7%
Missing youth	26	52	78	15%
<i>n</i>	204	316	520	100

We investigate the potential bias due to non-response by testing: (a) the differences of the mean characteristics between response and nonresponse youth for treatment and for control groups separately and (b) the difference of mean characteristics between control and treatment among the nonresponse sample. This latter category of tests is important (differences for nonresponse sample only), because an imbalance of mean characteristics for the youth who are not available between treatment and control could affect the internal validity of the study. For example, if treatment nonresponse youth were younger or more likely to be female or poorer than control youth who were not available to be interviewed, perhaps the remaining sample will be affected by these differences<sup>17</sup>.

As shown in Appendix C.1, there are no statistical differences between nonresponse treatment and nonresponse control, in terms of youth characteristics, household demographics, housing characteristics, or measurements of wealth and food security. The p-value in column eight shows the results of the wald tests performed for equality of means between these two groups.

In addition to the main response analysis using the pooled treatment group, we also examine the response rate using the disaggregated treatment arms. Results show nonresponse youth from the CCT plus PWP arm differ from the control nonresponse for one indicator. A higher percentage of nonresponse control youth have no education as compared to the nonresponse CCT Plus PWP population (see Table C.3.2 in Appendix C.3). Considering over 30 indicators were tested for four different groups (control, treatment, CCT only, and CCT plus PWP), there is very little evidence to suggest the validity of the RCT design was compromised.

<sup>17</sup> The interviewed study sample will also be tested for imbalances between treatment and control in more detail in the coming chapter (5. Sample Description).

## 5. Sample Description

This section has two main objectives: 1) to describe the sample at baseline for a number of background characteristics as well as outcomes and 2) to show balance between treatment and control for these background characteristics and outcomes. In other words, this section will show how youth in our sample start off before receiving the programme in terms of background characteristics (e.g., age, gender), where they live (e.g., community access to services and facilities), the make-up of their household units (e.g., demographics, number of household members), as well as a number of outcomes (e.g., sexual debut, perceived HIV risk). While describing the sample, the background characteristics and outcomes will be tested for equivalence between treatment and control. If these indicators are balanced at baseline for the treatment and control samples, then we can conclude that randomization was successful.

Balance tests were completed for the full sample and these results are included here in the main the report. Overall we perform approximately 150 statistical tests and find only one statistical difference across the two groups (full sample, pooled treatment versus control arms) and thus can conclude that randomization was successful to measure programme impacts. However, because timing of transitions to adulthood may differ between males and females, and because gender may moderate cash transfer impacts, each balance table was also tested for females only, males only, youth under the age of 25<sup>18</sup>. These additional balance tables are found in Appendix D. Further, we tested the balance between the separate treatment arms (CCT only and CCT plus PWP) and the control arm. In this analysis, out of 159 statistical tests, we found one significant difference between the CCT only and the control arms (<1 per cent) and seven differences between the CCT plus PWP and control arms (four per cent; Appendix E). In each case, the percentage of significant differences is fewer than the five per cent differences which we would expect due to chance. Thus, we can conclude that randomization also allows sub-group analysis by age and gender.

In addition to looking at balance between treatment and control overall, each treatment arm is compared to the control population separately (first CCT only communities are compared to control, then CCT plus PWP communities are compared to control). These separate balance tables are included in Appendix E, where differences in outcomes between controls and individual treatment arms were statistically in fewer than five per cent of outcomes, further confirming that the cluster RCT design was successful at creating a valid control group.

### 5.1 Community Characteristics

This study is set in eight districts that span across Tanzania. With the exception of Kahama and Mbogwe, which are part of Geita region, each district is in a different region of the country. This expansive geographic range has the potential to result in varying community characteristics throughout our sample. Therefore, to provide some context for our study, as well as to test balance on community characteristics, we administered one survey to each of the 84 communities. Team supervisors and assistant supervisors implemented the survey to community leaders and other

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<sup>18</sup> This is true for all analyses except for the community section, which is on the community level and cannot be disaggregated into subgroups or for the violence section where only females are included.

knowledgeable community members. The community survey collects information on characteristics that may moderate the way the transfer is spent, such as access to key services, occurrences of recent positive and negative shocks, and local prices. The survey also collects information on cultural norms to further understand community context.

Table 5.1.1 lists the number of communities within each district for those in the control arm and for those enrolled in the PSSN, by type of treatment. In the sample, more communities are part of the PSSN program (48) than not (36). However, each district has some communities in each arm, and each district has some communities in either the CCT only treatment group or the CCT plus PWP treatment arm.

**Table 5.1.1 Number of Communities, by District and Treatment Status**

	Control	CCT Only	CCT plus PWP	Total
<b>District</b>				
Handeni	5	3	2	10
Kisarawe	5	4	2	11
Kilosa	5	3	2	10
Itilima	3	4	3	10
Kahama	3	4	3	10
Mbogwe	5	3	2	10
Uyui	5	3	2	10
Misungwi	5	4	4	13
<b>Total</b>	<b>36</b>	<b>28</b>	<b>20</b>	<b>84</b>

### Access to Services and Facilities

Table 5.1.2 shows community access to markets, health facilities, schools, and asphalt roads for all communities in the sample, followed by access for control and treatment communities separately. Using a cut-off of  $p < 0.05$  per cent, there are no significant differences between treatment and control communities for any of the indicators, nor when looking at differences by two treatment arms.

#### Markets

A community's access to markets can affect the pathway of the CCT intervention for the households living in the community. For example, regular access to food, agricultural inputs and sale outlets may moderate the impact the cash will have on improving food security through direct food purchases or through purchases for agricultural supplies/materials. One in three communities surveyed has a weekly market, while only one in ten has a daily market. Very few communities have any Agricultural Development and Marketing Corporation (ADMARC) markets, which are geared towards promoting the economy by supporting farmers to increase agricultural exports in quantity and quality, and to increase foreign markets for consumption. On average, communities are nine kilometres (km) away

from the nearest market<sup>19</sup>, meaning that a round-trip visit to the market involves traveling, on average, 18 km.

### *Schools*

Access to primary and secondary schools may influence whether youth are able to meet conditions of the PSSN regarding school enrolment and attendance. Information was collected on availability to both primary and secondary government schools. Sixty per cent of communities have a primary school, with the nearest primary school less than a kilometre away from the community. Access may also differ greatly on a household level, particularly if communities span large distances.

Government secondary schools are a different story. Only twenty per cent of communities report having a government secondary school within the community. On average, children must travel 12 kms round trip from the community they live in to get to a government secondary school.

### *Health Facilities*

The PSSN also has conditions regarding health care for young children, making access to healthcare another important factor for program implementation and impacts. One in five communities has a health clinic or facility within the community, with slightly fewer (17 per cent) reporting facilities in their communities employing medical doctors. The nearest facility is located, on average, approximately 5.5 km away. However, just over half of all communities have access to medicine, with the nearest place to purchase medicine, on average, less than three km away.

Other factors may influence whether households seek healthcare, including quality of services rendered. Therefore, enumerators asked if the community members were satisfied with the quality of the nearest health clinic, and nearly one-third replied that they were dissatisfied or very dissatisfied.

### *Roads*

Even when traveling small distances, uneven or treacherous terrain can result in difficulty accessing key goods and services such as markets, schools, or health facilities, particularly when traveling with young, elderly, or disabled household members. Very few communities reported having a tar/asphalt road (14 per cent), and the distance to the nearest paved road is 22 km, on average.

**Table 5.1.2: Baseline Means of Access to Services/Facilities**

Variables	Pooled Mean	Control Mean	Treatment Mean	p-value
<b>Markets</b>				
Weekly market	0.33	0.33	0.33	1.00
Daily market	0.11	0.08	0.13	0.55
ADMARC market	0.04	0.00	0.06	0.13
Any market	0.38	0.36	0.40	0.75
Distance to nearest market (km)	8.98	10.42	7.90	0.54
<b>Schools</b>				
Government primary school in community	0.61	0.67	0.56	0.34
Distance to nearest Government primary school (km)	0.56	0.53	0.57	0.88
Government secondary school in community	0.19	0.25	0.15	0.23
Distance to nearest Government secondary school (km)	5.64	6.45	5.04	0.46
<b>Health services</b>				
Health clinic in community	0.21	0.22	0.21	0.88

<sup>19</sup> The distance to service/facilities indicators are zero for communities with service or facility within community.

Distance to nearest health clinic (km)	5.46	5.98	5.08	0.53
Health clinic with doctor in community	0.17	0.11	0.21	0.24
Distance to nearest health clinic with doctor (km)	5.69	6.10	5.38	0.63
Medicine available for purchase in community	0.55	0.56	0.54	0.90
Distance to nearest place to purchase medicine (km)	2.57	2.81	2.40	0.71
<b>Roads</b>				
Tar/asphalt road in community	0.14	0.14	0.15	0.93
Distance to nearest tar/asphalt road (km)	22.07	27.98	17.65	0.07
<i>N</i>	84	36	48	

Notes: Bivariate regressions test difference between treatment and control groups. Distances are replaced with zero when service is located within the community.

## Shocks

Table 5.1.3 shows the proportion of communities that report shocks occurring during the year prior to the survey. Using a cut-off of  $p < 0.05$ , there are no significant differences between treatment and control communities for any of the indicators, meaning that there is balance for both positive and negative shocks in the sample.

Negative shocks in the community, such as drought or flooding, can increase a household's vulnerability to negative health and wellbeing outcomes. Conversely, positive shocks, such as improved transportation, can increase opportunities or wellbeing of households which, in turn, can increase positive outcomes. Every community reports at least one negative shock within the year prior to the survey, with the most common being sharp changes in prices, livestock disease, and crop disease/pests. These are all closely connected with livelihood and food production. Positive shocks were less common, and not all communities reported having a positive shock in the prior year. The most frequently reported positive shocks were development programs implemented in the community, improved transportation, and off-grid electricity. When looking at two treatment arms, there is a difference in villages reporting sharp changes in prices the last 12 months between CCT plus PWP communities (75 per cent) and control communities (97 per cent).

**Table 5.1.3: Baseline means of Community Shocks (Past Year), by Treatment Status**

Variables	Pooled Mean	Control Mean	Treatment Mean	p-value
<b>Negative shocks</b>				
Drought	0.64	0.58	0.69	0.33
Flood	0.06	0.08	0.04	0.43
Crop disease/pests	0.76	0.75	0.77	0.83
Livestock disease	0.82	0.81	0.83	0.75
Human epidemic/disease	0.27	0.31	0.25	0.58
Sharp change in prices	0.90	0.97	0.85	0.07
Massive job lay-offs	0.01	0.00	0.02	0.39
Loss of key social services	0.24	0.22	0.25	0.77
Power outages	0.14	0.14	0.15	0.93
<b>Positive shocks</b>				
New employment opportunity	0.04	0.00	0.06	0.13
New health facility	0.02	0.00	0.04	0.22
New road	0.02	0.03	0.02	0.84
New school	0.01	0.00	0.02	0.39
On-grid electricity	0.10	0.08	0.10	0.75
Off-grid electricity	0.17	0.14	0.19	0.56
Improved transportation	0.18	0.17	0.19	0.81
Development programs	0.30	0.22	0.35	0.19
<i>N</i>	84	36	48	

Notes: Bivariate regressions test difference between treatment and control groups.

## Cultural Norms

To enrich the baseline report by understanding cultural context, questions about cultural community norms surrounding marriage, deaths and inheritance, and child care were included in the survey instrument (not reported by treatment status).

### *Marriage*

Patrilineal descent is the most common system guiding marriage norms, with only 18 per cent of communities listing matrilineal or other system as the first most commonly practiced marriage arrangement. In fact, matrilineal marriages were only reported as the most common type of marriage system in two of the ten study districts: Kisarawe and Misungwi. One in five communities report having nearly all monogamous marriages in the community, while the rest of the communities have varying proportions of polygamous households. Only six per cent of communities report that nearly all (majority of) marriages in the community are polygamous.

### *Death and Inheritance*

Just about half (55 per cent) of communities report immediate family as solely responsible for funeral costs for deceased within the community, while 37 per cent report that the burden is shared with community members. Only seven per cent report that community members alone take care of funeral costs without the assistance of family members. Typically either family members or a clan will settle an inheritance, and over 80 per cent of communities report that wives can inherit the land and property of deceased husbands. Seven per cent of communities report that a widow can be inherited by a male relative from her husband's family.

### *Child Care*

The survey asked how the community would respond to a number of scenarios regarding children in the community:

1. What does the community do if a family does not send a healthy ten year old to school for a long period of time (e.g., more than 3 months)?
2. In the case the mother of a child dies, who would usually be the main female caregiver for the child?
3. In case the father of a child dies, who would be the most likely to look after or help the widow with young children?
4. In case both parents of a 10 year old die, who would usually be responsible for caring for the child?

There was a mixed response for the schooling question, with about a third of communities saying they would do nothing if a healthy 10 year old was missing school for long periods of time. Just about as many communities report that there would be disapproval from the community, but 38 per cent report action would be taken, either local action by the village elders/community leaders or legal action.

In regards to who becomes the main female caregiver for a child after the death of a mother, one in three communities report both maternal and paternal grandmothers share the responsibility of caring for the child. Just about a quarter of communities report that the paternal grandmother alone cares for a maternal orphan, and 18 per cent report the responsibility lies on whichever family

member has the financial means. Only 15 per cent report that the responsibility is solely on the maternal grandparent. Conversely, if the father of a child dies, the top responses for who looks after the widow and her child are the husband's brother followed by the widow herself. In the case there is a double orphan (both parents die), in nearly half the communities the paternal grandparents will take in the child.

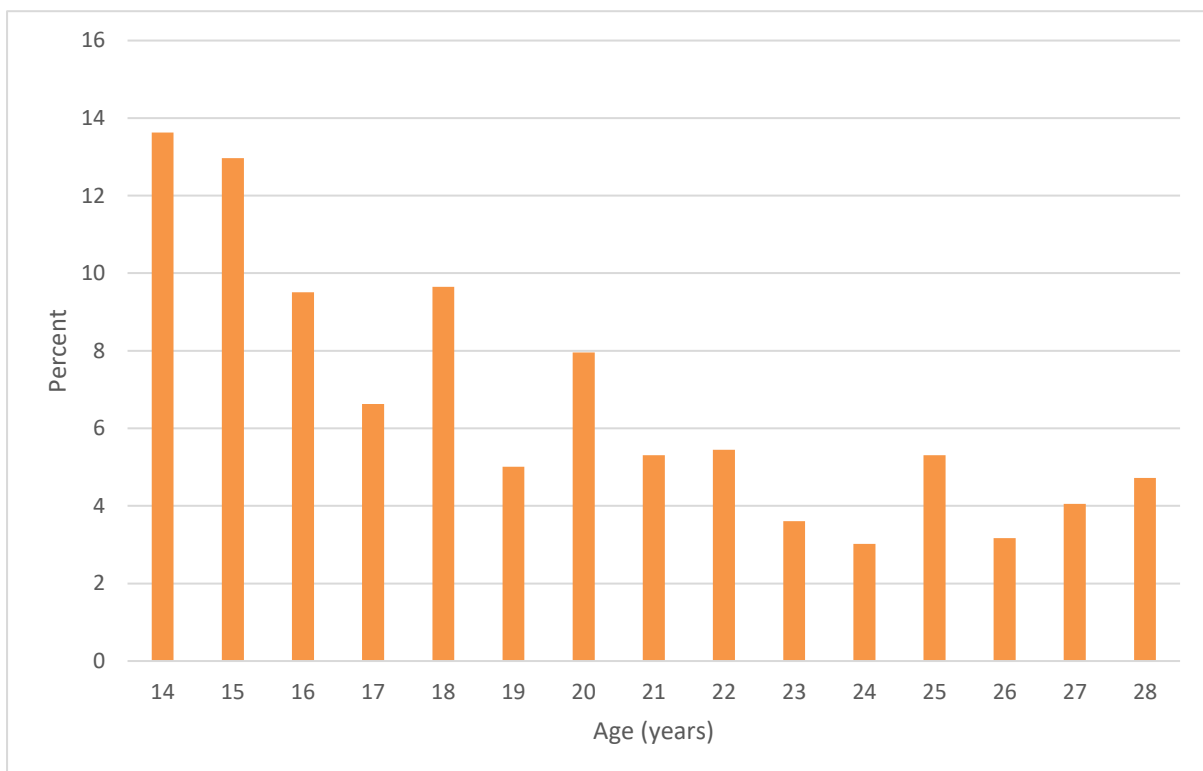
## 5.2 Sample Characteristics

This section describes the sample at baseline, providing a snapshot of individual and household characteristics of the study sample, including basic demographic and socioeconomic indicators. Because the treatment and control groups are equivalent, unless otherwise specified, the pooled mean is used when discussing the sample. For more detail, the balance tables include the means of treatment and control separately in addition to the pooled means (see Table 5.2.1 for an example using youth characteristics). Balance tables for females and males separately, as well as for two separate treatment arms can be found in Appendices D and E, respectively.

### Youth Characteristics

Since the outcomes of interest for the study (e.g., sexual debut, risky behaviour, mental health) may be sensitive to basic characteristics of the individuals, such as age, gender, and education level, we first describe the distribution of some basic characteristics of the sample (see Table 5.2.1). On average, youth in the study are 19.2 years, with the percentage of youth decreasing by age (see Figure 5.1).

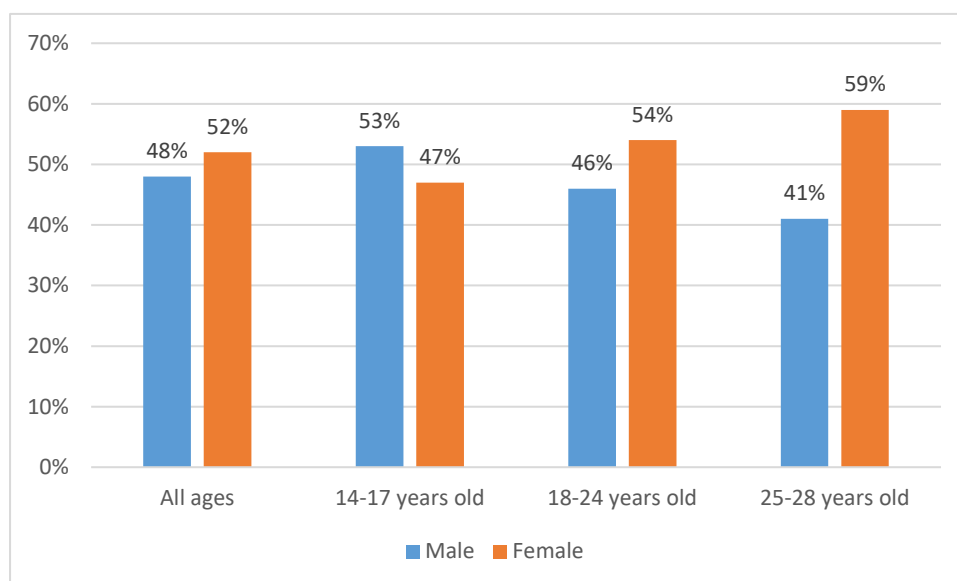
**Figure 5.1 Age Distribution of Youth (n=1357)**



Although females have a slightly higher representation than males overall (52 per cent female versus 48 per cent male), males outnumber females by six percentage points for youth under 18 years. The proportion of females increases in higher age groups (see Figure 5.2.2).



**Figure 5.2.2 Age Groups, by Gender**



Nearly half (46 per cent) of all youth have completed primary school, with nearly the same completion rate for females and males.<sup>20</sup> Approximately one in ten youth report having no schooling. In qualitative interviews, youth discussed barriers to attending school, including hunger, cost, and long distances to schools.

