A Cash Plus Model for Safe Transitions to a Healthy and Productive Adulthood
Midline Report

Tanzania Social Action Fund (TASAF)

Tanzania Commission for AIDS (TACAIDS)

UNICEF Tanzania

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University at Buffalo

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ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
ANCOVA	analysis of covariance
ATT	average treatment on the treated
CES-D	Centre for Epidemiological Studies–Depression Scale
EDI	Economic Development Initiatives
ELDI	enhanced life distress index
GEM	Gender-Equitable Men (Scale)
HIV	Human Immunodeficiency Virus
ITT	intent to treat
PAA	project authority areas
PSSN	Productive Social Safety Net
PWP	public works programme
SRH	sexual and reproductive health
STI	sexually transmitted infection
SWOT	strengths, weaknesses, opportunities and threats
TACAIDS	Tanzania Commission for AIDS
TASAF	Tanzania Social Action Fund
TZS	Tanzanian shilling
UNICEF	United Nations Children's Fund

GLOSSARY OF KEY TERMS

Analysis of covariance (ANCOVA): This is an econometric model that evaluates whether the means of a dependent variable (the outcome) are equal across levels of a categorical independent variable, often called a treatment, while statistically controlling for the effects of other continuous variables that are not of primary interest, known as covariates or nuisance variables.

Attrition: This occurs if individuals interviewed at baseline are not found (and so not interviewed) at follow-up. These individuals 'attrited', that is, they were lost to the follow-up.

Average treatment on the treated (ATT): This refers to the effects of an intervention on those receiving the intervention, that is, participating in the policy or programme.

Baseline balance: This is verified if outcomes are similar at baseline among the treatment and control groups. It allows the conclusion that the differences observed at follow-up on the same outcome are attributable to the intervention rather than to systematic differences that existed at baseline between the treatment and control groups.

Cash plus: This refers to social protection programmes that combine cash transfers with 'plus' initiatives that link beneficiaries to other services and interventions. Such complementary interventions may include access to services (health care, education, social services), livelihood strengthening interventions, or behaviour change communication on topics such as family planning, HIV, nutrition, hygiene and sanitation.

Control: The control group is the group of adolescents in villages that did not receive the plus intervention. This group and the treatment group are compared over time to estimate the impacts of the cash plus intervention.

Counterfactual: This refers to the outcomes in the absence of a policy, i.e., what would have occurred without the intervention.

Difference in differences: This is an estimation strategy whereby changes in the treatment group between baseline and midline are compared with changes in the control group over the same period. The control group allows researchers to identify changes that may have occurred because of other factors – e.g., floods, recession, inflation, rapid economic development – thus making it possible to isolate the impacts of the cash plus intervention.

Differential attrition: This occurs if the characteristics of the individuals who are lost to follow-up are different between the treatment and control groups. It threatens the internal validity of the study because it can eliminate the baseline balance.

Impact evaluation: An impact evaluation relies on rigorous methods to determine the changes in outcomes that can be attributed to a specific intervention, such as a project, programme or policy. It provides evidence of what works and what does not work.

Intent to treat (ITT): This refers to the effects of an intervention on the whole eligible population, i.e., those who are the subject of the intervention.

Inverse probability weighting: This is a statistical procedure whereby the observations in the panel sample are weighted so they 'look like' the original sample at baseline. This is accomplished by obtaining the predicted probability that youth are observed at midline, estimated from characteristics such as household dwelling characteristics, and baseline values of youth outcomes. The weights are obtained as the inverse of this probability.

Overall attrition: This represents the total share of individuals lost from baseline to follow-up, regardless of treatment status. It can lead to less accurate and less representative impact estimates but does not threaten the internal validity of the study, that is, the ability to attribute to the intervention the differences at follow-up between the study arms.

Social protection: Social protection comprises the set of programmes and policies that aim to reduce poverty, as well as the vulnerability to multidimensional poverty. Cash transfers are a common tool within the umbrella of social protection.

Treatment: This refers to the intervention itself. Receiving the treatment means participating in the intervention (the Cash Plus Programme).

EXECUTIVE SUMMARY

This report provides midline findings from the impact evaluation of a cash plus model for safe transitions to a healthy and productive adulthood that is being implemented within the Productive Social Safety Net (PSSN) of the Government of the United Republic of Tanzania, in collaboration with the Tanzania Commission for AIDS (TACAIDS) and with the technical assistance of the United Nations Children's Fund (UNICEF). This impact evaluation is a 24-month, mixed methods study. The study is aimed at providing evidence on the potential for an additional (plus) component targeting youth to be layered on top of a government cash transfer programme. The plus component was designed to improve the economic opportunities open to youth in the future and to facilitate among youth a safe transition to adulthood.