*“When I was in school life was very difficult because you can go to school and when you come back home you find there is nothing to eat and you start thinking where can I get food and that’s was how it was almost every day until I finished my primary education.” [18 year female-Handeni]*

*“I had to find a job so that I can get money to buy uniform, exercise books, pen and other school requirements but I had to go to school and study the school wasn’t very far from here so I just walk to school.” [18 year female-Handeni]*

*“After finishing my primary education did well in my exams and I passed I was supposed to join Pangambili secondary school but I couldn’t continue with my studies because I could not afford to pay for school fees. My fellow students are in form two now but some of them have dropped out of school because they don’t have money to cover for their school fees.” [20 year female-Misungwi]*

*“When I was in class three my father reallocated to another village and we lived far from school because we were living in the farm areas, so I couldn’t continue with school because school was very far. The reason we reallocated to another village was because things were very difficult here economically so my dad wanted to go elsewhere to find areas to farm. The main reason I never continued with my studies is that my father couldn’t take me to school after we reallocated in another place.” [26 year male-Uyui]*

<sup>20</sup> See Appendix D.1 for balance tables of youth and household characteristics for males and females separately, as well as for youth under age 25.

Only one in four youth have all their basic material needs met, which is defined as having at least one pair of shoes, a blanket (shared or own), and two sets of clothing. Three-quarters have two sets of clothing, therefore the lack of material needs being met is largely due to the lower proportions of youth with shoes (39 per cent) or a blanket (44 per cent). Females fare worse on this measure than males, with only 17 per cent having all three needs met, and only about one-third having shoes (32 per cent) or a blanket (37 per cent). Additionally, females in control villages are more likely to have shoes and a blanket than those in treatment villages (39 vs 27 for shoes; 44 vs 31 for owning a blanket).

**Table 5.2.1: Baseline Means of Youth Background Characteristics, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Age in years	19.22	1,357	19.09	598	19.32	759	0.45
Female	0.52	1,357	0.50	598	0.53	759	0.30
Currently enrolled in school (14-17 years only)	0.52	580	0.48	269	0.55	311	0.21
No education	0.11	1,351	0.13	595	0.09	756	0.19
Some primary	0.28	1,351	0.28	595	0.28	756	0.95
Completed primary	0.46	1,351	0.42	595	0.49	756	0.08
Has at least some secondary education	0.15	1,351	0.16	595	0.13	756	0.27
Blanket	0.44	1,355	0.48	597	0.41	758	0.07
Shoes	0.39	1,357	0.43	598	0.36	759	0.10
Two sets of clothing	0.73	1,357	0.74	598	0.72	759	0.66
All basic needs met	0.25	1,355	0.28	597	0.23	758	0.09

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Household Demographics

Table 5.2.2 shows some basic demographic of the individuals in the sample. All household characteristics come from REPOA's WEAI evaluation. Data were collected for the WEAI study one month prior to the start of data collection for youth. Just about half of the individuals in the sample come from Christian households, followed by one-third from Muslim households and the remaining fifth of individuals are from nonreligious households. One in four youth reside in female-headed households. On average, individuals come from households with seven members, and a dependency ratio<sup>21</sup> of 1.27. Most youth live in a household where the highest level of education reached by any adult household member is complete primary (58 per cent), followed by at least some secondary<sup>22</sup> (22 per cent). Individuals who live in houses where adults have no education are about 10 per cent of the study sample, which is the same who have adults' highest education level as some primary school. These indicators are relatively similar between male and female youth, except for the case of the dependency ratio, which is about 16 percentage points higher for households where females in the study sample live (1.31) compared to males (1.15). This suggests that households with female youth have a higher burden of non-working age household members households with male youth in our sample.

**Table 5.2.2: Balance Means of Household Demographics, by Treatment Status**

<sup>21</sup> The dependency ratio is defined as defined as the number of depend individuals below age 15 plus those aged 65 and above divided by the number on individuals aged 15-64.

<sup>22</sup> This indicator includes higher education, technical/vocational, and adult literacy. The adult literacy category consisted of six observations.

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Christian household	0.48	1,357	0.41	598	0.53	759	0.12
Muslim household	0.33	1,357	0.39	598	0.27	759	0.22
Nonreligious household	0.20	1,357	0.20	598	0.20	759	0.99
Female headed household	0.25	1,357	0.27	598	0.24	759	0.40
Household size	7.33	1,357	7.45	598	7.23	759	0.37
Dependency ratio	1.27	1,353	1.31	596	1.24	757	0.30
Adults in household have no education	0.10	1,357	0.12	598	0.09	759	0.23
Highest education for adults is some primary	0.10	1,357	0.10	598	0.10	759	0.81
Highest education for adults is primary completed	0.58	1,357	0.55	598	0.61	759	0.16
Highest education for adults is at least some secondary	0.22	1,357	0.24	598	0.19	759	0.24

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.

## Housing Characteristics

In terms of housing characteristics, Table 5.2.3 shows that 40 per cent of individuals have houses with improved roofs (tile, wood, corrugated metal, or plastic sheeting) as opposed to non-improved (thatched/vegetable matter/sticks or mud/cow dung). Only five per cent of individuals have households with improved floors (made of concrete, tiles, or wood) while 95 per cent live in households with earth or mud floorings. Just over half of individuals live in households defined as poor or very bad shape by REPOA enumerators. Sanitation facilities are another measure of economic wellbeing, and two-thirds of respondents have access to a toilet, including shared toilets and any type of latrine, besides community facilities.

**Table 5.2.3: Baseline Means of Housing Characteristics, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Improved roof	0.40	1,330	0.40	586	0.40	744	0.95
Improved floor	0.05	1,352	0.03	593	0.06	759	0.12
Dwelling in poor conditions	0.51	1,357	0.53	598	0.49	759	0.50
Any toilet access	0.66	1,357	0.67	598	0.65	759	0.77

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.

## Wealth and Food Security

To test whether youth are balanced in treatment and control households for measures of wellbeing, we present baseline statistics for household wealth and food security measures (Table 5.2.4). The results show that overall, the sample is balanced for wealth and food security measures.

Wealth is measured using a wealth index, which is a proxy for asset ownership and dwelling characteristics. Using methodology from the DHS<sup>23</sup>, the wealth index is the result of using a statistical procedure called principal components analysis (PCA) on a number of individual asset indicators. This weighted index represents an aggregation of these items, which have been weighted

<sup>23</sup> Rutstein, Shea O. and Kiersten Johnson. (2004). The DHS Wealth Index. DHS Comparative Reports No. 6. Calverton, Maryland: ORC Macro.

through the PCA<sup>24</sup>. Poorer households rank lower on the wealth index and better off households rank higher. From this index, tertiles were created to measure the poorest, middle, and wealthiest households in the sample. There are no differences between treatment and control for the full sample or for any subgroup. However, when looking at the two treatment arms separately, there is a statistically significant difference between control and CCT only communities for proportion of those in the highest tertile of the wealth index.

Food security was measured using the Food Consumption Score (FCS). The World Food Programme (WFP) developed the FCS as a standardized way to measure both diet diversity and food frequency using a simple survey module.<sup>25</sup> The FCS is constructed using questions on types and quantities of food eaten in the last week by individuals in the household. After adding number of times each food type is eaten, the resulting values are weighted by food type (meat has a higher weight, for example, than staples like cereals or rice). Finally, the weighted values of each food type are summed to create the FCS. The FCS is considered poor when values range from 0-21; borderline is from 21.5-35; acceptable are values over 35. Results show that the average FCS is approximately 34 for the full sample, and that only 38 per cent are classified as “acceptable,” while the remaining are classified as either poor (21 per cent) or borderline (41 per cent). However, there is no significant differences for the FCS overall, suggesting there is a slightly different distribution of the score between treatment and control for this subgroup. Finally, there are no imbalances between the control arm and either treatment arm for food security for the full sample or for any sub group.

**Table 5.2.4: Baseline Means of Wealth and Food Security Indicators, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Wealth Index	0.09	1,357	0.14	598	0.06	759	0.47
Lowest tertile	0.30	1,357	0.27	598	0.33	759	0.17
Middle tertile	0.33	1,357	0.33	598	0.33	759	0.88
Highest tertile	0.37	1,357	0.40	598	0.34	759	0.25
Food Consumption Score (FCS)	33.98	1,357	34.53	598	33.55	759	0.57
FCS Poor	0.21	1,357	0.21	598	0.21	759	0.94
FCS Borderline	0.41	1,357	0.42	598	0.41	759	0.91
FCS Acceptable	0.38	1,357	0.38	598	0.38	759	0.97

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.

### 5.3 Health and Wellbeing

One of the main objectives of the PSSN programme youth evaluation is to gain an improved understanding of how cash transfers impact young people’s health and wellbeing. Improved wellbeing is in itself a desired outcome of the cash transfer programme but may also affect the youths’ conditions for the future as they transition into adult life. Cash transfer can have a positive impact on the health and wellbeing through different pathways such as improved food security and nutrition, the possibility to stay in school longer and reduced stress caused by economic insecurity.<sup>26</sup>

<sup>24</sup> PCA was conducted using full sample of eligible households for study.

<sup>25</sup> WFP. (2008). Food consumption analysis: Calculation and use of the food consumption score in food security analysis. *Rome: World Food Programme*  
[http://documents.wfp.org/stellent/groups/public/documents/manual\\_guide\\_proced/wfp197216.pdf](http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp197216.pdf)

<sup>26</sup> Palermo T. (2015). Measuring health and wellbeing of young people in the Transfer Project. *Innocenti Research Brief* 2015-02.

In this section, mental health and expectation for the future is examined as well as current self-rated health and changes in health status.

## Mental Health

Poor mental health can affect the broader health and development of an individual and, typically starting in adolescence, is associated with negative health and behavioural outcomes, such as higher alcohol, tobacco and illicit substances use, sexual risk behaviour, adolescent pregnancy, violence, and lower educational achievement<sup>27</sup>. Adverse mental health conditions affect millions of people worldwide, with an estimated 151 million people suffering from depression alone<sup>28</sup>. The evidence on cash transfers and improvements in mental health outcomes is limited but promising. An evaluation of a cash transfer program in Malawi showed positive impacts on female adolescent mental health outcomes, though these impacts disappeared when measured after the transfers stopped (both immediately and two years later).<sup>29,30</sup> Additionally, the Kenyan Government's Cash Transfer for Orphans and Vulnerable Children (CT-OVC) program had positive impacts on mental health overall, however impacts were only significant for males aged 15-24 years (and not females) when disaggregated, with a larger impact on men from 20-24 years of age as compared to those aged 15 to 19 years.<sup>31</sup>

In the current evaluation, mental health was assessed using two main outcomes: 1) a short form of the Centre for Epidemiological Studies-Depression Scale (CES-D)<sup>32</sup> and 2) Snyder's Hope Scale.<sup>33</sup> The CES-D scale is an indicator of whether respondents display depressive symptoms, while the Hope Scale is an indicator meant to capture perceptions of hopefulness and optimism in the respondents. In addition, the youth's aspirations of their life in the future provides an insight of to what extent the young people in this sample have a positive outlook for the future.

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<sup>27</sup> Patel, V., et al. (2007). Mental health of young people: a global public-health challenge. *Lancet* 369(9569), 1302-1313.

<sup>28</sup> World Health Organisation. (2010). Mental health and development: Targeting people with mental health conditions as a vulnerable group. *WHO Press, Geneva*.

[http://www.who.int/mental\\_health/policy/development/en/index.html](http://www.who.int/mental_health/policy/development/en/index.html)

<sup>29</sup> Baird, S., De Hoop J., and Özler, B. (2013). Income shocks and adolescent mental health. *Journal of Human Resources* 48(2), 370-403.

<sup>30</sup> Baird, S., Chirwa, E., McIntosh, C., & Ozler, B. (2014). What Happens Once the Intervention Ends? The Five-Year Impacts of a Cash Transfer Experiment in Malawi. *Washington, DC: The World Bank*.

<sup>31</sup> Kilburn, K., et al. (2016). Effects of a large-scale unconditional cash transfer program on mental health outcomes of young people in Kenya. *Journal of Adolescent Health* 58(2): 223-229.

<sup>32</sup> Radloff, L. S. (1977). The CES-D scale a self-report depression scale for research in the general population. *Applied psychological measurement*, 1(3), 385-401.

<sup>33</sup> Snyder, C. Richard, et al. (1997). The development and validation of the Children's Hope Scale. *Journal of pediatric psychology* 22(3), 399-422.

The shortened 10-item version of the 20-item CES-D scale (also known as the CES-D 10 scale) has been validated internationally<sup>34,35,36</sup>. Ten questions were asked regarding feelings and behaviours in the past seven days, with responses given using a 5-point Likert scale. To calculate the CES-D, scores are summed for all 10 questions, ranging from 0 to 30, with higher scores reflecting more depressive symptoms. A binary indicator is created using a threshold of  $\geq 10$  to define having depressive symptoms, a cut-off used in previous studies implemented in Africa.<sup>37</sup>

According to Snyder, hope is a “combination of agentic and pathways thinking toward goals”<sup>38</sup>. Agency refers to an individual’s perceived ability to *act toward* a desired goal; pathways refer to their ability to *find ways* to reach those goals. Six questions are administered to measure the respondent’s hopefulness using a 5-point Likert Scale (1=Strongly disagree; 5=Strongly agree). These were summed to create the Hope Scale, with a range of 6-30.

Table 5.3.1 shows that 63 per cent of youth in the sample have depressive symptoms. This scale was also administered to a similar population as part of the evaluation of Kenya’s CT-OVC, Zimbabwe’s Harmonized Social Cash Transfer (HSCT), and Zambia’s Multiple Category Cash Transfer Programme (MCTG); for comparison purposes we also show the percentage of youth exhibiting depressive symptoms among these samples as a point of reference. The control group only is shown in the Kenya sample because the scale was administered only once at four years after intervention (endline survey).

The percentage of youth with depressive symptoms is higher in Tanzania, as compared to all other countries, both for the full sample, as well as for youth aged 14-17. The median CES-D score is eight for both Zimbabwe and Zambia, while the median is 12 for Tanzania overall, and 10 for youth 14-17 years old.

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<sup>34</sup> Boey, K. W. (1999). Cross-validation of a short form of the CES-D in Chinese elderly. *International journal of geriatric psychiatry*, 14(8), 608-617.

<sup>35</sup> Bojorquez Chapela, I. and N. Salgado de Snyder. (2009). Psychometric characteristics of the Center for Epidemiological Studies-depression Scale (CES-D), 20-and 10-item versions, in women from a Mexican rural area. *Salud Mental* 32(4), 299-307.

<sup>36</sup> Cheung, Y.B., K.Y. Liu, and P.S. Yip. (2007). Performance of the CES-D, and its short forms in screening suicidality and hopelessness in the Community. *Suicide and Life-Threatening Behavior* 37(1), 79-88.

<sup>37</sup> Onuoha, F.N., et al. (2009). Negative mental health factors in children orphaned by AIDS: natural mentoring as a palliative care. *AIDS and Behavior* 13(5), 980-988.

<sup>38</sup> Snyder, C., et al. (1997). The development and validation of the Children’s Hope Scale. *J Pediatr Psychol* 22(3), 399-421.

**Table 5.3.1: Percentage of Youth with Depressive Symptoms Using CES-D 10 Scale**

	Tanzania PSSN (Ages 14-28)	Tanzania PSSN (Ages 14-17)	Kenya CT-OVC (Ages 15-24, Control)	Malawi SCTP (Ages 13-19)	Zimbabwe HSCT (Ages 13-20)	Zambia MCP (Ages 13-17)
All	63	52	37	48	37	25
Male	57	47	40	46	36	26
Female	69	58	33	49	39	23

Notes: The cut-off score is 10 and above for depressive symptoms.

Table 5.3.2 shows details of the Tanzania youth sample for the mental health indicators. The difference between males and females is nearly 12 percentage points, with 69 per cent of females exhibiting depressive symptoms compared to 57 per cent of males. This gender difference is not quite as pronounced for females and males under the age of 25, where 66 and 61 per cent exhibit depressive symptoms, respectively. The Hope Scale average was 18.08 for the entire sample, but slightly lower among females than males (17.54 versus 18.7, respectively), suggesting that females are not only showing higher rates of depressive symptoms, but are also less hopeful, relatively speaking. Despite mean differences by gender, the mental health indicators are balanced for all youth, as well as for each subgroup (see Appendix D.2). This is also true when comparing the control to both treatment arms (see Appendix E.3).

Many factors may contribute to the relatively high levels of depressive symptoms, however economic insecurity was a salient theme among both female and male youths in qualitative interviews, as illustrated in the following quotes:

*“The thing that worries me the most is life. Life is very difficult economically and that is why I am really struggling and working hard to ensure that I can at least have a better life. When I look at things I ask myself, when will I have a life that is at least better? You will find that I am struggling a lot and I always think maybe this year I will work hard in farming; but it turns out to be then there is little rain for farming that year. I end up with no or very little harvest.”* [22-year old male, Misungwi]

*“... I am worried because the food we have is about to get finished so I ask myself how it is going to be if the rains delay?”* [28-year old female, Itilima]

*“During the rainy season I work as a casual laborer and earn some income for the family. I feel that I suffer a lot; during the rainy season I feel overwhelmed by all the activities I am supposed to do. I have to go work on the farm, come back and cook, fetch water; all these are my responsibilities and I get overwhelmed. During the dry season there is work to be done but it is not difficult.”* [28-year old female, Itilima]

*“Life has become so difficult; things are not easy because it’s hard to get job or even having something to do with my standard seven level of education. Running a business is so hard without capital. I am worried I can’t have enough money to cover for all the basic needs. I am a single mother and have a child to take care for. I have to prepare for her future; she needs*

*to go to school and I need to provide basic needs for her but due to my poor income sometimes I ask myself if I will ever be able to provide for her...I also need a house, good clothes, enough food for my family; this is what worries me about; the concern about my wellbeing and my family wellbeing” [19-year old female, Kisarawe]*

Youth were asked about their expectations for the future with the question: “Do you think your life will be better about the same or worse 5 years from now?” The response alternatives were: “Better”, “About the same” and “Worse”. In the total sample the majority expect their life to be the same or better in the future. About 22 per cent thought their life would be worse and as many as 20 per cent mentioned that they did not know if their life will be better, the same or worse five years from now.

**Table 5.3.2 Baseline Means of Mental Health Indicators, by Treatment Status**

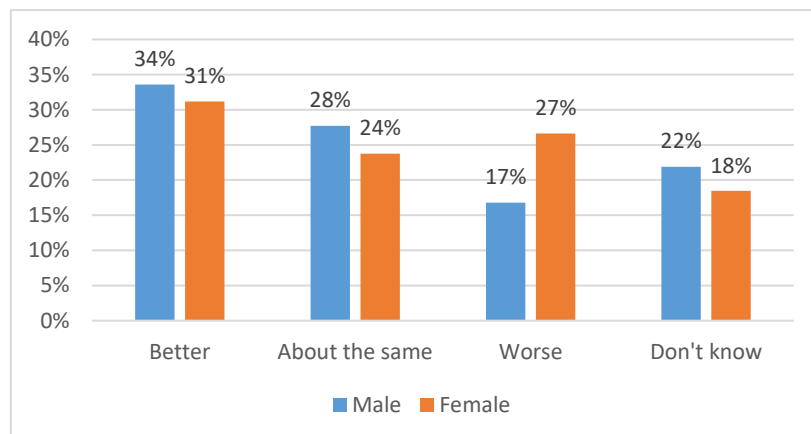
Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
CES-D $\geq$ 10	0.63	1,193	0.63	534	0.64	659	0.66
Snyder hope scale (6-30)	18.08	1,190	18.40	528	17.83	662	0.16
Life will be the same or better 5 years from now <sup>a</sup>	0.58	1,348	0.59	594	0.58	754	0.73

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. CES-D  $\geq$ 10 binary indicator for scoring a 10 or above on the CES-D depression scale.