The cash plus intervention model was the focus of a workshop held in the United Republic of Tanzania in February 2016 with the Government, researchers and development partners. It reflects the recognition that cash alone is rarely sufficient to mitigate all the risks and vulnerabilities youth face or to overcome structural barriers to education, non-risk behaviours, delays in marriage and pregnancy, and other safe transitions. The intervention follows a capacity- and asset-building framework that recognizes that youth need a combination of social, health and financial assets to transition safely to adulthood. The entry point for this adolescent cash plus pilot project in the government cash transfer programme, the PSSN of the Tanzania Social Action Fund (TASAF), is the livelihoods enhancement component. The intervention and study examine how economic empowerment (through an asset transfer, livelihood skills and mentoring), combined with HIV and sexual and reproductive health (SRH) education, mentoring and links to strengthened adolescent-friendly SRH services, can enable adolescents to leverage the participation of their households in the government cash transfer programme for their own benefit. The aim is to reduce extreme poverty and break the intergenerational cycle of poverty to achieve improved well-being among youth today and increase their opportunities and capacities for the future. The intervention is being implemented by TASAF, in collaboration with TACAIDS, and with the technical assistance of UNICEF. The UNICEF Office of Research—Innocenti, in collaboration with Economic Development Initiatives (EDI), is leading the research study and impact evaluation.

The UNICEF Office of Research—Innocenti and EDI have designed a rigorous mixed methods impact evaluation to estimate the effects of the adolescent cash plus initiative on youth well-being and the transition to adulthood, including outcomes related to livelihoods; aspirations; schooling; attitudes; violence; partnerships; SRH and care seeking; and HIV knowledge, testing and treatment. The study builds on lessons derived from the Transfer Project, a multi-organization consortium providing evidence on government-run cash transfers in Africa, including a recent study led by TASAF, UNICEF Office of Research—Innocenti and Policy Research for Development (REPOA) examining the impacts of the PSSN on youth well-being and the transition to adulthood.[1] The current evaluation utilizes a cluster randomized control trial design to examine the impacts in 130 villages in two project authority areas (PAAs), which are TASAF geographical classifications corresponding to Local Government Authorities on the mainland and to District Authorities in Zanzibar.[2] These two PAAs correspond to four districts: Mafinga and Mufindi in Iringa Region and Busokelo and Rungwe in Mbeya Region. Villages were randomized into two study arms: treatment (cash plus) or control (PSSN only). The youth study sample consists of a panel sample of 2,104 youth in 1,717 households. Additionally, the qualitative study

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1   TASAF (Tanzania Social Action Fund), UNICEF (United Nations Children's Fund) and REPOA (Policy Research for Development) (2018) *Tanzania Youth Study of the Productive Social Safety Net (PSSN) Impact Evaluation: Endline report*, UNICEF Office of Research—Innocenti, Florence, https://transfer.cpc.unc.edu/wp-content/uploads/2018/04/PSSN-Youth-Endline-Report-2018.pdf.

2   The terms village and community are used interchangeably.

sample consists of 32 adolescents to whom in-depth interviews were administered.[3] Furthermore, 100 health facility surveys and 130 community surveys were conducted to gather contextual information relevant to the intervention and study.

As this report summarizes findings from the midline data collection, which was conducted after 12 weeks of face-to-face training on livelihoods and life skills, one may expect to see changes in knowledge, attitudes and aspirations. Adolescents may have begun to gain new knowledge and think about their future in different ways. However, exposure to the intervention at this point was relatively short and mentoring and asset transfers had not yet occurred. For these reasons, one should probably not expect to see many changes in behaviour, economic activities or experiences, such as the experience of sexual debut, partnerships, health seeking and violence, until the endline. Nonetheless, for full transparency and ease of comparison across survey waves, the report emphasizes impacts on all outcomes on which data were collected. Thus, while the findings of this report should be considered a guide to where one may expect to see future changes in behaviour in the mid and long term, they should not be taken as a final conclusion on the effectiveness of the cash plus pilot intervention.

Some key findings of the study are highlighted below. As expected, there is evidence of changes in knowledge and attitudes.

Gender-equitable attitudes

- The intervention increased gender-equitable attitudes among males, particularly in the domains of violence and domestic chores, wherein inequitable attitudes can support intimate partner violence and reinforce power imbalances that subordinate women. Among females, the intervention did not have any statistically significant impacts on the overall scale or on any of the subscales.

HIV knowledge

- The training increased knowledge that sex with one uninfected monogamous partner can reduce HIV risk. This programme impact was larger among females, and the impacts on this outcome were not statistically significant for males.

- On whether HIV can be transmitted by mosquitoes or food, there were high levels of accurate knowledge at baseline (over 90 per cent) and, thus, little room for improvement as a result of the intervention. Indeed, there were no impacts on other knowledge indicators including on whether regular condom use reduces HIV risk.

Reproductive health knowledge

- As a result of the intervention, youth are less likely to report that they do not know where to get contraception or condoms.

- The intervention increased knowledge of one or more modern contraceptive methods.

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3   The terms adolescent and youth are used interchangeably.

Aspirations and attitudes

- The programme did not affect educational aspirations, measured as aspiring to a higher level of education than before the intervention given no constraints. With respect to occupational aspirations, the programme did have a positive effect on the share of adolescents who want to become business owners. However, these indicators do not take into account barriers adolescents may face. In the 2019 follow-up, data have been collected on more realistic expectations.

- The Cash Plus Programme did not change the attitudes of adolescents that are captured by indexes of life satisfaction, self-esteem, locus of control, entrepreneurial drive or perceived social support.

Regarding behavioural changes – more of which are expected at the 2019 follow-up – after mentoring and asset transfers, the following was revealed:

Schooling, economic participation and time use

- The Cash Plus Programme had no effect on school dropout.

- The programme increased youth participation in economic activities. This increase is mostly driven by greater participation in household livestock herding.

- The Cash Plus Programme did not affect the number of hours spent in economic activities.

- Youth engagement in household chores is not affected except for greater participation and more hours spent in collecting firewood.

Violence

- By midline, the intervention had no impact on adolescents' experience of emotional, physical or sexual violence.

- There were no impacts on sexual exploitation (transactional sex).

Health seeking and risky sexual behaviours

- There were no changes in seeking SRH or HIV testing, services or treatment. However, there was some change in the types of services sought by those seeking services. Adolescents were more likely to seek prevention-related services and less likely to seek pregnancy-related care.

- There were no impacts at midline on risky sexual behaviours, such as having more than one concurrent sexual partner, having a sexual partner who is much older or exchanging sex for money, favours, presents or a job.

Mental health

- There were no impacts on depression symptomology or levels of self-perceived stress.

The provision of adolescent-friendly services at public health facilities

- Health services are becoming more adolescent friendly, although no change was observed in the topic areas discussed or the perceived quality of services as a result of the intervention.

1. INTRODUCTION AND BACKGROUND

This report provides the midline results from the impact evaluation (2017–2019) of a cash plus model on youth well-being and safe, healthy and productive transitions to adulthood. The Cash Plus Programme is being implemented within the Government of the United Republic of Tanzania's Productive Social Safety Net (PSSN) by the Tanzania Social Action Fund (TASAF), in collaboration with the Tanzania Commission for AIDS (TACAIDS) and with technical assistance of the United Nations Children's Fund (UNICEF). The UNICEF Office of Research — Innocenti, in collaboration Economic Development Initiatives (EDI), is leading the research study and impact evaluation.

Adolescence is an intense period of physical and emotional transformation as well as brain development. Adolescence therefore represents a unique window of opportunity, and investments in adolescence are often said to have a triple dividend, that is, benefits today, during the future adult lives of the adolescents, and in the generation of the children of the adolescents.[4] Due to changes in population structure, the United Republic of Tanzania is poised for a one-time opportunity, the demographic dividend. The demographic dividend is the result of smaller birth cohorts because of declines in fertility. This means the working-age population becomes larger relative to the young and the elderly.[5]

To harness the demographic dividend for economic growth and development, the following are necessary conditions:

■ Youth are prepared with necessary education, economic and livelihood skills, while they are simultaneously empowered to address their health needs, including sexual and reproductive health (SRH) needs, to transition safely to adulthood and delay marriage and childbearing

■ Adequate investments are made in health, infrastructure and education

■ There are market conditions that facilitate fair competition and labour-intensive job growth in the private sector[6]

Investments made today will therefore largely determine whether Tanzanians are able to translate the country's demographic dividend into accelerated economic growth, peace and stability, or whether the dividend will result in irreversible loss of opportunity.[7] Indeed, policymakers, advocates and researchers are increasingly recognizing the power and potential of adolescents and youth for development and economic growth. In 2015, an estimated 16.7 million Tanzanians were aged 15–34, a number expected to reach 30.3 million (nearly doubling) by 2035.[8] Youth development is prominent in the Government's five-year development plan (2016–2020).[9] It is one of nine objectives in the plan, as follows: "Accelerate broad-based and inclusive economic growth that reduces poverty substantially and allows shared benefits among the majority of the people through increased productive capacities and job creation especially for the youth and disadvantaged groups".