<sup>a</sup> The remaining 42 per cent is made up of the two categories: worse and don’t know

As shown in the figure below, a higher proportion of females than males (27 versus 17 per cent) expected their life to be worse in the future. Among females aged 25 or older an even higher percentage (35 per cent) expected their lives to be worse five years from now (not shown).

**Figure 5.3.1: Expectation of Life in Five Years (males: n=649, females: n=699)**



### Self-rated Health

As a measure of subjective wellbeing, the youth were asked: “How would you rate your health in general?” Current self-rated health was measured using a five-point scale (poor, fair, good, very good, excellent). The youth were also asked to estimate how their health had changed over time by answering: “Compared with one year ago would you say your health is better, about the same or worse?”



Regarding current health, in the total sample, the majority (62 per cent) mentioned that their health was good, very good or excellent. Fewer among the females had given their health status the highest ratings, “very good” or “excellent” health compared with the males. When combining “good”, “very good” and “excellent” health into one category, there were no significant differences between males and females or between age groups.

In the total sample, about 81 per cent said that their health was the same or better as compared with one year ago, and there are no noted gender differences in the combined responses of either indicator.

**Table 5.3.3: Baseline Means of Life Expectations and Health Indicators, by Treatment**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N1	Mean	N2	
Good/very good/excellent self-rated health	0.62	1,323	0.63	585	0.61	738	0.54
Same or better health compared with one year ago	0.81	1,342	0.81	594	0.81	748	1.00

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

The pooled treatment groups compared to the control groups for this section are balanced, as no significant differences between the samples could be noted for any of the life expectation or health measures. However, when comparing the two treatment arms (CCT and CCT plus PWP) separately with the control group, there was a slight unbalance between the control and the CCT only treatment group regarding self-rated health (63 per cent of controls rated their health highly, versus only 56 per cent of CCT only treatment youth; see Appendix E.3).

## 5.4 Attitudes, Risk-taking, and Social Support

### Social Support

Social support is associated with physical and mental wellbeing. Social support may have a direct impact on the health and wellbeing of the individual or act as a buffer, protecting against negative outcomes. Cash transfers could potentially have a direct impact on the social support available to the youth. However, the more likely role of social support in relation to cash transfer programmes is, as described in the conceptual framework, is that social support works as a moderator, supporting the translation of the cash transfers into positive outcomes for the youth.

In this study, two different measures of social support were used. The first measure asks about the total number of family members and close friends available to the youth. The second measure of social support is a modified version of the multidimensional scale of perceived social support (MSPSS).<sup>39</sup> The MSPSS scale was constructed from eight items: (1) “My friends really try to help me”, (2) “I have friends with whom I can share my joys and sorrows”, (3) “I can count on my friends when things go wrong”, (4) “I can talk about my problems with my friends”, (5) “My family really tries to help me”, (6) “I get the help and support I need from my family”, (7) “I can talk about my problems with my family” and (8) “My family is willing to help me make decisions”, each item on a 5-point Likert scale ranging from: strongly disagree to strongly agree. The scale was created through

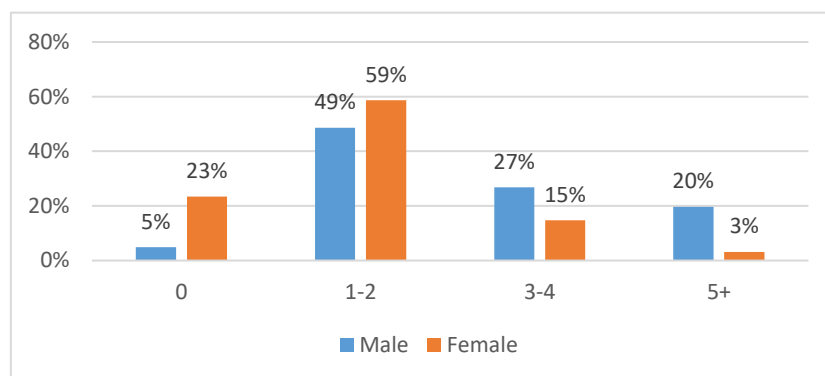
<sup>39</sup> Zimet GD, Powell SS, Farley GK, Werkman S, Berkoff KA. (1990). Psychometric characteristics of the Multidimensional Scale of Perceived Social Support. *Journal of personality assessment*.55(3-4), 610-617.

averaging the scores across all questions. Thus, a higher score indicates a higher level of social support. The scale was also further divided into two subscales: support from family and support from friends. Those who answered that they had no friends were not asked the questions included in the friends sub-scale; they were instead given the lowest score, strongly disagree, for these questions relating to support from friends. The subscales were created for all individuals that had answered at least two out of four questions. The overall scale was constructed for those that had answered at least two questions from each subscale.

Cronbach’s alpha for the overall MSPSS scale was 0.89, demonstrating good internal consistency<sup>40</sup>. Cronbach’s alpha for the friends sub-scale was 0.88 and 0.78 for the family sub-scale.

Overall, youth interviewed in the study had approximately ten family members to turn to and three close friends, on average. Females reported having fewer close friends as well as fewer family members to turn to, compared with males. As many as 23 per cent of the girls reported that they did not have any close friends. Among females 25 years or older, 33 per cent said that they had no close friends.

**Figure 5.4.1: Number of Close Friends (males: n=646, females: n=663)**



Through in-depth interviews we further explored the social network and support among people in the community. Youth were asked if they had any social groups and whether or not they participate in any social activities. Moreover, we asked if they received or offered help through such social patterns. Responses varied; whereas some participants responded that they had social groups and received help from them, others only had individual social ties with families, neighbours or friends to turn to for support. Findings also revealed communal and reciprocal type of relationships whereby individuals affirm the value and necessity to associate and support each other in similar ways as they would expect to be supported. This is the essence of the social exchange theory, which asserted that human relationships are formed and exist on a basis of a subjective cost-benefit analysis and the comparison of alternatives<sup>41</sup>.

<sup>40</sup> Generally, Cronbach’s alpha greater than 0.70 is used as a rule of thumb to indicate good internal consistency.

<sup>41</sup> Homans, G. (1961). *Social Behaviour: Its Elementary Forms*. New York: Harcourt Brace Jovanovich.

*“When I run out of anything here I go and explain to my neighbour. She listens and gives me what I need. Things like flour, or if I was unable to fetch water she will help me with it and I do the same for her. We have the sort of relationship where we assist each other with a lot of things.”* [28- year old female, Itilima]

*“There are no groups in this community; but there are some women’s groups and peer groups; the peer group help each other with farming.”* [20- year old female, Misungwi]

*“My relatives, help me when I am sick. They will help me financially and for taking care especially if hospitalized. ”* [24- year old male, Handeni]

*“If I get visitors, a funeral or wedding, I tell the “Wagikuru” (that is women who has their own homestead, whether young or elderly). They contribute money, other materials; they also help do the cooking and all other preparations.”* [25-year old female, Mbogwe]

Perceived social support scale averages were 3.3 for the total MSPSS, 3.0 for the friends sub-scale and 3.7 for the family sub-scale. The MSPSS scale averages were similar between the genders, although females had a slightly lower score than males. The gender difference becomes more pronounced for the friends sub-scale, for which females score 2.7 as compared with males who score 3.4, on average. Among females, the MSPSS score decreases with age, which means that the older females in the sample have less social support compared with the younger females. The social support indicators are balanced between the control group and the pooled treatment group. However, when comparing the two treatment arms separately with the control group there is an imbalance between the control group and the CCT plus PWP group with respect to the MSPSS (2.95 among controls versus 3.19 among the CCT plus PWP group; see Appendix E.4).

**Table 5.4.1 Baseline Means of Social Support Indicators, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N1	Mean	N2	
Number of family members	9.63	1,354	9.83	596	9.47	758	0.61
Number of close friends	2.60	1,309	2.36	575	2.80	734	0.19
MSPSS	3.34	1,336	3.34	594	3.35	742	0.85
Friends sub-scale	3.00	1,338	2.95	595	3.04	743	0.28
Family sub-scale	3.69	1,351	3.72	596	3.66	755	0.31

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

Youth also discussed social support in relation to stressful life events. This illustrates the essence of traditional social protection through family support, which has historically predominated the rural community in Tanzania. It provides a short-term safety net (which can eventually become long-term, as in case of the elderly) for support during sickness, hunger, old-age, unemployment, homelessness, drought, death of breadwinner, and the like. While still reliable, particularly for the majority of the rural populations, this kind of protection which has traditionally over-burdened women who assume

most of the domestic chores has been weakened by urbanization and industrialization<sup>42</sup>. The current study provides evidence of traditional social support networks assisting youth after stressful life events:

*“I am not worried about my wellbeing or my safety for now because I come to school and I have all I need. I was so worried when my father died because I didn’t know who will take care of me but after my grandmother took me in, and my uncle is taking care of us, and paying for my education I feel good now.”* [14- year old male, Kisarawe]

### Attitudes toward Risky Behaviour

Adolescents that are more prone to take risks are also more likely to be subject to negative peer pressure and to use alcohol, tobacco and drugs, which in turn is associated with risky sexual behaviour.<sup>43</sup> The risk taking measure used in this study is an adapted version of a risk-taking scale from the National Longitudinal Survey of Youth 1979.<sup>44</sup> The scale consists of six questions. As done in the previous studies, the six items were used to create one overall risk taking scale measuring proneness to taking risk<sup>45,46</sup> and to create two separate sub-scales measuring impulse control and sensation seeking.<sup>47</sup>

The impulse control sub-scale is made up of the following three items: (1) “I often get into trouble because I do things without thinking”, (2) “I think that planning takes the fun out of things” and (3) “I have to use a lot of self-control to keep out of trouble”. Item 4-6 measure sensation-seeking, and the questions are: (4) “I enjoy taking risks”, (5) “I enjoy new and exciting experiences, even if they are a little frightening or unusual” and (6) “Life with no danger in it would be too dull for me”.

The items were rated on a 5-point scale from strongly agree to strongly disagree and both the overall scale and the two sub-scales were created using the average score of the items. The overall scale were constructed for individuals who answered four or more of the six questions and the subscales were constructed for those that had answered at least two out of the three questions per sub-scale. A higher score on the overall risk taking scale translates to being more prone to take risks, while for the impulse control subscale a higher scale means a lower impulse control and for the sensation seeking subscale, a higher score means more prone to seek sensation. Cronbach’s alpha for the overall risk taking scale was 0.73, demonstrating an acceptable internal consistency.

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<sup>42</sup> Tungaraza, F.S. (2004). Social Protection in SADC - Developing an Integrated and Inclusive Framework-the Case of Tanzania. In Olivier, M.P. and Kalula, E.R., (Eds.), *Social Protection in SADC: Developing an Integrated and Inclusive Framework*, CILASS, RAU and Institute of Development and Labour Law, UCT, 178-197.

<sup>43</sup> Crockett LJ, Raffaelli M, Shen YL. (2006). Linking Self-Regulation and Risk Proneness to Risky Sexual Behaviour: Pathways through Peer Pressure and Early Substance Use. *Journal of Research on Adolescence* 16(4), 503-25.

<sup>44</sup> National Longitudinal Survey of Youth 1979. Attitudes and expectations. Available from: <https://www.nlsinfo.org/content/cohorts/nlsy79-children/topical-guide/attitudes/page/0/1/#YA>.

<sup>45</sup> Crockett LJ, Raffaelli M, Shen YL. (2006). Linking Self-Regulation and Risk Proneness to Risky Sexual Behaviour: Pathways through Peer Pressure and Early Substance Use. *Journal of Research on Adolescence* 16(4), 503-25.

<sup>46</sup> Raffaelli M, Crockett LJ. (2003). Sexual risk taking in adolescence: the role of self-regulation and attraction to risk. *Developmental psychology* 39(6), 1036.

<sup>47</sup> Shulman EP, Harden KP, Chein JM, Steinberg L. (2014). The Development of Impulse Control and Sensation-Seeking in Adolescence: Independent or Interdependent Processes? *Journal of Research on Adolescence*, 26(1): 37-44.

Cronbach’s alpha for the impulse control and sensation-seeking sub-scales were 0.57 and 0.75, respectively.

Overall, the average of the overall risk-taking scale is 2.6 (Table 5.4.2), while the averages for sub-scales are 2.9 (impulse control) and 2.3 (sensation seeking). There are no significant differences between the control group and the pooled treatment group or between the control and either treatment arms (CCT and CCT plus PWP) at conventional significance levels.

**Table 5.4.2: Baseline Means of Risk-taking Indicators, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N1	Mean	N2	
Overall risk taking scale	2.60	1,335	2.64	593	2.56	742	0.14
Impulse control	2.86	1,336	2.93	595	2.81	741	0.08
Sensation seeking	2.33	1,337	2.35	593	2.31	744	0.55

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

The overall risk taking scores are similar for females and males, while females score lower on sensation seeking than do males (2.2 for females versus 2.5 for males). Age does not appear to be correlated with risk taking in our evaluation sample.

## 5.5 Sexual Behaviour and HIV Risk

This section describes youth’s sexual behaviours and perceived HIV risk. Questions followed validated survey items from DHS and other similar youth modules from impact evaluations in the Transfer Project. As shown in table 5.5.1, those youth reporting having ever been married or cohabited with a partner made up 33 per cent of the sample, while the remaining 67 per cent had never been married. Among both groups combined, 25 per cent reported currently having a boyfriend or girlfriend. Among females, the percentage ever married or cohabiting increased to 47 per cent, while for males the percentage was 17 per cent. There were no statistically significant differences between the pooled treatment and control groups on any of these indicators. However, when examining treatment arms separately, the CCT only youth were more likely than control youth to have ever been married or cohabited (35 per cent versus 18 per cent;  $p < 0.05$ ).

**Table 5.5.1: Baseline Means of Partner/Relationship Indicators, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Ever had spouse/cohabiting partner	0.33	1,357	0.29	598	0.35	759	0.12
Single/never married	0.67	1,357	0.71	598	0.65	759	0.12
Has a girlfriend or boyfriend	0.25	1,344	0.24	594	0.26	750	0.48

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

### Sexual Debut

Approximately 59 per cent of the sample reported having had sexual intercourse (60 per cent of females and 58 per cent of males). As shown in table 5.5.2, there were no statistically significant differences in sexual debut between treatment and control youth. Among youth ages 14 to 24 years, 52 per cent had sexually debuted (no differences between treatment and control groups). The percentage of never married/cohabiting females and males reporting sexual debut was 35 and 49 per cent, respectively (not shown).

Next, we asked questions related to the youth's first sex, including partner's age and condom use. Data on age at sexual debut and condom use at first sex was missing for 29 per cent and 43 per cent, respectively, of those who had sex due to a data collection error, and thus will be re-collected at endline. However, among those reporting (n=586), average age at sexual debut was 16 years, with no differences between males and females. There were no statistically significant differences among the overall sample nor among sub-samples on this indicator when comparing the pooled treatment group to the controls, with the exception of males, where the difference in age at sexual debut between controls and the pooled treatment group was significant at the  $p < 0.05$  level.

Nineteen per cent of youth reported condom use at first sex. Among females, this increased to 23 per cent. Among males, 14 per cent indicated using a condom at first sex. Eighteen per cent of females who had sexually debuted reported that their first sexual partner was five or more years older (20 per cent controls, 16 per cent treatment). For males, the percentage reporting first sexual partner five or more years older was three per cent among controls and zero per cent for treatment, and this difference was statistically significant ( $p < 0.05$ ).

**Table 5.5.2: Baseline Means of First Sex Indicators, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Ever had sex	0.59	1,344	0.58	591	0.60	753	0.53
Age at first sexual intercourse	16.04	586	15.83	272	16.21	314	0.13
First sex: condom used	0.19	479	0.21	193	0.17	286	0.40
First sex: partner 5 or more years older	0.10	788	0.12	339	0.09	449	0.14

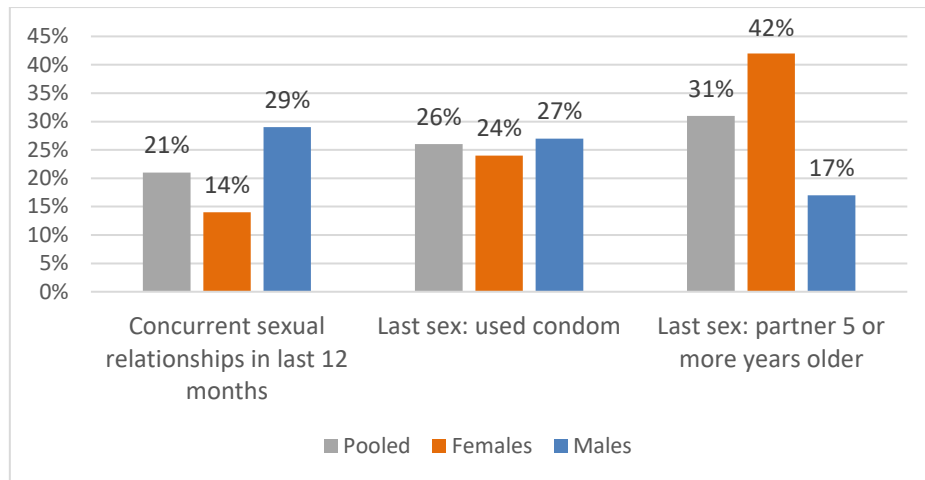
Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Recent Sex

To assess HIV risk, we asked about characteristics of the youth's most recent sexual encounter among the 833 youth reporting that they had ever had sex, and among these, 797 provided information about their most recent sexual encounter. The average number of lifetime sexual partners was 3.49 overall. Among females, this number was slightly lower at 2.51 partners overall, while among males it was 4.62 partners. There were no statistically significant differences in this indicator between treatment and controls, by age, among youth under age 25.

Twenty-one per cent of youth who had ever had sex had concurrent sexual relationships in the previous 12 months (13 per cent of the overall sample, including youth who had not yet sexually debuted). Among sexually active youth, the percentage having concurrent sexual relationships in the past 12 months was nine per cent and 29 per cent among females and males, respectively. There were no differences between the pooled treatment and control youth in this indicator overall nor in any of the sub-groups examined.

**Figure 5.5.1 Characteristics of Last Sex, Among Youth Reporting Sexual Debut (N=788)**



Condoms were used at last sex among 26 per cent of the sexually experienced sample. Among females, 24 per cent overall used a condom at last sex, and this increased to 39 per cent among never-married females. Among males, these percentages were 27 per cent overall and 33 per cent among never-married males. There were no differences between treatment and control youth in this indicator overall nor in any of the sub-groups examined.

When further asked through in-depth interviews about condom use and who makes the decision about using protection. Some respondents discussed decision-making around condom use and negotiating their use with sexual partners. Issues of lack of trust among partners as well as not being ready for a child were raised, as was fear of HIV/AIDS and other sexually-transmitted infections.