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4 Patton, George Christopher, et al. (2014) 'Next Steps for Adolescent Health: A Lancet Commission', *Lancet*, vol. 383, no. 9915, pp. 385–386.

5 Gribble, James, and Jason Bremner (2012) 'The Challenge of Attaining the Demographic Dividend', Policy Brief, September, Population Reference Bureau, Washington, DC.

6 Newhouse, David Locke (2015) 'The Demographic Transition and Labor Markets in Sub-Saharan Africa', *Africa Can End Poverty* (blog), 12 March, https://blogs.worldbank.org/africacan/the-demographic-transition-and-labor-markets-in-sub-saharan-africa.

7 Jenkins, Alison, and Maggie Bangser (2015) 'The Promise of Adolescence: UNICEF Tanzania Country Office adolescent strategy to guide the 2016–2020 country programme', UNICEF, Dar es Salaam, United Republic of Tanzania.

8 NBS (National Bureau of Statistics, Dar es Salaam) and OCGS (Office of the Chief Government Statistician, Zanzibar) (2018) *National Population Projections*, February, OCGS, Zanzibar; NBS, Dar es Salaam, United Republic of Tanzania.

9 MOF (Ministry of Finance and Planning, United Republic of Tanzania) (2016) *National Five Year Development Plan 2016/17–2020/21*, MOF, Dar es Salaam, United Republic of Tanzania. The quotation is from page 2.

According to a recent study, investment in the capabilities of adolescents in health care and education in resource-poor settings would generate large economic and social returns.[10] However, the returns are not automatic. Despite the incredible potential, adolescence is not without risks. Adolescents in the United Republic of Tanzania face many risks related to poverty, early pregnancy and marriage, violence, HIV, and lack of livelihood opportunities.[11] Gendered norms in the sociocultural environment also begin to play an increasingly important role in the lives of adolescents, shaping – among girls, often constraining – their current and future opportunities.[12]

Social protection can play a role in empowering youth by allowing households to invest in the health and education of children and adolescents, preparing them for healthy and productive futures. One popular tool of social protection is cash transfers. These have been widely demonstrated to improve household food security, consumption, productive activities and school enrolment.[13] Because cash transfer programmes aim to reduce poverty and food insecurity and improve human capital, they generally do not have direct outcomes in adolescent mental health, risk behaviour and violence as primary objectives. However, by targeting poverty and vulnerabilities, these programmes may address some of the structural drivers of adverse outcomes in adolescence. The evidence from sub-Saharan Africa linking cash transfers and safe transitions to adulthood is growing. In addition to increasing school enrolment among secondary school–age youth, government cash transfer programmes have been found to delay sexual debut and pregnancy and to reduce transactional and age-disparate sex among adolescent girls.[14] Evidence from the region on non-governmental conditional and unconditional cash transfer programmes demonstrates that these programmes are associated with reduced intimate partner violence and delayed sexual debut, pregnancy and marriage, as well as reduced HIV risks among adolescent girls.[15] Nonetheless, these protective effects vary based on programme characteristics and context. For example, government cash transfers resulted in delays in sexual debut and pregnancy in Kenya and South Africa, but these findings were not replicated in government programmes in Malawi, the United Republic of Tanzania, Zambia or Zimbabwe. Furthermore, the studies finding reduced intimate partner violence among adolescents, delayed marriage and reduced incidence of HIV were both small-scale, non-governmental pilot programmes that were not targeted at poverty, and, to date, studies of governmental cash transfers have not replicated these findings. In addition, the study that finds a reduced incidence of HIV resulting from the cash transfers had a low incidence of HIV over the study period, and the findings varied based on how the data were analysed.[16] Cash transfer programmes in the region have been found to improve the

10 Sheehan, Peter, et al. (2017) 'Building the Foundations for Sustainable Development: A case for global investment in the capabilities of adolescents', *Lancet Health Policy*, vol. 390, no. 10104, pp. 1792–1806.

11 Haji, Mahjabeen (2015) 'Youth Employment in Tanzania: Taking stock of the evidence and knowledge gaps', International Development Research Centre, Ottawa; Population Council, et al. (2015) *The Adolescent Experience In-Depth: Using data to identify and reach the most vulnerable young people, Tanzania 2009–2012*, Population Council, New York.