*“I was the one who decide that we should use condom because I was afraid that I may get STDs or pregnant but he never wanted to use condom with me because he wanted me to get pregnant.” [19- year female, Kisarawe]*

*“With her it was the same; we used to meet just to have sex. I used protection with her and it was my choice because I heard that she had other men. She did not want us to use protection but I forced it. I think that maybe she just trusted me or wanted to have a baby but she did not give me a reason.” [24- year old male, Kahama]*

*“...She didn’t see a reason why we had to use condom but for me, because I know what I have been reading in the books about HIV/AIDS and other STDs, I had to make decision that we must use condom during sexual intercourse until we go for testing.” [24-year old male, Handeni]*

*“We were always using condom and he was the one who made that decision that he was afraid that I may get pregnant and he wasn’t ready to have a child at that time. He wanted us to get children after our marriage because that was the right time as we would be ready to raise the family.” [25-year old female, Kilosa]*

Nevertheless, some participants reported not using condoms during sexual intercourse for various reasons including being too young to understand the significance of using protection. There was also

a group of youths who claimed to have used protection for a while but later stopped after they had tested negative to HIV/AIDS or had gotten married.

*“Truly speaking, at that time...and that is why I said our brains had not yet even matured so we had unprotected sex; we did not even have the thought of using condoms.”* [22-year old male, Misungwi].

*“At first we were using condom but we later agree on having a child so we stopped using it. But that was after testing for HIV/AIDS and negative results.”* [19-year old female, Kisarawe]

*“Before marriage they use condoms because a man may not be sure of the girl’s HIV/AIDS status but after marriage. Even though they don’t as many go for testing before marriage.”* [25-year old female, Mbogwe]

*“With the first girl we had a good relationship but we only met to have sex, this is the only reason I would meet with her. I did not use condoms with her and neither with the second one.”* [17-year old male, Mbogwe]

Others reported a limited understanding of condom use.

*“I have heard of protection but I am not sure I understand it much. They say condoms prevent/protect but I do not use them; they say that if you use these condoms when you have an ‘affair outside your marriage’ they will protect you from getting infected with HIV/AIDS. I have heard this on the radio... I don’t like using them; I don’t expect to use them with my husband. I don’t even know what they would be for.”* [28-year old female, Itilima]

Even though most youth in our study reported having safe sex themselves, when asked about the practices of others, youth generally responded that they did not think other youth were practicing safe sex, for reasons including caring less about HIV/AIDS and lack of adequate knowledge on HIV/AIDS prevention.

*“Really, when it comes to prevention I do not think that adolescents concern themselves with the matters of prevention; it is not so easy. Consider that this is a village and people do not know the importance of prevention; they don’t hear much about these things.”* [22- year old male, Misungwi]

*“I don’t think they care to protect themselves from HIV/AIDS because if they do protect themselves they won’t get pregnant may be if they go for test before starting sexual relationship.”* [18-year old female, Handeni]

*“They go ahead and have unprotected sex; there are those who use protection but many have unprotected sex because here we are in the bush and they do not understand well that now there are many diseases out there.”* [24-year old male, Kahama]



Another HIV-risk factor that we examined was age-disparate sex. Thirty-one per cent of youth report that their last sexual partner was five or more years older (35 per cent controls, 28 per cent treatment). Among females, this percentage increased to 42 per cent (48 per cent controls, 37 per cent treatment). Among males, 17 per cent reported their last sexual partner was five or more years older. Those reporting last sexual partner 10 or more years older included 23 per cent of females and five per cent of males. None of these differences reached statistical significance at the 5 per cent level.

**Table 5.5.3: Baseline Means of Recent Sex Indicators, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Lifetime number of sexual partners	3.49	781	3.82	337	3.24	444	0.11
Has had concurrent sexual relationships in last 12 months	0.13	1,308	0.14	577	0.12	731	0.47
Among ever had sex: has had concurrent sexual relationships in last 12 months	0.21	797	0.24	343	0.20	454	0.28
<b>Last sex indicators</b>							
Used condom	0.26	748	0.28	320	0.24	428	0.23
Used condom among never married youth	0.35	351	0.33	165	0.37	186	0.45
Partner 5 or more years older	0.31	741	0.35	314	0.28	427	0.09
Partner 10 or more years older	0.15	741	0.16	314	0.15	427	0.90

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Transactional Sex

Transactional sex, defined as having given or received food, favours, gifts, or money in exchange for sex, is another HIV-risk factor that we assessed in this study. If the PSSN reduces food insecurity and increases household economic security (and thus the need to trade sex for food or other goods), the programme may potentially reduce engagement in transactional sex. Among our combined sample of males and females, 22 per cent reported having engaged in transactional sex over the previous 12 months (23 per cent controls, 21 per cent treatment; Table 5.5.4).

**Table 5.5.4: Baseline Means of Transactional Sex Indicators (Past 12 Months), by Treatment Status**

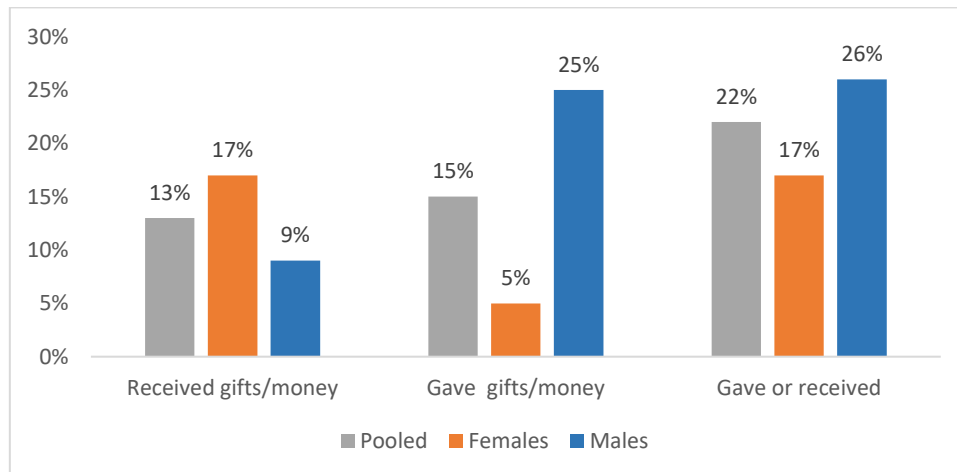
Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Received food/ favours/ gifts/ money for sex	0.13	1,329	0.14	588	0.12	741	0.35
Given food/favours/gifts/money for sex	0.15	1,329	0.16	590	0.14	739	0.41
Given or received food/favours/ gifts /money for sex	0.22	1,333	0.23	591	0.21	742	0.54

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

Breaking it down further into giving versus receiving food, favours, gifts, or money, 13 and 15 per cent of the sample report receiving and giving, respectively. Salient differences emerge when we examine these means by gender. Seventeen per cent of all females in the sample reported having

received food, favours, gifts, or money in exchange for sex in the previous 12 months (18 per cent controls, 16 per cent treatment), while only five per cent reported having given something in exchange for sex. Among males, nine per cent reported having received something in exchange for sex, while 26 per cent reported having given something in exchange for sex.

**Figure 5.5.2 Transactional Sex - 12 Months (N=1,329)**

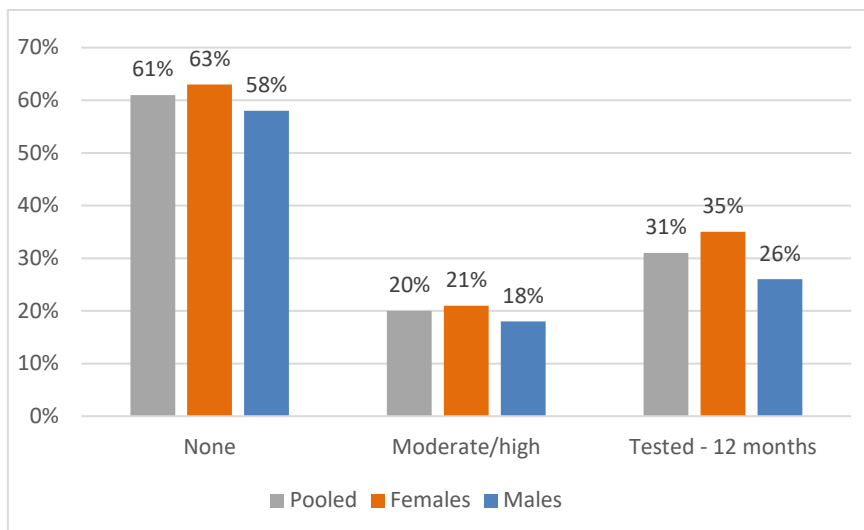


### Perceived HIV Risk

Adolescence and the transition to adulthood is a period of risk for HIV. Girls in particular are at a sharply increasing risk of HIV during this transition—according to nationally-representative data from Tanzania in 2012, 1.5 per cent of girls aged 18-19 were HIV positive, compared to 6.6 per cent of those aged 23 to 24 years.<sup>48</sup> We assessed youth’s perceived HIV risk and their testing practices. We asked youth whether they believed they were at high, moderate, low, or no risk of contracting HIV. Perceived HIV risk indicators are presented in Table 5.5.5 and show that 20 per cent of youth in the sample perceived that they were at moderate or high risk (18 per cent controls, 22 per cent treatment), while 19 per cent reported low risk, and 61 per cent reported no risk (63 per cent controls, 59 per cent treatment). Perceived risk did not vary dramatically between males and females; 21 and 18 per cent of females and males, respectively, perceived themselves to be at moderate/high risk.

<sup>48</sup> TACAIDS, ZAC, NBS, OCGS, ICF International. (2013). Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS). Dar es Salaam, Tanzania and Calverton, MD.

**Figure 5.5.3 Perceived HIV Risk and Testing (N=1,348)**



We also asked about HIV testing. In their lifetime, 43 per cent of youth had been tested, and in the previous 12 months, 31 per cent of youth had been tested. Among never married youth, 26 had been tested in their lifetime and 18 per cent in the previous 12 months. Among females, these percentages were 49 for lifetime and 35 for 12 months (and 21 and 15 respectively, respectively for never married females), while among males they were 36 for lifetime, and 26 for 12 months (29 for lifetime and 20 per cent for 12 months among never married males).

**Table 5.5.5: Baseline Means of Perceived HIV Risk Indicators, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
<b>Perceived HIV risk</b>							
Moderate/high	0.20	1,242	0.18	554	0.22	688	0.08
Low	0.19	1,242	0.19	554	0.19	688	0.95
None	0.61	1,242	0.63	554	0.59	688	0.23
<b>Perceived HIV risk among never married youth</b>							
Moderate/high	0.15	834	0.14	391	0.17	443	0.32
Low	0.17	834	0.18	391	0.16	443	0.36
None	0.68	834	0.68	391	0.67	443	0.95
<b>Tested for HIV</b>							
Lifetime	0.43	1,348	0.43	594	0.42	754	0.74
12 months	0.31	1,348	0.31	594	0.30	754	0.77
12 months: Received test results	0.99	412	0.99	183	0.98	229	0.10
<b>Tested for HIV among never married youth</b>							
Lifetime	0.26	904	0.30	418	0.23	486	0.02
12 months	0.18	904	0.21	418	0.15	486	0.06

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

In in-depth interviews, some youth reported that many do not seek treatment for HIV simply because they were not aware of their status.

*“Many don’t get this treatment because they are not self-aware and hence don’t go for testing and treatment; they just go on with their lives. And you just hear rumours that at someone’s home there is an infected person living there...”* [22-year old male, Misungwi]

Through qualitative data we also examined people’s perception of HIV/AIDS and how the situation is for those who have HIV/AIDS in the community, with a focus on access to treatment. The findings were mixed with respect to access to treatment and care. While some claimed that it was good in health centres and organizations for people with HIV/AIDS, others stated that the only available care was anti-retroviral therapy (ARVs) and care from their own relatives.

*“There are those who get help from an organization which is in Kilosa; patients get various things such as soap, sheets, and sugar because their family alone cannot provide all the basic needs due to poor financial conditions of these families. There is also a group of those who take care of their family members without any help they just help each other and get help from other relatives.”* [25-year old female, Kilosa]

*“We have a dispensary here at the village so people with HIV/AIDS go there for treatment and they go to take ARVs. They go secretly; it’s not easy to see when they are going or how they get services so if there are any challenges faced it will not be easy for us to know.”* [19-year old female, Kisarawe]

*“Let me just say that there is no care they get but there are a few who go to the hospital, get tested and start clinic sessions, for reducing the impact of HIV/AIDS and increasing living days; these are the ones that that use this care service a lot, it is the sort of care I see them getting.”*

[22-year old male, Misungwi]

In addition to the general situation concerning HIV/AIDS infection in the communities, our in-depth interviews also explored whether youth personally knew an HIV/AIDS infected person, and their experiences are reflected in the following:

*“My aunt was affected with HIV/AIDS and it is from her that I knew about HIV/AIDS. She was being taken care of by her family and her husband. Most families in this community are responsible for taking care of their family member living with HIV/AIDS.”* [28-year old male, Uyuwi]

*“I have a relative who is affected by HIV, a close relative of mine and I have seen how she suffers and I will tell you even if they are given ARV’S it’s not easy for a person who has HIV because living with HIV knowing you will die from it?! It’s so hard for them.”* [25-years old female, Uyuwi]

*“Yes, I have had close friends of mine get this disease. I got to the point where I felt all that was left was for me to protect myself as I saw many students died from the disease. I saw them suffering a lot such as cough every now and again as well as other health. Some struggled even with getting food to eat.”* [24-year male, Kahama]

When we asked about challenges facing people with HIV/AIDS in the community, the issues that came out the most were that of stigma and the difficulties in caring for this group of people. Also highlighted was the concern about poverty levels many of the infected people live in, and thus inability to acquire basic necessities.

*“...they get various challenges; within a family an infected person is almost with no one to take care for. It is perceived that if you care for infected person, especially you touch them you too will also be infected. This leads to isolation and stigmatization.”* [22-year old female, Misungwi.]

*“I know there are people in the community who stigmatize and segregate people with HIV/AIDS. For example, we may be in for a meeting and you will hear people saying negative things about them. Some are ok sitting with them but others will separate themselves and say things or just look at them.”* [28-year old female, Itilima]

*“Some of these people are from poor households. They may need even vegetables or fruits but given their poor living conditions these things are not there; it is hard to afford. Like here in the village they are also far from here. You have to go all the way to Kisesa, and the cost is another thing. The cost becomes too much and the family is unable to provide these services for the person. In this and in other cases family members may find these needs as bothersome and simply ignore.”* [22-year old male, Misungwi]

## 5.6 Contraception and Fertility

### Contraceptive Use

Contraceptive use has broad, positive impacts on women’s health and also on infant and child health and survival through birth spacing and other pathways.<sup>49</sup> Indeed, it is estimated that contraceptive use (at a rate of 22.1 per cent) prevented over 88,000 maternal deaths in SSA in 2008 alone and that an additional 59,000 maternal deaths could be averted annually in the region by fulfilling unmet need for contraception.<sup>50</sup> We asked youth who had ever had sex about current use of contraceptive methods by either the youth or their partner. Modern methods were defined as male or female sterilization, injectables, implants, intrauterine device, pills, condoms (male or female), diaphragm, foam or jelly, or emergency contraceptive pills. These are in contrast to lactational amenorrhea method, withdrawal, or rhythm method, which are all considered to be traditional or non-modern methods of contraception, and have lower efficacy rates. Among males and females together, 25 per cent reported current use of any contraceptive method and 24 per cent reported using a modern contraceptive method. The most commonly used modern methods were condoms and injectables, followed by implants (results of method break-down not shown). Among females, 27 per cent reported current use of a modern method. Among males, 20 per cent reported that they or their partner were using a modern method.

**Table 5.6.1: Baseline Means of Contraceptive Use Indicators, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Currently using contraceptive	0.25	768	0.25	332	0.24	436	0.83
Currently using modern contraceptive	0.24	768	0.25	332	0.23	436	0.74

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

### Fertility

Policymakers often fear that cash transfer programmes may increase childbearing through beliefs around qualifying and maintaining eligibility for such programmes. In general, the evidence from cash transfer programmes (conditional and unconditional) in Latin America and Africa shows no evidence, or very little evidence in exceptional cases, of increased fertility as a result of cash transfers.<sup>51</sup> Alternatively, cash transfers may decrease the number of births per women if they are better able to exercise their preferences for fewer births, either through increased access to health care or increased autonomy and/or decision-making within the household, where disagreements exist between partners around fertility. In fact, South Africa’s Child Support Grant reduced

<sup>49</sup> Cleland, J., et al. (2012). Contraception and health. *Lancet* 380(9837), 149-56.

<sup>50</sup> Ahmed, S., et al. (2012). Maternal deaths averted by contraceptive use: an analysis of 172 countries. *Lancet* 380(9837), 111-25.

<sup>51</sup> Palermo, T., & Hjelm, L. (2016). Unconditional Government Social Cash Transfers in Africa Do Not Increase Fertility. UNICEF Innocenti Research Brief 2016-01. *Florence, Italy: UNICEF Office of Research-Innocenti.*

adolescent pregnancy and increased birth intervals among female caregivers receiving the grant, as compared to similar caregivers not receiving the grant.<sup>52,53</sup>

Eight per cent of females in our sample were pregnant at the time of the survey. Fifty per cent of all females in the sample had ever been pregnant, including 41 per cent of females under the age of 25 (and 10 per cent of those under age 18; results not shown). Among all females in the sample, 11 per cent had ever had a pregnancy end in miscarriage, abortion, or stillbirth (eight per cent controls, 13 per cent treatment). Average number of live births to date for females in the sample was 1.22 children overall and 0.70 among females under age 25. Among those who had ever been pregnant, average age at first pregnancy in the sample was 17.85 years. Among males, 20 per cent reported having ever made a female pregnant. Further, among males under age 25 years, 11 per cent report having ever made a female pregnant. None of the differences in these indicators between treatment and control groups reached statistical significance at the 5 per cent level.

**Table 5.6.2: Baseline Means of Fertility Indicators, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Currently pregnant	0.08	703	0.09	301	0.07	402	0.60
Ever had pregnancy end in miscarriage/abortion/stillbirth	0.11	706	0.08	301	0.13	405	0.07
Total fertility	1.22	672	1.23	282	1.22	390	0.94
Ever pregnant	0.50	706	0.51	301	0.50	405	0.87
Age at first pregnancy	17.85	351	17.79	150	17.91	201	0.63
Ever got female pregnant	0.20	647	0.19	296	0.21	351	0.50

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## 5.7 Physical, Sexual and Emotional Violence, Females

This section describes females' experience of gender-based violence and related help-seeking behaviours. Physical, sexual and emotional violence against women and girls has adverse health, social and economic impacts on women, their families and society. Globally, the most prevalent form of gender-based violence is intimate partner violence (IPV), which one in three women will experience in her lifetime<sup>54</sup>. In addition to adverse consequences for women related to health, productivity and overall wellbeing, IPV also increases the risk of adverse health and child development outcomes for her children, and this is most likely due to stress and caring pathways. Based on our own calculations among women aged 15 to 28 years residing in the regions of the current study using the most recent TDHS where data on IPV are available (2010), an estimated 20 per cent of ever married/cohabiting Tanzanian women from the poorest quintile have experienced

<sup>52</sup> Heinrich, C., Hoddinott, J., Samson, M., Mac Quene, K., van Nierkerk, I., & Renaud, B. (2012). The South African Child Support Grant Impact Assessment. *South Africa: Department of Social Development, South African Social Security Agency, UNICEF*.

<sup>53</sup> Rosenberg, M., Pettifor, A., Nguyen, N., Westreich, D., Bor, J., Bärnighausen, T. Mee P., Twine, R. Tollman, S., Kahn, K. (2015). Relationship between Receipt of a Social Protection Grant for a Child and Second Pregnancy Rates among South African Women: A Cohort Study. *PLoS One*, 10(9), e0137352.