12 GAGE Consortium (Gender and Adolescence: Global Evidence) (2017) 'Gender and Adolescence: Why understanding adolescent capabilities, change strategies and context matters', Overseas Development Institute, London.

13 Baird, Sarah Jane, et al. (2014) 'Conditional, Unconditional, and Everything in Between: A systematic review of the effects of cash transfer programmes on schooling outcomes', *Journal of Development Effectiveness*, vol. 6, no. 1, pp. 1–43; Davis, Benjamin, et al., eds. (2016) *From Evidence to Action: The story of cash transfers and impact evaluation in sub-Saharan Africa*, Oxford University Press, Oxford; Hidrobo, Melissa, et al. (2018) 'Social Protection, Food Security, and Asset Formation', *World Development*, no. 101, January, pp. 88–103.

14 Cluver, Lucie, et al. (2013) 'Child-Focused State Cash Transfers and Adolescent Risk of HIV Infection in South Africa: A propensity-score-matched case-control study', *Lancet Global Health*, vol. 1, no. 6, pp. e362–e370; Handa, Sudhanshu, et al. (2014) 'The Government of Kenya's Cash Transfer Programme Reduces the Risk of Sexual Debut among Young People Age 15–25', *PLoS One*, vol. 9, no. 1, p. e85473; Handa, Sudhanshu, and Marlous de Miliano (2015) 'Impact of Social Cash Transfer on Schooling in Africa: An update from the Transfer Project', Research Brief, no. 2015–01, January, Transfer Project, Carolina Population Centre, University of North Carolina, Chapel Hill, NC; Heinrich, Carolyn J., John F. Hoddinott, and Michael Samson (2017) 'Reducing Adolescent Risky Behaviors in a High-Risk Context: The effects of unconditional cash transfers in South Africa', *Economic Development and Cultural Change*, vol. 65, no. 4, pp. 619–652.

15 Baird, Sarah Jane, et al. (2012) 'Effect of a Cash Transfer Program for Schooling on Prevalence of HIV and Herpes Simplex Type 2 in Malawi: A cluster randomized trial', *Lancet*, vol. 379, no. 9823, pp. 1320–1329; Handa, Sudhanshu, et al. (2015) 'Impact of the Kenya Cash Transfer for Orphans and Vulnerable Children on Early Pregnancy and Marriage of Adolescent Girls', *Social Science and Medicine*, vol. 141, September, pp. 36–45; Pettifor, Audrey, et al. (2016) 'The Effect of a Conditional Cash Transfer on HIV Incidence in Young Women in Rural South Africa (HPTN 068): A phase 3, randomised controlled trial', *Lancet Global Health*, vol. 4, no. 12, pp. E978–E988.

16 Webb, Emily L., Richard J. Hayes, and Judith R. Glynn (2012) 'Cash Transfer Scheme for Reducing HIV and Herpes Simplex Type 2', *Lancet*, vol. 380, no. 9844, pp. 802.

mental health of adolescents and youth.[17] However, the effects on mental health may be adverse when cash transfer programmes are conditional rather than unconditional.[18]

A recent study examining the impacts of only the cash and public works programme (PWP) components of the PSSN highlighted positive impacts on youth well-being, including increased school enrolment, a reduction in children's paid work, and positive impacts on basic needs, perceptions of control over their own lives, participation in household decision-making and social support.[19] However, the evaluation also highlighted nuanced findings related to children's schooling and work. Among agricultural households, the increased financial resources deriving from the cash benefits and thus investments in, for example, livestock, are often accompanied by children's greater participation in home production, such as tending livestock. Furthermore, the programme had no impacts on other outcomes related to safe transitions to adulthood, such as delayed sexual debut and pregnancy, contraceptive use, risky sexual behaviours and mental health. These findings underscore how, while cash transfers can positively impact youth well-being and transitions to adulthood, they are often not sufficient to overcome the broad-based and interrelated social, economic and health risks youth face.[20] The links between social protection programmes and government and other services should thus be strengthened to facilitate safe transitions to adulthood. This recognition has led advocates to highlight cash plus as an important area of investment. The rationale is that, while government cash transfer programmes identify the poorest and most vulnerable members of society with the aim of smoothing consumption and improving food security, linking these vulnerable populations to other services may have synergistic impacts on well-being. Beneficiaries may be reached in this way by health care or social services, or they may be able to leverage the cash benefits to produce better outcomes in productive activities and future well-being.

In recognition of the need for such links and complementary programming, governments in the region have been piloting cash plus initiatives. Cash plus involves the bundling of cash transfer programmes and complementary interventions or links to services, which may consist of integral elements or external components.[21] Among the former are additional benefits, in-kind transfers, information, behaviour change communication or psychosocial support; among the latter are the direct provision of access to services or facilitating links to services. In the United Republic of Tanzania, cash plus initiatives associated with the PSSN have included nutrition sensitization, with the technical support of UNICEF, youth livelihoods training, with the technical support of the International Labour Organization, and contraceptive knowledge sensitization, with the technical support of the United Nations Population Fund.

The evidence described above, taken together with the United Republic of Tanzania's recent widespread expansion of social protection programmes, highlights the opportunity to examine the potential for social protection and complementary programming to facilitate safe transitions and maximize the future productivity and well-being of youth. The pilot project and evaluation described in this report focus on the impacts of a unique, multisectoral, government-implemented intervention that targets vulnerable adolescents in impoverished households. The study builds on lessons from the Transfer

17 Angeles, Gustavo, et al. (2019) 'Government of Malawi's Unconditional Cash Transfer Improves Youth Mental Health', *Social Science and Medicine*, vol. 225, March, pp. 108–119; Kilburn, Kelly, et al. (2016) 'Effects of a Large-Scale Unconditional Cash Transfer Programme on Mental Health Outcomes of Young People in Kenya', *Journal of Adolescent Health*, vol. 58, no. 2, pp. 223–229

18 Statistically significant reductions were found only when analyses were weighted.

19 TASAF (Tanzania Social Action Fund), UNICEF (United Nations Children's Fund), and REPOA (Policy Research for Development) (2018) *Tanzania Youth Study of the Productive Social Safety Net (PSSN) Impact Evaluation: Endline report*, UNICEF Office of Research—Innocenti, Florence, https://transfer.cpc.unc.edu/wp-content/uploads/2018/04/PSSN-Youth-Endline-Report-2018.pdf.

20 Watson, Carol (2016) 'Options for a "Cash Plus" Intervention to Enhance Adolescent Well-Being in Tanzania: An introduction and review of the evidence from different programme models in Eastern and Southern Africa', with the collaboration of Tia Palermo, background paper for a Stakeholder Workshop, Dar es Salaam, United Republic of Tanzania, 11–12 February.

21 Roelen, Keetie, et al. (2017) 'How to Make "Cash Plus" Work: Linking cash transfers to services and sectors', Innocenti Working Paper, no. WP–2017–10, UNICEF Office of Research—Innocenti, Florence.

Project, a multiorganization consortium providing evidence on government-run cash transfers in Africa, with a focus on safe transitions to adulthood among youth.[22]

The current study appears to be the first to examine specifically the impacts of a cash plus model on youth well-being and transitions to adulthood in the context of a government transfer programme in sub-Saharan Africa. It summarizes findings from the midline data collection, which was conducted in 2018 after 12 weeks of face-to-face training on livelihoods and life skills. Thus, in the findings summarized below, one may expect to see changes in knowledge, attitudes and aspirations. The adolescent interviewees may have already begun to acquire new knowledge and think about their future in different ways. However, exposure to the intervention at this point was relatively short and mentoring and asset transfers – two additional components of the intervention – had not yet occurred. For these reasons, one should not expect to see many changes in behaviour, economic activities or experiences, such as experiences in sexual debut, partnerships, health seeking and violence, until endline. Nonetheless, for full transparency and ease of comparison across survey waves, the impacts are reported on all outcomes for which data were collected. Thus, while the findings of the report should be viewed as a guide indicating where one may expect to see future changes in behaviours in the mid and long term, they should not be taken as a final conclusion on the effectiveness of the cash plus pilot intervention.

The remainder of this report is organized as follows. The rest of section 1 presents information on the PSSN and cash plus programmes. Section 2 examines the conceptual framework of the programme and evaluation. Section 3 describes the impact evaluation framework and sample, while section 4 describes attrition. Section 5 compares the characteristics of youth who took up or chose to participate in the cash plus programme, and section 6 describes participation rates and attendance among those who participated in at least one session. Sections 7–14 describe impacts by topic. Section 15 concludes.