<sup>54</sup> Devries, K. M., Mak, J. Y. T., Garcia-Moreno, C., Petzold, M., Child, J. C., Falder, G., Watts, C. H. (2013). The Global Prevalence of Intimate Partner Violence Against Women. *Science*, 340(28 June 2013), 1527-1528.

physical IPV, and 24 per cent have experienced physical, sexual, or emotional IPV in their lifetime.<sup>55</sup> Furthermore, the Tanzanian VACS, conducted in 2009, estimated that 14 per cent of females aged 14 to 17 had experienced sexual violence and 51 per cent experienced physical violence in the previous 12 months<sup>56</sup>.

Questions followed validated survey items from VACS and DHS previously implemented in Tanzania. We assessed attitudes and experiences related to violence. We first assessed attitudes about IPV by asking, given a variety of situations, when females believe that husbands are justified in hitting their wives. Situations included: (1) if she goes out without telling him, (2) if she neglects taking care of the children, (3) if she argues with him, (4) if she refuses to have sex with him, and (5) if she burns the food. We then assessed females' experience with emotional abuse was assessed with two questions: (1) whether anyone had insulted her or made her feel bad about herself and (2) whether anyone had belittled, called her names or humiliated her in front of other people. Next, physical violence experience was assessed through questions asking whether anyone ever did the following in the previous 12 months: (1) slapped or pushed her; (2) hit her with a fist, (3) kicked her or beat her up; (4) tried to choke her or burn her on purpose; (5) threatened or attacked her with a knife, gun, or any other weapon. For both emotional and physical violence, we asked about perpetrators and grouped these into intimate partner (spouse/boyfriend/girlfriend), family member, authority figure (including teachers), peers, or other. Finally, sexual violence (12 month and lifetime experience) was assessed by asking whether anyone had ever: (1) physically forced her to have sexual intercourse or (2) forced her to perform other sexual acts that she did not want to. We also asked whether her sexual debut was forced, pressured, or tricked, and classified these women as also having experienced sexual violence.

### Acceptance of Physical Intimate Partner Abuse

We found high levels of acceptability of physical IPV. Seventy per cent of females justified husbands' beating their wives in at least one circumstance (and 71 per cent of females under the age of 25 did so). Conversely, this means that 29 per cent of females in our sample disagreed with all reasons justifying IPV, and this compares to 44 per cent in the TDHS (2010). In our sample, rates in each specific circumstance were as follows for all females (and females under 25 years) as shown in Table 5.7.1: 41 per cent (40 per cent) if she goes out without telling him, 47 per cent (46 per cent) if she neglects the children, 50 per cent (51 per cent) if she argues with him, 34 per cent (32 per cent) if she refuses sex, and 25 per cent (27 per cent) if she burns the food. In the pooled treatment group, there were no statistically significant differences on these items compared to the control group, or in the entire sample when examining by treatment arm. However, when examining treatment arms separately, among females under the age of 25, the control group was more likely to justify domestic violence than the CCT plus group in cases where the wife neglects the children (51 per cent versus 37 per cent;  $p < 0.05$ ) and if she refuses sex (36 per cent versus 25 per cent;  $p < 0.05$ ).

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<sup>55</sup> National Bureau of Statistics (NBS) [Tanzania] and ICF Macro. (2011). Tanzania Demographic and Health Survey 2010. *Dar es Salaam, Tanzania: NBS and ICF Macro*.

<sup>56</sup> UNICEF Tanzania, United States Centers for Disease Control and Prevention (CDC), & Muhimbili University of Health and Allied Sciences. (2011). Violence against Children in Tanzania: Findings from a National Survey, 2009. Summary Report on the Prevalence of Sexual, Physical and Emotional Violence, Context of Sexual Violence, and Health and Behavioural Consequences of Violence Experienced in Childhood. *Dar es Salaam, Tanzania: United Nations Children's Fund Tanzania*.



**Table 5.7.1: Baseline Means of Beliefs Regarding Intimate Partner Violence Justification for Females, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
<b>Believes that IPV is justified</b>							
Any reason	0.70	701	0.72	300	0.69	401	0.38
Goes out without telling partner	0.41	689	0.43	294	0.39	395	0.48
Neglects children	0.47	691	0.51	293	0.45	398	0.19
Argues with partner	0.50	689	0.55	294	0.47	395	0.07
Refuses sex	0.34	652	0.36	272	0.32	380	0.20
Burns the food	0.25	691	0.28	295	0.23	396	0.14

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

Findings from the qualitative interviews were largely consistent with the quantitative evidence presented above. While most youth who participated in in-depth interviews condemned the act of men physically abusing their wives/partners, a majority stated that there are some situations in which a man is justified to beating the woman. Most youth with these beliefs considered wife beating as a way of disciplining a woman once she has acted mischievously. Jealousy and thus the feeling with or without proper evidence that the woman was being unfaithful was the most referred justification cause of this particular violence.

*“In this case, a man has the right to beat his wife especially if he learns that she is having an extramarital affair. Consider that nowadays there are all sorts of diseases. There are still a few men who do not feel like beating their wives and only offer a sort of counselling through family elders but for the majority of people over here, if they hear their wives are having an affair, they must beat them up.”* [22-year old male, Misungwi]

*“Maybe if she refuses to cook he is justified in beating her...Yes, I have witnessed and I felt that it was something quite ordinary. There are some situations where you will be saddened and you feel it is not right and justified to beat her but there are others where I feel it is something normal. When the woman goes out without explaining where she went to then she is to be beaten; here it is justified for her to be beaten as she did not bid farewell, nor say where she was going to and came back at night.”* [24-year old male, Kahama]

*“A husband is justified beating his wife if she has done something wrong and she made her husband angry but you also need to understand your woman if she has any problem because you can beat her and you can kill her, so you have to know her before you start beating her.”* [24-year old male, Handeni]

*“If she has done something wrong towards her husband its right for a husband to beat his wife but there are those who beat their wives with no reason he may be drunk and come back home and start beating his wife with no reason. A husband is justified to beat his wife if she cheats on him and sleeps with other men.”* [16-year old male, Kilosa]

Not surprising, given existing social and gender norms relating to male dominance and patriarchy, some females also shared these views.

*“There are those who beat their wives even if they haven’t done anything serious, that is wrong; but there are those who beat their wives because they have done something wrong. For example, if a wife left without telling her husband and without getting his permission he can beat her or if she talks badly or rudely to husband he is justified to beat her up.” [25-year old female, Kilosa]*

*“If a wife has done something wrong her husband is justified to beat her, for example if a wife refuse to have sex with her husband or if a wife is cheating with other men also when a woman go out and come back late, if she is late cooking for her husband it is right for her husband to beat her—and many women get beaten for that.” [19-years old female, Kisarawe]*

*“... if she is told not to do certain things and she does it anyway her husband can beat her. Like if she is talking back to her husband in a bad way.” [25-years old female, Uyuwi]*

However, others condemned IPV, as illustrated in the following:

*“When it is right to beat his wife...? When she has wronged him? I don’t see it; I don’t see anything that justifies a husband or any man beating a woman. It is not right at all. Why beat her? Why not talk it out? ‘We have wronged each other here let us forgive each other’.” [28-years old female, Itilima]*

## Emotional Violence

Fifty-five per cent of females reported experiencing emotional violence in the previous 12 months (53 per cent of females under age 25). The percentages reporting emotional violence from specific perpetrators were as follows: 11 per cent (8 per cent) from an intimate partner, 20 per cent (21 per cent) from a family member, 1 per cent from an authority figure, 13 per cent (14 per cent) from a peer, 16 per cent (15 per cent) from another individual. There were no significant differences in these outcomes between the pooled treatment and control groups. However, when examining treatment arms separately, control females were more likely to have experienced emotional violence from a spouse or partner than were CCT plus PWP females (12 per cent versus six per cent;  $p < 0.05$ ).

**Table 5.7.2: Baseline Means of Emotional Violence Indicators for Females (Past 12 Months), by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
<b>Emotional violence</b>							
Any perpetrator	0.55	704	0.55	300	0.55	404	0.95
Partner/spouse	0.11	704	0.12	300	0.11	404	0.62
Family member	0.20	704	0.20	300	0.19	404	0.77
Authority	0.01	704	0.01	300	0.00	404	0.44
Peer	0.13	704	0.10	300	0.15	404	0.12
Other perpetrator	0.16	704	0.19	300	0.15	404	0.13

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Physical Violence

Experience of physical violence in the previous 12 months was reported by 29 per cent of females in our sample (29 per cent among those under age 25). The percentages reporting physical violence from an intimate partner were as follows: nine per cent among the full sample, 15 per cent among those who were ever married/cohabiting, and seven per cent of those who report having a boyfriend (not currently married). The percentages reporting physical violence from other specific perpetrators were as follows: 10 per cent (12 per cent) from a family member, two per cent (two per cent) from an authority figure, eight per cent (nine per cent) from a peer, two per cent (two per cent) from another individual. The differences between the pooled treatment and control groups were not significant, however when examining treatment arms separately, females under the age of 25 who were in the CCT only arm were more likely than control females to have experienced physical violence from a spouse or partner (nine per cent versus four per cent;  $p < 0.05$ ). In qualitative interviews, females discussed corporal punishment from teachers.

*“To be punished by teaches is one thing that I disliked most about school. In school if you did something wrong the teachers punished you. Sometimes you didn’t even do anything wrong but still you will be punished. For example you may be coming late she will beat you but later in at the assembly they will beat you again like a donkey?”* [18-years old female, Handeni].

*“What I disliked most about school is being punished by our teachers, although it was for a good intention that they wanted us to behave but sometimes the punishment was severe.”* [25-years old female, Uyui]

**Table 5.7.3: Baseline Means of Physical Violence Indicators for Females (Past 12 Months), by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
<b>Experienced physical violence</b>							
Any perpetrator	0.29	705	0.28	301	0.29	404	0.76
Any perpetrator among 14-17 year olds	0.34	273	0.31	121	0.37	152	0.32
Any perpetrator among ever partnered females	0.15	332	0.16	132	0.15	200	0.79
Any perpetrator among females with boyfriend	0.07	155	0.06	65	0.08	90	0.64
Partner/spouse	0.09	705	0.08	301	0.09	404	0.46

Family member	0.10	705	0.10	301	0.11	404	0.80
Authority	0.02	705	0.01	301	0.02	404	0.34
Peer	0.08	705	0.07	301	0.08	404	0.57
Other perpetrator	0.02	705	0.03	301	0.02	404	0.44

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Sexual Violence

Table 5.7.4 indicates that 12 per cent of females in the sample reported that they were forced, pressured or tricked at first intercourse, and 19 per cent had experienced forced sex in their lifetime (18 per cent of females under age 25). Further, 16 per cent of females experienced forced sex in the previous 12 months. Thirteen and 10 per cent of females in the sample reported other forced sexual acts in their lifetime and the previous 12 months, respectively. Taking these forced sex and other sexual acts in combination, 22 per cent of females reported sexual violence in their lifetime, and 19 per cent in the previous 12 months. Among females under 25 years of age, 22 per cent reported lifetime sexual violence and 19 per cent reported sexual violence in the previous 12 months. Further, 11 per cent of those aged 14-17 reported 12-month experience of sexual violence (compared to 14 per cent reported in the VACS).

**Table 5.7.4: Baseline Means of Sexual Violence Indicators for Females, by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
First sex forced/pressured/tricked	0.12	704	0.10	300	0.13	404	0.33
Forced sex - lifetime	0.19	702	0.17	300	0.20	402	0.47
Forced sex - 12 months	0.16	702	0.14	300	0.17	402	0.45
Other forced sexual acts - lifetime	0.13	701	0.12	299	0.13	402	0.91
Other forced sexual acts - 12 months	0.10	701	0.10	299	0.10	402	0.92
Sexual violence - lifetime	0.22	703	0.23	300	0.22	403	0.93
Sexual violence - 12 months	0.19	703	0.19	300	0.19	403	0.90
Sexual violence - 12 months among 14-17 year olds	0.11	273	0.12	121	0.11	152	0.93

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Reporting and Help-seeking

Among females who reported ever experiencing verbal bullying or physical violence in the past 12 months, we further asked if they had ever told anyone or sought help related to the violence. Options for reporting included friends, family, husband/partner's family, neighbours (combined to create an "informal reporting" category). Further, formal reporting sources included police, doctor/health worker, priest/religious leader, counsellor, NGO/women's organization, or local leader. Only 27 per cent of females who experienced verbal bullying or violence had ever told anyone about the violence or sought help. Twenty-three per cent told an informal source, while less than two per cent of all females reported to a formal source, none of which reported to a health worker. It is possible females experiencing sexual violence may have reported to healthcare workers, but the format in which questions were asked only capture help-seeking for emotional and/or physical violence. There were no statistically significant differences in reporting rates between treatment and control women. However, when examining treatment arms separately, CCT plus PWP

females who experienced any physical or emotional violence were more likely than control females to have sought help (56 per cent versus 35 per cent;  $p < 0.05$ ).

**Table 5.7.5: Baseline Means of Violence-related Help-seeking Indicators for Females who Reported Emotional or Physical Violence (Past 12 Months), by Treatment Status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Sought any help for verbal bullying/physical violence	0.27	426	0.22	183	0.30	243	0.08
Informal help-seeking	0.23	426	0.20	183	0.24	243	0.36
Sought help from social service	0.00	426	0.01	183	0.00	243	0.84
Sought help from authority figure	0.02	426	0.01	183	0.02	243	0.07

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

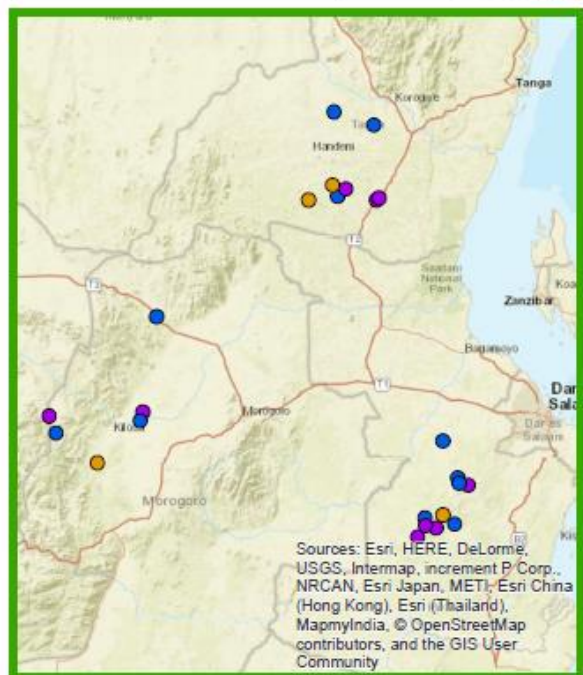
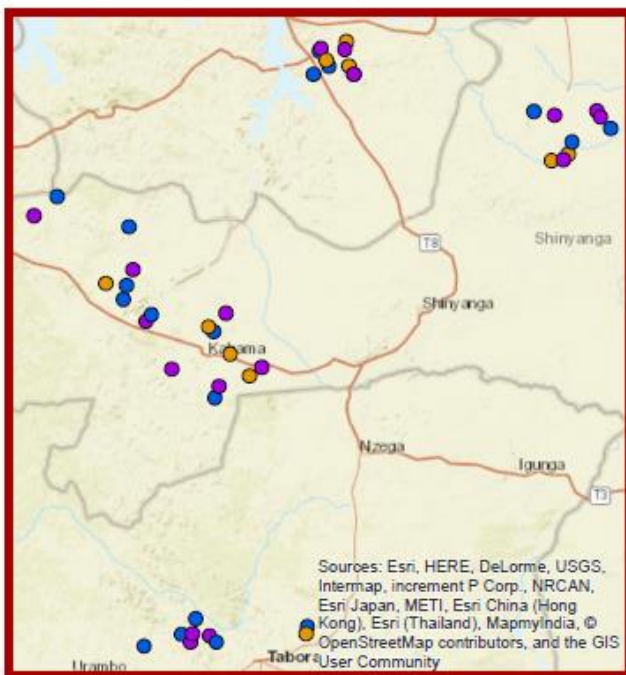
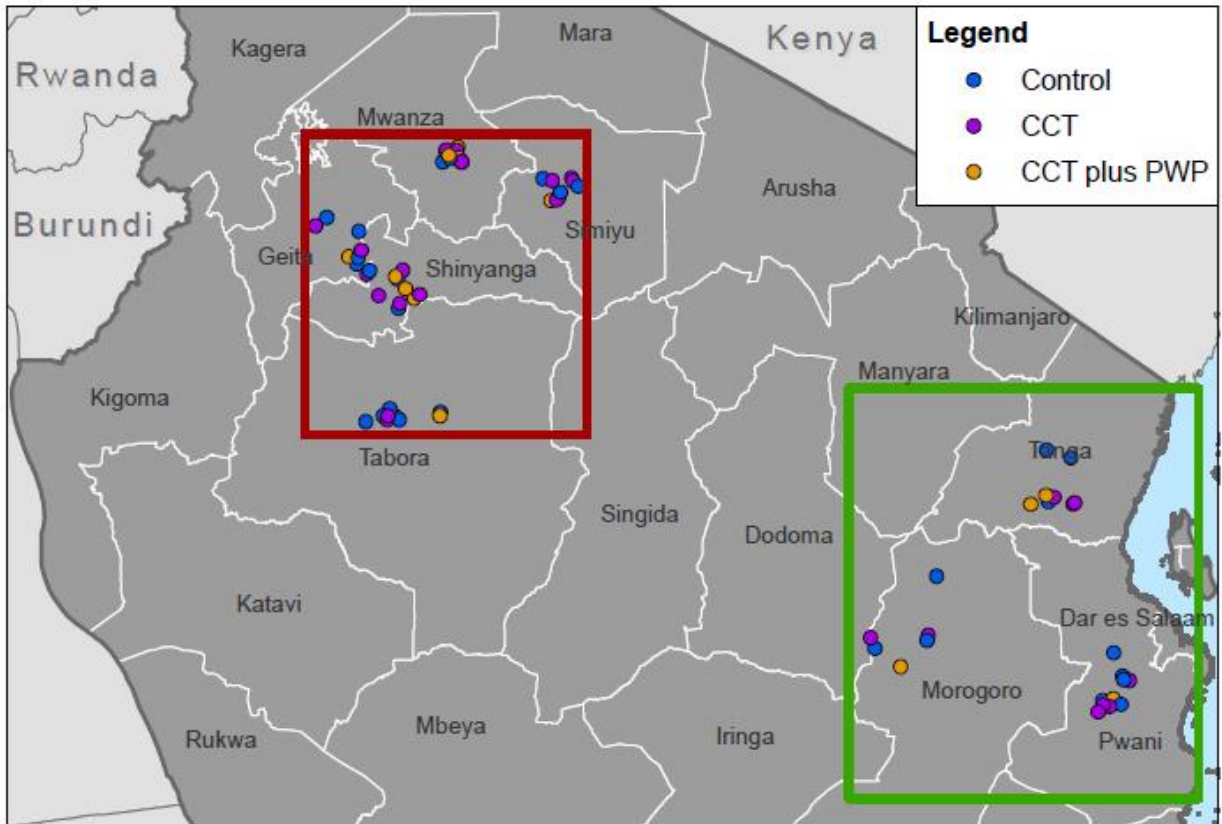
## 6. Conclusion

This report documents the design of PSSN impact evaluation on Youth Wellbeing and Transition to Adulthood, an 18-month, mixed methods study. It describes the beneficiary sample and assesses randomization of treatment and control groups. We first show that variation in response rates for youth across the sample do not threaten the internal validity of the study and are unlikely to result in biased estimates. Second, we show that implementation of randomization was highly successful, with baseline equivalence confirmed over a large number of indicators across domains as diverse as violence to mental health and risk taking. Some differences that emerged among sub-groups or when examining CCT only versus CCT plus PWP treatment arms separately, as compared to the control group, may be due to smaller sample sizes among the groups and low prevalence of outcomes within sub-groups.