1.1 Tanzania Social Action Fund

TASAF was established in 2000 as part of a government strategy to supplement other government poverty reduction initiatives by using a community-driven development approach. It was launched with a one-year pilot in 1999–2000 in eight of the poorest districts of the United Republic of Tanzania, including Bagamoyo, Bukoba, Dodoma, Kibaha, Rombo, Shinyanga, Singida and Tandahimba. TASAF I, the first phase (2000–2005), focused on improving social service delivery; capacity enhancement in communities, including overseeing 1,704 community-run subprojects, such as the construction or rehabilitation of health care facilities, schools and other small-scale infrastructure; and a public works component with 113,646 direct beneficiaries. TASAF II, the second phase (2005–2013), built on the Millennium Development Goals and expanded the first-phase commitments to address a shortage of social services; the need for capacity enhancements, including 12,347 community subprojects; and income poverty, including a pilot conditional cash transfer programme reaching 11,576 households in communities that had been strengthened during the first phase. Phase I and phase II of TASAF were successfully implemented and achieved the programme objectives.

However, despite the successes of the first two phases, the programme faced challenges. Thus, the community demand for subprojects exceeded TASAF financial capacity, and the financial capacity of TASAF II was insufficient to address other problem areas, such as the expansion of the conditional cash transfers; saving and Investment; the infrastructure needed in key sectors (health care, education, water and so on); the existence of extreme poor households (9.7 per cent of the population) that were not

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22 The Transfer Project is currently operating in more than 10 countries and includes impact evaluations on youth in five countries. For details, see the Transfer Project website, at https://transfer.cpc.unc.edu/.

benefiting from services (education, health care, and so on); malnutrition and stunted growth among children in poor households; inadequate access to health facilities by children in poor households; and the many children in poor households who were not registered in school as well as those few who were registered but were not attending school. There were also school dropouts and child labour among children in poor households. Due to all these challenges, the Government needed to invest in human capital with the aim of breaking the intergenerational cycle of poverty. This called for a new comprehensive social protection programme to address the challenges.

1.2 The Productive Social Safety Net Programme

PSSN (TASAF-III) was officially launched in August 2012. Initially, it aimed to support approximately 275,000 extremely poor households living in selected poor communities in rural and urban areas. In September 2013, with the overall objective of reducing extreme poverty by half, the Government, in collaboration with its development partners, agreed to scale up the PSSN to support those who were living below the national food poverty line. By early 2016, over 1.1 million of the poorest households in the United Republic of Tanzania, or approximately 10.5 per cent of the total population, in 70 per cent of all villages in the country, had enrolled in the conditional cash transfer component. Eventually, all eligible households nationwide (approximately 15 per cent of the population) are expected to benefit from the programme. A further expansion of the programme to the remaining 30 per cent of all villages is envisaged during PSSN II, which is being launched in 2019. The programme includes consolidation of integrated social safety net interventions to maximize the impact of the social safety net through the implementation and scale-up of labour-intensive public works and cash transfer interventions that target the extreme poor and the food insecure. The programme also includes livelihoods enhancement initiatives that involve income-generating activities among targeted poor and vulnerable groups.

The objectives of PSSN I include a permanent increase in consumption among the extremely poor, smooth consumption during lean seasons and shocks, investment in human capital, strengthened links to income-generating activities, and increased access to improved social services. It aims to enhance consumption and human capital accumulation and reduce the poverty headcount and poverty gap by 5 per cent and 30 per cent, respectively. The programme also seeks to boost the ability of the vulnerable to cope with shocks, invest in human capital, and increase access to improved social services. The key element of the programme is a conditional cash transfer provided to households below the food poverty line, complemented by public works and livelihoods enhancement components. To receive the cash transfers, participating households are required to comply with certain conditions or co-responsibilities related to children's school attendance and health care, although a portion of the transfers is fixed and unconditional; to benefit from this segment of the transfers, households must be below a certain poverty threshold and include a certain number of children.

The PSSN depends on a three-stage targeting process: geographical targeting, community-based targeting and a proxy-means test. In the first stage, national poverty maps were used to identify the poorest project authority areas (PAAs) and villages. In the villages, community teams developed lists of potential programme beneficiaries. The village councils and meetings of the village assemblies had to approve the composition of the teams and the beneficiary lists. The households identified in this process were then enumerated for the proxy-means test to ensure they met the poverty criterion. Those that met the poverty criterion, that is, those households below the designated poverty threshold, were then enrolled in the programme.

1.3 Programme details

The overall PSSN has four components, as follows:

- A national safety net incorporating transfers linked to participation in a PWP and adherence to co-responsibilities, that is, the conditionalities
- Enhancement of livelihoods and increasing the incomes of beneficiaries
- Targeted infrastructure development (education, health care, water)
- Capacity-building to ensure adequate programme implementation

Box 1.1 describes details of PSSN I. The benefit and fee structure are expected to change in PSSN II, the launch of which is anticipated after mid-2019.