Youth interviewed in this study faced myriad of challenges to safe transitions to adulthood, indicating broad potential for the CCT programme to improve their lives. There were low reported rates of having basic material needs met and high reported levels of depression and violence. One in five youth believed their life would be worse in the future, and in qualitative interviews, youth discussed economic worries. With respect to sexual and reproductive health, contraceptive use was lower than regional averages, and there were substantial levels of HIV-risk behaviours including concurrent sexual relationships and engagement in transactional sexual relationships. On a positive note, some youth discussed their social support networks helping out when they needed it, and a majority of youth reported that they were in good health. The summary of results presented here has aimed to integrate quantitative and qualitative data analysis, and more in depth analysis of the topics will be pursued, particularly after follow-up data are collected (planned for early 2017). The innovation in a range of health and wellbeing outcomes will contribute to understanding of if and how cash transfers can contribute to safe transitions to adulthood for youth in Tanzania, SSA and globally.

Appendix A: Tanzania youth study map

**Tanzania Communities by Treatment Type (n=84)**



## Appendix B: Sample characteristics, by eligibility

**Table B.1. : Means of household demographics for households in youth study region, by eligibility (has youth 14-28)**

	Not eligible		Eligible	
	N	mean	N	mean
Christian household	441	0.404	929	0.443
Muslim household	441	0.440	929	0.354
Nonreligious household	441	0.154	929	0.202
Female headed household	441	0.295	929	0.266
Household size	441	4.070	929	6.587
Dependency ratio	342	1.966	923	1.409
Adults in household have no education	441	0.392	929	0.150
Highest education for adults is some primary	441	0.147	929	0.110
Highest education for adults is primary completed	441	0.399	929	0.579
Highest education for adults is at least some secondary	441	0.0612	929	0.161

**Table B.1. : Means of housing characteristics for households in youth study region, by eligibility (has youth 14-28)**

	Not eligible		Eligible	
	N	mean	N	mean
Improved roof	439	0.417	915	0.399
Improved floor	441	0.0499	927	0.0464
Dwelling in poor conditions	441	0.619	929	0.532
Any toilet access	441	0.619	929	0.653



## Appendix C: Sample characteristics, by response and treatment status

### C.1 Control versus one treatment arm

**Table C.1.1: Baseline means of youth characteristics, by response and treatment status**

	Control			Treatment			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4) (7)	P-value (8)
	(1)	(2)	(3)	(4)	(5)	(6)		
Age in years	18.99	19.34	0.29	19.21	19.81	0.05	-0.23	0.44
Female	0.50	0.52	0.62	0.53	0.50	0.38	-0.03	0.30
No education	0.18	0.21	0.35	0.13	0.21	0.01	0.05	0.10
Some primary	0.28	0.23	0.11	0.33	0.16	0.00	-0.05	0.10
Completed primary	0.39	0.43	0.50	0.43	0.50	0.04	-0.03	0.43
Has at least some secondary education	0.15	0.13	0.44	0.11	0.14	0.40	0.03	0.22
<i>N</i>	197	598		309	759			

P-values are reported from Wald tests on the equality of means of Treatment and Control for each variable. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

**Table C.1.2: Baseline means of household demographics, by response and treatment status**

	Control			Treatment			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4) (7)	P-value (8)
	(1)	(2)	(3)	(4)	(5)	(6)		
Christian household	0.41	0.43	0.78	0.53	0.55	0.66	-0.12	0.12
Muslim household	0.39	0.37	0.66	0.27	0.25	0.53	0.12	0.22
Nonreligious household	0.20	0.20	0.88	0.20	0.20	0.78	0.00	0.99
Female headed household	0.27	0.31	0.37	0.24	0.24	0.98	0.04	0.40
Household size	7.45	7.62	0.58	7.23	7.52	0.23	0.22	0.37
Dependency ratio	1.31	1.17	0.20	1.24	1.11	0.04	0.07	0.30
Adults in household have no education	0.12	0.10	0.37	0.09	0.12	0.54	0.02	0.23
Highest education for adults is some primary	0.10	0.11	0.64	0.10	0.05	0.01	-0.01	0.81
Highest education for adults is primary completed	0.55	0.61	0.18	0.61	0.61	0.91	-0.06	0.16
Highest education for adults is at least some secondary	0.24	0.19	0.18	0.19	0.23	0.32	0.05	0.24
<i>N</i>	197	598		309	759			

P-values are reported from Wald tests on the equality of means of Treatment and Control for each variable. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken

prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

**Table C.1.3: Baseline means of housing characteristics, by response and treatment status**

	Control			Treatment			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4)	P-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Improved roof	0.40	0.36	0.23	0.40	0.38	0.62	0.00	0.95
Improved floor	0.03	0.00	0.00	0.06	0.06	0.78	-0.03	0.12
Dwelling in poor conditions	0.53	0.63	0.02	0.49	0.54	0.25	0.04	0.50
<i>N</i>	197	598		309	759			

P-values are reported from Wald tests on the equality of means of Treatment and Control for each variable. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

**Table C.1.4: Baseline means of wealth and food security indicators, by response and treatment status**

	Control			Treatment			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4)	P-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wealth Index	0.14	-0.15	0.00	0.06	0.06	0.96	0.08	0.47
Lowest tertile	0.27	0.43	0.00	0.33	0.32	0.72	-0.06	0.17
Middle tertile	0.33	0.26	0.11	0.33	0.33	0.97	0.01	0.88
Highest tertile	0.40	0.31	0.08	0.34	0.36	0.73	0.05	0.25
Food Consumption Score (FCS)	34.53	33.93	0.69	33.55	35.19	0.21	0.98	0.57
FCS Poor	0.21	0.19	0.63	0.21	0.21	0.95	-0.00	0.94
FCS Borderline	0.42	0.42	0.94	0.41	0.39	0.56	0.01	0.91
FCS Acceptable	0.38	0.39	0.77	0.38	0.40	0.49	-0.00	0.97
<i>N</i>	197	598		309	759			

P-values are reported from Wald tests on the equality of means of Treatment and Control for each variable. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

## C.2 Control versus CCT Only

**Table C.2.1: Baseline means of youth characteristics, by response and treatment status (CCT Only)**

	Control			CCT Only			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4)	P-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age in years	18.99	19.34	0.29	19.23	19.75	0.25	-0.25	0.52
Female	0.50	0.52	0.62	0.53	0.53	0.97	-0.03	0.46
Single/never married	0.79	0.78	0.91	0.73	0.80	0.18	0.05	0.26
Ever had spouse	0.21	0.22	0.91	0.27	0.20	0.18	-0.05	0.26
No education	0.18	0.21	0.35	0.14	0.23	0.05	0.04	0.34
Some primary	0.28	0.23	0.11	0.33	0.17	0.00	-0.05	0.17
Completed primary	0.39	0.43	0.50	0.41	0.49	0.09	-0.02	0.69
Has at least some secondary education	0.15	0.13	0.44	0.11	0.11	0.79	0.03	0.27
<i>N</i>	197	598		197	406			

P-values are reported from Wald tests on the equality of means of 'CCT Only' and Control for each variable. The 'CCT Only' sample includes communities with only CCT being administered. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

**Table C.2.2: Baseline means of household demographics, by response and treatment status (CCT Only)**

	Control			CCT Only			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4)	P-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Christian household	0.41	0.43	0.78	0.49	0.47	0.74	-0.08	0.39
Muslim household	0.39	0.37	0.66	0.32	0.30	0.71	0.07	0.50
Nonreligious household	0.20	0.20	0.88	0.19	0.23	0.40	0.00	0.97
Female headed household	0.27	0.31	0.37	0.27	0.26	0.74	0.00	0.99
Household size	7.45	7.62	0.58	7.14	7.14	0.99	0.31	0.27
Dependency ratio	1.31	1.17	0.20	1.25	1.10	0.08	0.07	0.43
Adults in household have no education	0.12	0.10	0.37	0.12	0.15	0.51	0.00	0.96
Highest education for adults is some primary	0.10	0.11	0.64	0.11	0.06	0.09	-0.01	0.73
Highest education for adults is primary completed	0.55	0.61	0.18	0.57	0.62	0.39	-0.03	0.59
Highest education for adults is at least some secondary	0.24	0.19	0.18	0.20	0.17	0.28	0.04	0.43
<i>N</i>	197	598		197	406			

P-values are reported from Wald tests on the equality of means of 'CCT Only' and Control for each variable. The 'CCT Only' sample includes communities with only CCT being administered. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

**Table C.2.3: Baseline means of housing characteristics, by response and treatment status (CCT Only)**

	Control			CCT Only			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4)	P-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Improved roof	0.40	0.36	0.23	0.40	0.38	0.61	-0.00	0.98
Improved floor	0.03	0.00	0.00	0.05	0.07	0.62	-0.02	0.40
Dwelling in poor conditions	0.53	0.63	0.02	0.46	0.56	0.03	0.07	0.20
<i>N</i>	197	598		197	406			

P-values are reported from Wald tests on the equality of means of 'CCT Only' and Control for each variable. The 'CCT Only' sample includes communities with only CCT being administered. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

**Table C.2.4: Baseline means of wealth and food security indicators, by response and treatment status (CCT Only)**

	Control			CCT Only			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4)	P-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wealth Index	0.14	-0.15	0.00	0.00	-0.01	0.92	0.14	0.25
Lowest tertile	0.27	0.43	0.00	0.34	0.30	0.37	-0.07	0.15
Middle tertile	0.33	0.26	0.11	0.36	0.38	0.80	-0.03	0.50
Highest tertile	0.40	0.31	0.08	0.30	0.32	0.65	0.10	0.04
Food Consumption Score (FCS)	34.53	33.93	0.69	34.34	34.06	0.84	0.19	0.93
FCS Poor	0.21	0.19	0.63	0.19	0.23	0.37	0.02	0.75
FCS Borderline	0.42	0.42	0.94	0.41	0.39	0.72	0.01	0.88
FCS Acceptable	0.38	0.39	0.77	0.40	0.38	0.58	-0.03	0.70
<i>N</i>	197	598		197	406			

P-values are reported from Wald tests on the equality of means of 'CCT Only' and Control for each variable. The 'CCT Only' sample includes communities with only CCT being administered. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

### C.3 Control versus CCT Plus PWP

**Table C.3.1: Baseline means of youth characteristics, by response and treatment status (CCT Plus PWP)**

	Control			CCT Plus			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4)	P-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age in years	18.99	19.34	0.29	19.19	19.90	0.09	-0.20	0.51
Female	0.50	0.52	0.62	0.54	0.46	0.17	-0.03	0.35
Single/never married	0.79	0.78	0.91	0.74	0.88	0.00	0.05	0.32
Ever had spouse	0.21	0.22	0.91	0.26	0.12	0.00	-0.05	0.32
No education	0.18	0.21	0.35	0.11	0.16	0.13	0.07	0.04
Some primary	0.28	0.23	0.11	0.33	0.14	0.00	-0.05	0.16
Completed primary	0.39	0.43	0.50	0.44	0.51	0.26	-0.05	0.32
Has at least some secondary education	0.15	0.13	0.44	0.12	0.19	0.16	0.03	0.32
<i>N</i>	197	598		112	353			

P-values are reported from Wald tests on the equality of means of 'CCT Plus' and Control for each variable. The 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

**Table C.3.2: Baseline means of household demographics, by response and treatment status (CCT Plus PWP)**

	Control			CCT Plus			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4)	P-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Christian household	0.41	0.43	0.78	0.58	0.68	0.07	-0.17	0.08
Muslim household	0.39	0.37	0.66	0.22	0.16	0.26	0.17	0.15
Nonreligious household	0.20	0.20	0.88	0.20	0.16	0.18	-0.00	0.99
Female headed household	0.27	0.31	0.37	0.20	0.20	0.98	0.08	0.16
Household size	7.45	7.62	0.58	7.34	8.21	0.02	0.11	0.72
Dependency ratio	1.31	1.17	0.20	1.23	1.12	0.27	0.08	0.35
Adults in household have no education	0.12	0.10	0.37	0.07	0.05	0.59	0.05	0.02
Highest education for adults is some primary	0.10	0.11	0.64	0.10	0.04	0.03	-0.00	0.97
Highest education for adults is primary completed	0.55	0.61	0.18	0.65	0.58	0.25	-0.10	0.06
Highest education for adults is at least some secondary	0.24	0.19	0.18	0.18	0.33	0.01	0.06	0.22
<i>N</i>	197	598		112	353			

P-values are reported from Wald tests on the equality of means of 'CCT Plus' and Control for each variable. The 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

**Table C.3.3: Baseline means of housing characteristics, by response and treatment status (CCT Plus PWP)**

	Control			Treatment			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4)	P-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Improved roof	0.40	0.36	0.23	0.39	0.38	0.82	0.01	0.89
Improved floor	0.03	0.00	0.00	0.07	0.04	0.14	-0.04	0.13
Dwelling in poor conditions	0.53	0.63	0.02	0.54	0.50	0.58	-0.01	0.92
<i>N</i>	197	598		112	353			

P-values are reported from Wald tests on the equality of means of 'CCT Plus' and Control for each variable. The 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

**Table C.3.4: Baseline means of wealth and food security indicators, by response and treatment status (CCT Plus PWP)**

	Control			Treatment			Difference	
	Nonresponse	Interviewed	P-value	Nonresponse	Interviewed	P-value	Col(1)- Col(4)	P-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wealth Index	0.14	-0.15	0.00	0.12	0.18	0.64	0.01	0.94
Lowest tertile	0.27	0.43	0.00	0.32	0.34	0.67	-0.05	0.43
Middle tertile	0.33	0.26	0.11	0.28	0.24	0.45	0.05	0.31
Highest tertile	0.40	0.31	0.08	0.40	0.42	0.72	-0.00	1.00
Food Consumption Score (FCS)	34.53	33.93	0.69	32.63	37.17	0.09	1.89	0.35
FCS Poor	0.21	0.19	0.63	0.23	0.16	0.23	-0.03	0.72
FCS Borderline	0.42	0.42	0.94	0.42	0.38	0.64	0.00	0.98
FCS Acceptable	0.38	0.39	0.77	0.35	0.46	0.10	0.02	0.73
<i>N</i>	197	598		112	353			

P-values are reported from Wald tests on the equality of means of 'CCT Plus' and Control for each variable. The 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned. Standard errors are clustered at the community level. All indicators were created using REPOA WEAI study data taken prior to youth study data collection, except in cases of new youth (N=78). N may differ slightly for some indicators.

## Appendix D: Baseline means tables for subgroups, by treatment

### D.1 Sample characteristics

#### Youth characteristics

**Table D.1.1.1: Baseline means of youth background characteristics for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Age in years	19.58	706	19.63	301	19.53	405	0.79
Ever had spouse/cohabiting partner	0.47	706	0.44	301	0.49	405	0.28
Single/never married	0.53	706	0.56	301	0.51	405	0.28
Currently enrolled in school (14-17 years only)	0.56	273	0.54	121	0.58	152	0.53
No education	0.13	701	0.14	298	0.12	403	0.47
Some primary	0.26	701	0.25	298	0.26	403	0.77
Completed primary	0.48	701	0.44	298	0.51	403	0.14
Has at least some secondary education	0.13	701	0.16	298	0.11	403	0.14
Blanket	0.37	706	0.44	301	0.31	405	0.01
Shoes	0.32	706	0.39	301	0.27	405	0.01
Two sets of clothing	0.72	706	0.75	301	0.69	405	0.15
All basic needs met	0.17	706	0.23	301	0.13	405	0.01

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.1.1.2: Baseline means of youth background characteristics for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Age in years	18.83	651	18.55	297	19.07	354	0.17
Ever had spouse/cohabiting partner	0.17	651	0.15	297	0.19	354	0.20
Single/never married	0.83	651	0.85	297	0.81	354	0.20
Currently enrolled in school (14-17 years only)	0.48	307	0.44	148	0.52	159	0.23
No education	0.09	650	0.11	297	0.07	353	0.09
Some primary	0.31	650	0.32	297	0.30	353	0.75
Completed primary	0.44	650	0.40	297	0.48	353	0.16
Has at least some secondary education	0.16	650	0.17	297	0.16	353	0.74
Blanket	0.52	649	0.52	296	0.52	353	0.89
Shoes	0.47	651	0.47	297	0.47	354	0.99
Two sets of clothing	0.75	651	0.72	297	0.77	354	0.26
All basic needs met	0.34	649	0.34	296	0.34	353	0.92

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.1.1.3: Baseline means of youth background characteristics for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Age in years	17.71	1,123	17.61	499	17.78	624	0.43
Ever had spouse/cohabiting partner	0.23	1,123	0.19	499	0.27	624	0.04
Single/never married	0.77	1,123	0.81	499	0.73	624	0.04
Currently enrolled in school (14-17 years only)	0.52	580	0.48	269	0.55	311	0.21
No education	0.09	1,121	0.10	498	0.08	623	0.41
Some primary	0.30	1,121	0.31	498	0.30	623	0.89
Completed primary	0.45	1,121	0.41	498	0.47	623	0.13
Has at least some secondary education	0.17	1,121	0.19	498	0.15	623	0.27
Blanket	0.41	1,122	0.46	498	0.38	624	0.04
Shoes	0.39	1,123	0.43	499	0.36	624	0.09
Two sets of clothing	0.72	1,123	0.74	499	0.71	624	0.50
All basic needs met	0.24	1,122	0.27	498	0.22	624	0.09

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Household demographics

**Table D.1.2.1: Balance means of household demographics for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Christian household	0.48	706	0.40	301	0.53	405	0.11
Muslim household	0.31	706	0.40	301	0.25	405	0.15
Nonreligious household	0.21	706	0.20	301	0.22	405	0.79
Female headed household	0.25	706	0.26	301	0.24	405	0.75
Household size	7.23	706	7.33	301	7.16	405	0.52
Dependency ratio	1.38	705	1.40	301	1.36	404	0.66
Adults in household have no education	0.11	706	0.13	301	0.09	405	0.16
Highest education for adults is some primary	0.11	706	0.10	301	0.12	405	0.55
Highest education for adults is primary completed	0.58	706	0.54	301	0.61	405	0.13
Highest education for adults is at least some secondary	0.20	706	0.24	301	0.18	405	0.19

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.



**Table D.1.2.2: Balance means of household demographics for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Christian household	0.48	651	0.42	297	0.53	354	0.18
Muslim household	0.34	651	0.39	297	0.30	354	0.39
Nonreligious household	0.18	651	0.19	297	0.17	354	0.72
Female headed household	0.26	651	0.29	297	0.23	354	0.23
Household size	7.44	651	7.58	297	7.32	354	0.37
Dependency ratio	1.15	648	1.22	295	1.10	353	0.14
Adults in household have no education	0.10	651	0.11	297	0.10	354	0.66
Highest education for adults is some primary	0.09	651	0.09	297	0.08	354	0.84
Highest education for adults is primary completed	0.58	651	0.56	297	0.60	354	0.38
Highest education for adults is at least some secondary	0.23	651	0.25	297	0.21	354	0.47

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.

**Table D.1.2.3: Balance means of household demographics for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Christian household	0.48	1,123	0.41	499	0.53	624	0.15
Muslim household	0.34	1,123	0.41	499	0.29	624	0.21
Nonreligious household	0.18	1,123	0.18	499	0.19	624	0.86
Female headed household	0.26	1,123	0.29	499	0.23	624	0.24
Household size	7.40	1,123	7.54	499	7.29	624	0.33
Dependency ratio	1.22	1,119	1.26	497	1.19	622	0.36
Adults in household have no education	0.10	1,123	0.11	499	0.09	624	0.22
Highest education for adults is some primary	0.10	1,123	0.10	499	0.11	624	0.61
Highest education for adults is primary completed	0.56	1,123	0.53	499	0.59	624	0.22
Highest education for adults is at least some secondary	0.24	1,123	0.26	499	0.21	624	0.28

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.

## Housing characteristics

**Table D.1.3.1: Balance means of housing characteristics for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Improved roof	0.40	689	0.40	294	0.39	395	0.86
Improved floor	0.04	703	0.04	298	0.05	405	0.59
Dwelling in poor conditions	0.50	706	0.51	301	0.49	405	0.75
Any toilet access	0.65	706	0.69	301	0.62	405	0.31

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.

**Table D.1.3.2: Balance means of housing characteristics for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Improved roof	0.40	641	0.40	292	0.41	349	0.92
Improved floor	0.06	649	0.03	295	0.08	354	0.04
Dwelling in poor conditions	0.52	651	0.55	297	0.49	354	0.39
Any toilet access	0.67	651	0.65	297	0.69	354	0.56

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.

**Table D.1.3.3: Balance means of housing characteristics for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Improved roof	0.40	1,102	0.40	490	0.40	612	0.97
Improved floor	0.06	1,118	0.04	494	0.07	624	0.14
Dwelling in poor conditions	0.52	1,123	0.54	499	0.50	624	0.47
Any toilet access	0.68	1,123	0.68	499	0.67	624	0.87

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.

## Wealth and food security

**Table D.1.4.1: Balance means of wealth and food security for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Wealth Index	0.05	706	0.08	301	0.03	405	0.66
Lowest tertile	0.31	706	0.30	301	0.32	405	0.60
Middle tertile	0.34	706	0.33	301	0.34	405	0.82
Highest tertile	0.35	706	0.37	301	0.33	405	0.47
Food Consumption Score (FCS)	33.53	706	34.80	301	32.59	405	0.26
FCS Poor	0.20	706	0.18	301	0.21	405	0.59
FCS Borderline	0.44	706	0.44	301	0.44	405	0.99
FCS Acceptable	0.36	706	0.38	301	0.35	405	0.64

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.

**Table D.1.4.2: Balance means of wealth and food security for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Wealth Index	0.14	651	0.20	297	0.09	354	0.43
Lowest tertile	0.29	651	0.24	297	0.34	354	0.07
Middle tertile	0.32	651	0.33	297	0.31	354	0.60
Highest tertile	0.39	651	0.42	297	0.36	354	0.23
Food Consumption Score (FCS)	34.47	651	34.26	297	34.64	354	0.83
FCS Poor	0.22	651	0.23	297	0.21	354	0.72
FCS Borderline	0.39	651	0.40	297	0.38	354	0.79
FCS Acceptable	0.39	651	0.37	297	0.41	354	0.59

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.

**Table D.1.4.3: Balance means of wealth and food security for youth under, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Wealth Index	0.10	1,123	0.14	499	0.07	624	0.52
Lowest tertile	0.31	1,123	0.27	499	0.33	624	0.17
Middle tertile	0.32	1,123	0.33	499	0.32	624	0.91
Highest tertile	0.37	1,123	0.40	499	0.35	624	0.24
Food Consumption Score (FCS)	33.88	1,123	34.66	499	33.26	624	0.43
FCS Poor	0.21	1,123	0.20	499	0.22	624	0.82
FCS Borderline	0.42	1,123	0.41	499	0.42	624	0.90
FCS Acceptable	0.37	1,123	0.38	499	0.36	624	0.75

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. Data come from the REPOA WEAI study data collection, implemented prior to the youth study data collection.

## D.2 Health and well-being

### Mental health

**Table D.2.1.1. Baseline means of mental health indicators for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
CES-D $\geq$ 10	0.69	611	0.66	268	0.72	343	0.26
Snyder hope scale (6-30)	17.54	633	17.80	273	17.34	360	0.37
Life will be better 5 years from now	0.31	699	0.33	298	0.30	401	0.38

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. CES-D  $\geq$ 10 binary indicator for scoring a 10 or above on the CES-D depression scale.

**Table D.2.1.2. Baseline means of mental health indicators for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
CES-D $\geq$ 10	0.57	582	0.59	266	0.56	316	0.49
Snyder hope scale (6-30)	18.70	557	19.04	255	18.41	302	0.25
Life will be better 5 years from now	0.34	649	0.33	296	0.34	353	0.94

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. CES-D  $\geq$ 10 binary indicator for scoring a 10 or above on the CES-D depression scale.

**Table D.2.1.3. Baseline means of mental health indicators for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
CES-D $\geq$ 10	0.59	983	0.59	445	0.59	538	0.92
Snyder hope scale (6-30)	18.04	980	18.31	438	17.83	542	0.25
Life will be better 5 years from now	0.34	1,116	0.36	496	0.33	620	0.39

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. CES-D  $\geq$ 10 binary indicator for scoring a 10 or above on the CES-D depression scale.

## Self-rated health

**Table D.2.2.1: Baseline means of life expectations and health for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N1	Mean	N2	
Good/excellent self-rated health	0.63	693	0.67	297	0.59	396	0.06
Same or better health compared with one year ago	0.79	703	0.82	300	0.77	403	0.13

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.2.2.2: Baseline means of life expectations and health for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N1	Mean	N2	
Good/excellent self-rated health	0.62	630	0.60	288	0.64	342	0.41
Same or better health compared with one year ago	0.83	639	0.80	294	0.86	345	0.16

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.2.2.3: Baseline means of life expectations and health for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N1	Mean	N2	
Good/excellent self-rated health	0.63	1,090	0.62	487	0.63	603	0.75
Same or better health compared with one year ago	0.81	1,109	0.81	496	0.82	613	0.69

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## D.3 Attitudes, risk-taking, and social support

### Social support

**Table D.3.1.1: Baseline means of social support indicators for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Number of family members	7.22	703	7.20	299	7.23	404	0.97
Number of close friends	1.53	663	1.33	280	1.68	383	0.00
Multidimensional scale of perceived social support	3.12	691	3.09	298	3.14	393	0.47
Multidimensional scale of perceived social support, friends subscale	2.67	691	2.56	298	2.75	393	0.05
Multidimensional scale of perceived social support, family subscale	3.58	704	3.61	300	3.55	404	0.58

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.3.1.2: Baseline means of social support indicators for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Number of family members	12.23	651	12.46	297	12.03	354	0.70
Number of close friends	3.70	646	3.34	295	4.01	351	0.31
Multidimensional scale of perceived social support	3.58	645	3.59	296	3.58	349	0.86
Multidimensional scale of perceived social support, friends subscale	3.36	647	3.35	297	3.36	350	0.85
Multidimensional scale of perceived social support, family subscale	3.80	647	3.83	296	3.78	351	0.46

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.3.1.3: Baseline means of social support indicators for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Number of family members	9.80	1,121	10.15	498	9.52	623	0.43
Number of close friends	2.73	1,090	2.51	483	2.91	607	0.29
Multidimensional scale of perceived social support	3.38	1,107	3.37	497	3.38	610	0.89
Multidimensional scale of perceived social support, friends subscale	3.02	1,109	2.98	498	3.05	611	0.47
Multidimensional scale of perceived social support, family subscale	3.74	1,118	3.76	498	3.72	620	0.47

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Attitudes towards risky behaviour

**Table D.3.2.1: Baseline means of attitudes towards risk taking for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Risk taking scale	2.56	692	2.62	297	2.51	395	0.13
Impulse control	2.92	692	2.99	298	2.87	394	0.12
Sensation seeking	2.21	696	2.26	299	2.17	397	0.31

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.3.2.2: Baseline means of attitudes towards risk taking for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Risk taking scale	2.64	643	2.67	296	2.61	347	0.53
Impulse control	2.80	644	2.87	297	2.74	347	0.26
Sensation seeking	2.46	641	2.45	294	2.47	347	0.87

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.3.2.3: Baseline means of attitudes towards risk taking for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Risk taking scale	2.58	1,102	2.63	495	2.54	607	0.16
Impulse control	2.85	1,102	2.92	496	2.79	606	0.06
Sensation seeking	2.32	1,105	2.34	495	2.30	610	0.65

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## D.4 Sexual behaviour and HIV risk

### Relationship status

**Table D.3.1.1: Baseline mean partner/relationship indicators for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Ever had spouse/cohabiting partner	0.47	706	0.44	301	0.49	405	0.28
Single/never married	0.53	706	0.56	301	0.51	405	0.28
Has a girlfriend or boyfriend	0.22	704	0.21	300	0.22	404	0.84

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.3.1.2: Baseline mean partner/relationship indicators for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Ever had spouse/cohabiting partner	0.17	651	0.15	297	0.19	354	0.20
Single/never married	0.83	651	0.85	297	0.81	354	0.20
Has a girlfriend or boyfriend	0.29	640	0.27	294	0.31	346	0.31

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.3.1.3: Baseline mean partner/relationship indicators for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Ever had spouse/cohabiting partner	0.23	1,123	0.19	499	0.27	624	0.04
Single/never married	0.77	1,123	0.81	499	0.73	624	0.04
Has a girlfriend or boyfriend	0.25	1,111	0.24	496	0.25	615	0.87

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

### First sex

**Table D.4.2.1: Baseline mean first sex indicators for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Ever had sex	0.60	705	0.60	300	0.60	405	0.85
Age at first sexual intercourse	16.14	287	16.15	138	16.12	149	0.91
First sex: condom used	0.23	272	0.27	106	0.20	166	0.17
First sex: partner 5 or more years older	0.18	420	0.20	177	0.16	243	0.28

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.4.2.2: Baseline mean first sex indicators for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Ever had sex	0.58	639	0.56	291	0.59	348	0.43
Age at first sexual intercourse	0.49	526	0.48	247	0.50	279	0.75
First sex: condom used	15.94	299	15.51	134	16.30	165	0.03
First sex: partner 5 or more years older	0.14	207	0.14	87	0.13	120	0.94

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.4.2.3: Baseline mean first sex indicators for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Ever had sex	0.52	1,111	0.51	492	0.53	619	0.69
Age at first sexual intercourse	15.81	449	15.62	210	15.98	239	0.16
First sex: condom used	0.24	325	0.27	126	0.22	199	0.43
First sex: partner 5 or more years older	0.10	576	0.11	251	0.09	325	0.52

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Recent sex

**Table D.4.3.1: Baseline mean recent sex indicators for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Lifetime number of sexual partners	2.51	419	2.56	178	2.48	241	0.75
Has had concurrent sexual relationships in last 12 months	0.09	705	0.11	300	0.07	405	0.16
Among ever had sex: has had concurrent sexual relationships in last 12 months	0.14	424	0.18	179	0.12	245	0.11
Last sex: used condom	0.24	418	0.29	177	0.21	241	0.11
Last sex: used condom - never married youth	0.39	127	0.38	63	0.41	64	0.79
Last sex: partner 5 or more years older	0.42	414	0.48	173	0.37	241	0.09
Last sex: partner 10 or more years older	0.23	414	0.25	173	0.22	241	0.62

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.4.3.2: Baseline mean recent sex indicators for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Lifetime number of sexual partners	4.62	362	5.24	159	4.13	203	0.15
Has had concurrent sexual relationships in last 12 months	0.17	646	0.17	295	0.17	351	0.83
Among ever had sex: has had concurrent sexual relationships in last 12 months	0.29	376	0.30	166	0.29	210	0.94
Last sex: used condom	0.27	330	0.28	143	0.27	187	0.82
Last sex: used condom - never married youth	0.33	224	0.29	102	0.35	122	0.37
Last sex: partner 5 or more years older	0.17	325	0.19	141	0.15	184	0.29
Last sex: partner 10 or more years older	0.05	325	0.04	141	0.06	184	0.48

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.4.3.3: Baseline mean recent sex indicators for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Lifetime number of sexual partners	3.30	574	3.82	250	2.89	324	0.05
Has had concurrent sexual relationships in last 12 months	0.12	1,118	0.14	496	0.11	622	0.28
Among ever had sex: has had concurrent sexual relationships in last 12 months	0.23	586	0.27	256	0.21	330	0.17
Last sex: used condom	0.27	548	0.29	237	0.25	311	0.48
Last sex: used condom - never married youth	0.33	320	0.31	154	0.36	166	0.42
Last sex: partner 5 or more years older	0.25	541	0.29	233	0.22	308	0.09
Last sex: partner 10 or more years older	0.10	541	0.09	233	0.11	308	0.63

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.



## Transactional sex

**Table D.4.4.1: Baseline mean transactional sex for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Last 12 months: received food/favours/gifts/money for sex	0.17	685	0.18	295	0.16	390	0.55
Last 12 months: given food/favours/gifts/money for sex	0.05	684	0.05	295	0.04	389	0.83
Last 12 months: given or received food/favours/gifts/money for sex	0.17	687	0.18	296	0.16	391	0.66

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.4.4.2: Baseline mean transactional sex for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Last 12 months: received food/favours/gifts/money for sex	0.09	644	0.10	293	0.07	351	0.27
Last 12 months: given food/favours/gifts/money for sex	0.25	645	0.26	295	0.24	350	0.55
Last 12 months: given or received food/favours/gifts/money for sex	0.26	646	0.27	295	0.26	351	0.69

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.4.4.3: Baseline mean transactional sex for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Last 12 months: received food/favours/gifts/money for sex	0.12	1,104	0.12	492	0.11	612	0.51
Last 12 months: given food/favours/gifts/money for sex	0.14	1,104	0.16	494	0.13	610	0.18
Last 12 months: given or received food/favours/gifts/money for sex	0.20	1,107	0.22	494	0.19	613	0.37

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level

## Perceived HIV risk

**Table D.4.5.1: Baseline mean of perceived HIV risk indicators for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Perceived HIV risk: moderate/high	0.21	638	0.20	277	0.22	361	0.44
Perceived HIV risk: low	0.16	638	0.13	277	0.17	361	0.20
Perceived HIV risk: none	0.63	638	0.67	277	0.60	361	0.15
Tested for HIV: Lifetime	0.49	702	0.50	299	0.49	403	0.86
Tested for HIV: 12 months	0.35	702	0.35	299	0.34	403	0.78
Received HIV test results: 12 months	0.99	243	0.99	104	0.99	139	0.72
Perceived HIV risk: moderate/high - Never married youth	0.14	339	0.15	156	0.14	183	0.71
Perceived HIV risk: low - Never married youth	0.10	339	0.10	156	0.10	183	0.95
Perceived HIV risk: none - Never married youth	0.76	339	0.75	156	0.77	183	0.80
Tested for HIV: Lifetime - Never married youth	0.23	371	0.27	167	0.20	204	0.04
Tested for HIV: 12 months - Never married youth	0.16	371	0.20	167	0.13	204	0.05

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.4.5.2: Baseline mean of perceived HIV risk indicators for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Perceived HIV risk: moderate/high	0.18	604	0.16	277	0.21	327	0.13
Perceived HIV risk: low	0.24	604	0.25	277	0.22	327	0.39
Perceived HIV risk: none	0.58	604	0.59	277	0.57	327	0.69
Tested for HIV: Lifetime	0.36	646	0.37	295	0.35	351	0.56
Tested for HIV: 12 months	0.26	646	0.27	295	0.26	351	0.78
Perceived HIV risk: moderate/high - Never married youth	0.16	495	0.13	235	0.19	260	0.11
Perceived HIV risk: low - Never married youth	0.22	495	0.24	235	0.20	260	0.32
Perceived HIV risk: none - Never married youth	0.62	495	0.63	235	0.61	260	0.77
Tested for HIV: Lifetime - Never married youth	0.29	533	0.32	251	0.26	282	0.10
Tested for HIV: 12 months - Never married youth	0.20	533	0.22	251	0.17	282	0.29

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.4.5.3: Baseline mean of perceived HIV risk indicators for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Perceived HIV risk: moderate/high	0.17	1,029	0.15	463	0.18	566	0.13
Perceived HIV risk: low	0.19	1,029	0.19	463	0.19	566	0.92
Perceived HIV risk: none	0.64	1,029	0.66	463	0.63	566	0.41
Tested for HIV: Lifetime	0.35	1,115	0.37	495	0.35	620	0.51
Tested for HIV: 12 months	0.26	1,115	0.26	495	0.25	620	0.85
Perceived HIV risk: moderate/high - Never married youth	0.14	790	0.13	374	0.15	416	0.57
Perceived HIV risk: low - Never married youth	0.17	790	0.19	374	0.16	416	0.32
Perceived HIV risk: none - Never married youth	0.69	790	0.68	374	0.69	416	0.73
Tested for HIV: Lifetime - Never married youth	0.24	854	0.29	400	0.20	454	0.00
Tested for HIV: 12 months - Never married youth	0.17	854	0.20	400	0.14	454	0.04

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## D.5 Contraception and fertility

### Contraceptive use

**Table D.5.1.1: Baseline mean contraceptive use indicators for females, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Currently using contraceptive	0.29	420	0.30	178	0.28	242	0.73
Currently using modern contraceptive	0.27	420	0.29	178	0.26	242	0.65

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.5.1.2: Baseline mean contraceptive use indicators for males, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Currently using contraceptive	0.20	348	0.20	154	0.20	194	1.00
Currently using modern contraceptive	0.20	348	0.20	154	0.20	194	0.92

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

**Table D.5.1.3: Baseline mean contraceptive use indicators for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Currently using contraceptive	0.23	557	0.24	244	0.22	313	0.69
Currently using modern contraceptive	0.22	557	0.24	244	0.21	313	0.61

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Fertility<sup>57</sup>

**Table D.5.2.1: Baseline mean fertility indicators for youth under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Currently pregnant	0.06	567	0.07	238	0.05	329	0.49
Ever had pregnancy end in miscarriage/abortion/stillbirth	0.07	569	0.05	238	0.08	331	0.18
Total fertility	0.70	546	0.68	225	0.71	321	0.81
Ever pregnant	0.41	569	0.42	238	0.40	331	0.81
Age at first pregnancy	17.65	229	17.66	97	17.64	132	0.95
Males: ever got female pregnant	0.11	551	0.11	260	0.11	291	0.84

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## D.6 Physical, sexual, and emotional violence<sup>58</sup>

### Acceptance of physical intimate partner abuse

**Table D.6.1.1: Baseline means of beliefs regarding intimate partner violence (IPV) justification for females under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Believes husband is justified in hitting wife	0.71	564	0.73	237	0.69	327	0.34
Justify IPV - goes out without telling him	0.40	552	0.45	231	0.36	321	0.11
Justify IPV - neglects children	0.46	555	0.51	231	0.44	324	0.15
Justify IPV - argues with him	0.51	553	0.56	232	0.46	321	0.06
Justify IPV - refuses sex	0.32	515	0.36	209	0.29	306	0.08
Justify IPV - burns the food	0.27	555	0.32	232	0.23	323	0.03

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Emotional violence

**Table D.6.2.1: Baseline means of emotional violence indicators for females under 25 (past 12 months), by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Emotional abuse	0.53	567	0.54	237	0.53	330	0.71
Emotional violence from partner/spouse	0.08	567	0.09	237	0.08	330	0.77
Emotional violence from family member	0.21	567	0.22	237	0.21	330	0.88
Emotional violence from authority	0.01	567	0.01	237	0.01	330	0.43
Emotional violence from peer	0.14	567	0.11	237	0.16	330	0.17
Emotional violence from other perpetrator	0.15	567	0.18	237	0.13	330	0.07

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

<sup>57</sup> No subgroup analysis tables by gender due to gendered indicators in table.

<sup>58</sup> No subgroup analyses by gender since only females responded to violence module (analysis for full female sample in main report).

## Physical violence

**Table D.6.3.1: Baseline means of physical violence indicators for females under 25 (past 12 months), by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Experienced physical violence	0.29	568	0.28	238	0.30	330	0.65
Experienced physical violence among 14-17 year olds	0.34	273	0.31	121	0.37	152	0.32
Experienced physical violence from partner/spouse	0.05	568	0.04	238	0.06	330	0.12
Among ever partnered females: experienced physical IPV	0.11	211	0.09	77	0.13	134	0.36
Among females with boyfriend: experienced physical IPV	0.06	124	0.06	53	0.06	71	0.99
Experienced physical violence from family member	0.12	568	0.12	238	0.12	330	0.94
Experienced physical violence from authority	0.02	568	0.02	238	0.03	330	0.37
Experienced physical violence from peer	0.09	568	0.08	238	0.09	330	0.69
Experienced physical violence from other perpetrator	0.02	568	0.03	238	0.02	330	0.47

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Sexual violence

**Table D.6.4.1: Baseline mean of sexual violence indicators for females under 25, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
First sex forced/pressured/tricked - among all youth	0.12	567	0.10	237	0.13	330	0.25
Experienced forced sex - lifetime	0.18	566	0.16	238	0.19	328	0.41
Experienced forced sex - 12 months	0.15	566	0.13	238	0.17	328	0.28
Experienced other forced sexual acts - lifetime	0.13	565	0.12	237	0.13	328	0.67
Experienced other forced sexual acts - 12 months	0.10	565	0.08	237	0.10	328	0.42
Experienced sexual violence - lifetime	0.22	567	0.21	238	0.22	329	0.84
Experienced sexual violence - 12 months	0.19	567	0.18	238	0.19	329	0.71
Experienced sexual violence - 12 months among 14-17 year olds	0.11	273	0.12	121	0.11	152	0.93

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Reporting and help-seeking

**Table D.6.5.1: Baseline means of violence-related help-seeking indicators for females under 25 who reported emotional or physical violence last 12 months, by treatment status**

Variables	Pooled		Control		Treatment		p-value
	Mean	N	Mean	N	Mean	N	
Sought help for emotional/physical violence	0.25	339	0.19	144	0.29	195	0.09
Sought help from friends ,family, neighbour for emotional/physical violence	0.21	339	0.18	144	0.24	195	0.30
Sought help from social service for emotional/physical violence	0.00	339	0.01	144	0.00	195	0.32
Sought help from authority figure for emotional/physical violence	0.01	339	0.00	144	0.02	195	0.04

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.

## Appendix E: Baseline means tables, by treatment (two treatment arms)

### E.1 Community characteristics

**Table E.1.1: Balance of districts, by treatment (two treatment arms)**

Variables	Control Mean	CCT Mean	CCT + PWP Mean	CCT-C p-value	PWP-C p-value
Handeni	0.14	0.11	0.10	0.71	0.68
Kisarawe	0.14	0.14	0.10	0.96	0.68
Kilosa	0.14	0.11	0.10	0.71	0.68
Itilima	0.08	0.14	0.15	0.46	0.45
Kahama Town Council	0.08	0.14	0.15	0.46	0.45
Mbogwe (Geita region)	0.14	0.11	0.10	0.71	0.68
Uyui(Tabora)	0.14	0.11	0.10	0.71	0.68
Misungwi	0.14	0.14	0.20	0.96	0.56
<i>N</i>	36	28	20		

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.1.2: Baseline mean of access to services/facilities, by treatment (two treatment arms)**

Variables	Control Mean	CCT Mean	CCT + PWP Mean	CCT-C p-value	PWP-C p-value
Weekly market	0.33	0.36	0.30	0.85	0.80
Daily market	0.08	0.11	0.15	0.75	0.45
ADMARC market	0.00	0.07	0.05	0.11	0.18
Any market	0.36	0.39	0.40	0.80	0.78
Distance to nearest market	10.42	9.14	6.15	0.81	0.41
Government primary school in community	0.67	0.57	0.55	0.44	0.40
Distance to nearest gov't primary school	0.53	0.59	0.55	0.87	0.96
Government secondary school in community	0.25	0.18	0.10	0.50	0.18
Distance to nearest gov't secondary school	6.45	4.57	5.69	0.44	0.79
Health clinic in community	0.22	0.25	0.15	0.80	0.52
Distance to nearest health clinic	5.98	4.36	6.08	0.34	0.96
Health clinic with MD in community	0.11	0.25	0.15	0.15	0.68
Distance to nearest health clinic with MD	6.10	4.61	6.45	0.38	0.86
Medicine available for purchase in community	0.56	0.61	0.45	0.68	0.46
Distance to nearest location to purchase medicine	2.81	1.65	3.44	0.30	0.67
Tar/asphalt road in community	0.14	0.14	0.15	0.96	0.91
Distance to nearest tar/asphalt road	27.98	21.25	12.60	0.34	0.04
<i>N</i>	36	28	20		

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.1.3: Balance of shocks in last 12 months, by treatment (two treatment arms)**

Variables	Control Mean	CCT Mean	CCT + PWP Mean	CCT-C p-value	PWP-C p-value
Drought	0.58	0.68	0.70	0.44	0.40
Flood	0.08	0.07	0.00	0.86	0.19
Crop disease/pests	0.75	0.75	0.80	1.00	0.68
Livestock disease	0.81	0.86	0.80	0.59	0.96
Human epidemic/disease	0.31	0.25	0.25	0.63	0.67
Sharp change in prices	0.97	0.93	0.75	0.42	0.01
Massive job lay-offs	0.00	0.00	0.05		0.18
Loss of key social services	0.22	0.29	0.20	0.57	0.85
Power outage	0.14	0.14	0.15	0.96	0.91
New employment opportunity	0.00	0.07	0.05	0.11	0.18
New health facility	0.00	0.04	0.05	0.26	0.18
New road	0.03	0.04	0.00	0.86	0.46
New school	0.00	0.04	0.00	0.26	
On-grid electricity	0.08	0.11	0.10	0.75	0.84
Off-grid electricity	0.14	0.14	0.25	0.96	0.31
Improved transportation	0.17	0.25	0.10	0.42	0.50
Development program	0.22	0.32	0.40	0.38	0.16
N	36	28	20		

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

## E.2 Sample characteristics

**Table E.2.1: Baseline means of youth background characteristics, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Age in years	19.09	598	19.36	406	19.27	353	0.51	0.55
Female	0.50	598	0.53	406	0.54	353	0.46	0.35
Ever had spouse/cohabiting partner	0.29	598	0.35	406	0.35	353	0.17	0.25
Single/never married	0.71	598	0.65	406	0.65	353	0.17	0.25
Currently enrolled in school (14-17 years only)	0.48	269	0.51	167	0.58	144	0.63	0.07
No education	0.13	595	0.10	405	0.08	351	0.42	0.13
Some primary	0.28	595	0.27	405	0.29	351	0.80	0.87
Completed primary	0.42	595	0.50	405	0.49	351	0.12	0.14
Has at least some secondary education	0.16	595	0.13	405	0.14	351	0.29	0.41
Blanket	0.48	597	0.41	405	0.41	353	0.09	0.16
Shoes	0.43	598	0.34	406	0.39	353	0.04	0.47
Two sets of clothing	0.74	598	0.72	406	0.73	353	0.53	0.90
All basic needs met	0.28	597	0.22	405	0.25	353	0.05	0.35

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.



**Table E.2.2: Baseline means of household demographics, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Christian household	0.41	598	0.49	406	0.58	353	0.39	0.08
Muslim household	0.39	598	0.32	406	0.22	353	0.50	0.15
Nonreligious household	0.20	598	0.19	406	0.20	353	0.97	0.99
Female headed household	0.27	598	0.27	406	0.20	353	0.99	0.16
Household size	7.45	598	7.14	406	7.34	353	0.27	0.72
Dependency ratio	1.31	596	1.25	405	1.23	352	0.43	0.35
Adults in household have no education	0.12	598	0.12	406	0.07	353	0.96	0.02
Highest education for adults is some primary	0.10	598	0.11	406	0.10	353	0.73	0.97
Highest education for adults is primary completed	0.55	598	0.57	406	0.65	353	0.59	0.06
Highest education for adults is at least some secondary	0.24	598	0.20	406	0.18	353	0.43	0.22

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.2.3: Baseline means of housing characteristics, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Improved roof	0.40	586	0.40	393	0.39	351	0.98	0.89
Improved floor	0.03	593	0.05	406	0.07	353	0.40	0.13
Dwelling in poor conditions	0.53	598	0.46	406	0.54	353	0.20	0.92
Any toilet access	0.67	598	0.66	406	0.65	353	0.82	0.80

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.2.4: Baseline means of wealth and food security, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Wealth Index	0.14	598	0.00	406	0.12	353	0.25	0.94
Lowest tertile	0.27	598	0.34	406	0.32	353	0.15	0.43
Middle tertile	0.33	598	0.36	406	0.28	353	0.50	0.31
Highest tertile	0.40	598	0.30	406	0.40	353	0.04	1.00
Food Consumption Score (FCS)	34.53	598	34.34	406	32.63	353	0.93	0.35
FCS Poor	0.21	598	0.19	406	0.23	353	0.75	0.72
FCS Borderline	0.42	598	0.41	406	0.42	353	0.88	0.98
FCS Acceptable	0.38	598	0.40	406	0.35	353	0.70	0.73

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

## E.3 Health and well-being

**Table E.3.1. Baseline means of mental health indicators, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
CES-D $\geq$ 10	0.63	534	0.64	354	0.64	305	0.69	0.73
Snyder hope scale (6-30)	18.40	528	17.90	354	17.76	308	0.32	0.14
Life will be better 5 years from now	0.32	620	0.29	435	0.30	371	0.42	0.59

Notes: Bivariate regressions test difference between each treatment group and control. Standard errors are clustered at the community level. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned. CES-D  $\geq$ 10 binary indicator for scoring a 10 or above on the CES-D depression scale.

**Table E.3.2: Baseline means of life expectations and health, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Good/excellent self-rated health	0.63	585	0.56	397	0.68	341	0.05	0.23
Same or better health compared with one year ago	0.81	594	0.80	403	0.82	345	0.70	0.64

Notes: Bivariate regressions test difference between each treatment group and control. Standard errors are clustered at the community level. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

## E.4 Attitudes, risk-taking, and social support

**Table E.4.1: Baseline means of social support indicators, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Number of family members	9.83	596	9.04	406	9.97	352	0.28	0.89
Number of close friends	2.36	575	2.56	388	3.06	346	0.50	0.24
Multidimensional scale of perceived social support	3.34	594	3.26	394	3.45	348	0.20	0.10
Multidimensional scale of perceived social support, friends subscale	2.95	595	2.91	395	3.19	348	0.59	0.04
Multidimensional scale of perceived social support, family subscale	3.72	596	3.61	403	3.72	352	0.08	0.97

Notes: Bivariate regressions test difference between each treatment group and control. Standard errors are clustered at the community level. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.4.2: Baseline means of attitudes towards risk taking, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Risk taking scale	2.64	593	2.59	399	2.51	343	0.43	0.08
Impulse control	2.93	595	2.84	399	2.78	342	0.23	0.07
Sensation seeking	2.35	593	2.36	399	2.26	345	0.98	0.32

Notes: Bivariate regressions test difference between each treatment group and control. Standard errors are clustered at the community level. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

## E.5 Sexual behaviour and HIV risk

**Table E.5.1: Baseline means of partner/relationship indicators, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Ever had spouse/cohabiting partner	0.29	598	0.35	406	0.35	353	0.17	0.25
Single/never married	0.71	598	0.65	406	0.65	353	0.17	0.25
Has a girlfriend or boyfriend	0.24	594	0.28	402	0.23	348	0.17	0.81

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.5.2: Baseline means of first sex indicators, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Ever had sex	0.58	591	0.61	402	0.59	351	0.45	0.79
Age at first sexual intercourse	15.83	272	16.09	175	16.37	139	0.38	0.07
First sex: condom used	0.21	193	0.15	149	0.20	137	0.17	0.82
First sex: partner 5 or more years older	0.12	337	0.10	241	0.07	207	0.52	0.05

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.5.3: Baseline means of recent sex indicators, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Lifetime number of sexual partners	3.82	337	3.36	241	3.09	203	0.26	0.07
Has had concurrent sexual relationships in last 12 months	0.14	595	0.14	403	0.10	353	0.99	0.13
Among ever had sex: has had concurrent sexual relationships in last 12 months	0.23	345	0.22	246	0.17	209	0.80	0.07
Last sex: used condom	0.28	320	0.24	234	0.23	194	0.32	0.37
Last sex: used condom - never married youth	0.33	165	0.40	106	0.34	80	0.24	0.91
Last sex: partner 5 or more years older	0.35	314	0.29	232	0.26	193	0.30	0.05
Last sex: partner 10 or more years older	0.16	314	0.18	232	0.12	193	0.57	0.23

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.5.4: Baseline means of transactional sex indicators, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Last 12 months: received food/favours/gifts/money for sex	0.14	588	0.15	394	0.08	347	0.65	0.02
Last 12 months: given food/favours/gifts/money for sex	0.16	590	0.16	393	0.12	346	0.98	0.11
Last 12 months: given or received food/favours/gifts/money for sex	0.23	591	0.25	395	0.16	347	0.58	0.05

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.5.5: Baseline means of perceived HIV risk indicators, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Perceived HIV risk: moderate/high	0.18	554	0.22	372	0.22	316	0.15	0.17
Perceived HIV risk: low	0.19	554	0.19	372	0.21	316	0.77	0.66
Perceived HIV risk: none	0.63	554	0.60	372	0.58	316	0.43	0.15
Tested for HIV: Lifetime	0.43	594	0.41	403	0.44	351	0.59	0.97
Tested for HIV: 12 months	0.31	594	0.31	403	0.29	351	0.97	0.57
Received HIV test results: 12 months	0.99	183	0.98	125	0.97	104	0.36	0.12
Perceived HIV risk: moderate/high - Never married youth	0.14	391	0.17	241	0.17	202	0.45	0.39
Perceived HIV risk: low - Never married youth	0.18	391	0.14	241	0.18	202	0.14	0.98
Perceived HIV risk: none - Never married youth	0.68	391	0.70	241	0.65	202	0.72	0.56
Tested for HIV: Lifetime - Never married youth	0.30	418	0.24	260	0.22	226	0.08	0.04
Tested for HIV: 12 months - Never married youth	0.21	418	0.18	260	0.13	226	0.36	0.03

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

## E.6 Contraception and fertility

**Table E.6.1: Baseline means of contraceptive use indicators, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Currently using contraceptive	0.25	332	0.27	237	0.21	199	0.70	0.43
Currently using modern contraceptive	0.25	332	0.27	237	0.19	199	0.72	0.34

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.6.2: Baseline means of fertility indicators, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Currently pregnant	0.09	301	0.08	212	0.06	190	0.96	0.32
Ever had pregnancy end in miscarriage/abortion/stillbirth	0.08	301	0.13	215	0.12	190	0.13	0.17
Total fertility	1.23	282	1.24	205	1.19	185	0.97	0.83
Ever pregnant	0.51	301	0.53	215	0.47	190	0.69	0.45
Age at first pregnancy	17.79	150	17.88	113	17.93	88	0.74	0.62
Males: ever got female pregnant	0.19	296	0.22	188	0.20	163	0.44	0.77

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

## E.7 Physical, sexual, and emotional violence

**Table E.7.1: Baseline means of beliefs regarding intimate partner violence justification for females, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Believes husband is justified in hitting wife	0.72	300	0.69	214	0.68	187	0.48	0.46
Justify domestic violence - goes out without telling him	0.43	294	0.42	209	0.36	186	0.90	0.29
Justify domestic violence - neglects children	0.51	293	0.47	212	0.42	186	0.46	0.12
Justify domestic violence - argues with him	0.55	294	0.45	209	0.48	186	0.09	0.24
Justify domestic violence - refuses sex	0.36	272	0.32	198	0.31	182	0.32	0.26
Justify domestic violence - burns the food	0.28	295	0.19	210	0.27	186	0.03	0.82

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level.. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.7.2: Baseline means of emotional violence indicators for females (past 12 months), by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Emotional abuse	0.55	300	0.61	214	0.47	190	0.15	0.20
Emotional violence from partner/spouse	0.12	300	0.14	214	0.06	190	0.52	0.03
Emotional violence from family member	0.20	300	0.20	214	0.18	190	0.95	0.65
Emotional violence from authority	0.01	300	0.01	214	0.00	190	0.94	0.08
Emotional violence from peer	0.10	300	0.15	214	0.15	190	0.18	0.23
Emotional violence from other perpetrator	0.19	300	0.16	214	0.13	190	0.38	0.10

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.7.3: Baseline means of physical violence indicators for females (past 12 months), by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Experienced physical violence	0.28	301	0.35	214	0.24	190	0.15	0.27
Experienced physical violence among 14-17 year olds	0.31	121	0.37	78	0.36	74	0.34	0.46
Experienced physical violence from partner/spouse	0.08	301	0.12	214	0.06	190	0.18	0.48
Among ever partnered females: experienced physical IPV	0.16	132	0.18	105	0.12	95	0.60	0.24
Among females with boyfriend: experienced physical IPV	0.06	65	0.09	53	0.05	37	0.45	0.85
Experienced physical violence from family member	0.10	301	0.12	214	0.09	190	0.47	0.75
Experienced physical violence from authority	0.01	301	0.03	214	0.01	190	0.13	0.78
Experienced physical violence from peer	0.07	301	0.10	214	0.06	190	0.31	0.76
Experienced physical violence from other perpetrator	0.03	301	0.02	214	0.02	190	0.43	0.55

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.7.4: Baseline means of sexual violence indicators for females, by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
First sex forced/pressured/tricked - among all youth	0.10	300	0.15	214	0.11	190	0.18	0.83
Experienced forced sex - lifetime	0.17	300	0.22	213	0.17	189	0.22	0.99
Experienced forced sex - 12 months	0.14	300	0.19	213	0.14	189	0.19	0.96
Experienced other forced sexual acts - lifetime	0.12	299	0.15	213	0.10	189	0.35	0.31
Experienced other forced sexual acts - 12 months	0.10	299	0.12	213	0.07	189	0.39	0.34
Experienced sexual violence - lifetime	0.23	300	0.24	214	0.20	189	0.71	0.58
Experienced sexual violence - 12 months	0.19	300	0.21	214	0.16	189	0.70	0.52
Experienced sexual violence - 12 months among 14-17 year olds	0.12	121	0.12	78	0.11	74	1.00	0.87

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.

**Table E.7.5: Baseline means of violence-related help-seeking indicators for females who reported emotional or physical violence (past 12 months), by treatment status (two treatment arms)**

Variables	Control		CCT Only		CCT Plus		CCT Only vs. C p-value	CCT Plus vs. C p-value
	Mean	N	Mean	N	Mean	N		
Sought any help for emotional/physical violence	0.22	183	0.28	140	0.34	103	0.23	0.06
Informal help-seeking	0.20	183	0.23	140	0.26	103	0.58	0.26
Sought help from social service	0.01	183	0.01	140	0.00	103	0.85	0.32
Sought help from authority figure	0.01	183	0.02	140	0.03	103	0.21	0.15

Notes: Bivariate regressions test difference between treatment and control groups. Standard errors are clustered at the community level. The 'CCT Only' sample includes communities with only CCT being administered; 'CCT Plus' communities have CCT and Public Works Programs (PWP) planned.