Box 1.1. *PSSN I programme details.*

As of 2015, the conditional cash transfer provided the following:

- A TZS 10,000 fixed benefit (approximately US$4.50)
- A TZS 4,000 fixed benefit (approximately US$1.80) for each child in the household under age 18
- A TZS 4,000 fixed additional benefit (approximately US$1.80) for each child under age 5, conditional on compliance with a health care requirement
- A TZS 2,000 additional benefit (approximately US$0.90) for each of up to four children, conditional on enrolment in primary school
- A TZS 4,000–TZS 6,000 additional benefit (approximately US$1.80–US$2.70) for each child, conditional on enrolment in lower or upper secondary school
- A maximum total monthly transfer of TZS 38,000 (approximately US$17.00)

The public works or cash-for-work component provides the following:

- A TZS 2,300 benefit (approximately US$1.00) per household per day for one able-bodied adult age 18 or more for up to 60 days over four months

The livelihoods enhancement component includes the following:

- A savings promotion initiative and the mobilization of beneficiaries to form savings groups
- Training to prepare beneficiaries to access existing productive opportunities
- Support for household income-generating capacity and income diversification
- A productive grant

Source: Aide Memoire, Tanzania Productive Social Safety Net Project (PSSN), Mid-Term Review and Implementation Support Mission, Dar es Salaam, 8–19 September 2014.

1.4 The plus intervention: Programme details

The cash plus model complements the PSSN through a package of interventions focused on strengthening productive, human and health capital among adolescents. It may ultimately have synergistic impacts in the promotion of sustainable and healthy livelihoods that foster resilience, well-being and empowerment today, tomorrow and for future generations.

It is estimated that 908,346 adolescents ages 14–19 were living in households reached by the PSSN nationwide in April 2019. There is thus huge potential to scale up and leverage the positive impacts on this key segment of the population. The Cash Plus Programme builds on the cash transfer and livelihoods enhancement components of the PSSN. It is designed to fit within the PSSN livelihoods framework and is closely aligned with the objectives of the PSSN. The roll-out of the PSSN livelihoods component followed a strategic approach involving, first, the design of the livelihoods enhancement packages and, second, the gradual implementation of the packages in phases until full scale-up was achieved. The programme builds on and strengthens the local government capacity and services associated with adolescent health, livelihoods and social protection. It is being implemented initially in two pilot PAAs in four districts – one in Mafinga and Mufindi and one in Busokelo and Rungwe – chosen based on overlaps between UNICEF programme regions and TASAF priorities areas, including areas not scheduled for pilot livelihood programmes as part of the overall PSSN *(see Appendix A for a map of the intervention sites)*.

The focus on adolescent development and livelihoods is aligned with the Government's five-year development plan (2016–2020).

A main objective of the plan is to accelerate broad-based, inclusive economic growth that reduces poverty substantially and allows shared benefits among the majority of the people through increased productive capacities and job creation, especially among youth and disadvantaged groups. This is an example of how the Government can take steps to strengthen the productive capabilities of adolescents as they transition to adulthood, harness the demographic dividend and break the intergenerational cycle of poverty.

The intervention provides livelihood and life skills training, asset transfers and mentoring, while linking adolescents to enhanced supply-side services, such as adolescent-friendly HIV-SRH services in public health care facilities. In this way, the plus intervention follows the capabilities approach in seeking to strengthen the productive, human and health capital of youth.[23]

The guiding principles of the Cash Plus Programme are as follows:

- Government ownership

- Implementation within the TASAF/PSSN livelihoods enhancement strategy and government frameworks

- Links with other government services

- Age- and gender-sensitive livelihood interventions

- A financial, health care and social asset-building framework for adolescent development and well-being

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23 GAGE Consortium (Gender and Adolescence: Global Evidence) (2017) 'Gender and Adolescence: Why understanding adolescent capabilities, change strategies and context matters', Overseas Development Institute, London; Sen, Amartya K. (2005) 'Human Rights and Capabilities', *Journal of Human Development*, vol. 6, no. 2, pp. 151–166; Sen, Amartya K. (2012) 'Development as Capability Expansion', ch. 37 in *Community Development Reader*, 2nd ed., edited by James DeFilippis and Susan Saegert, Routledge, New York, pp. 319–327.

Based on a review of the evidence on what works, stakeholder consultations and a consensus process, the programme was designed with the following three components:

■ *Adolescent livelihood and SRH-HIV life skills training*: This includes training sessions among adolescents on livelihood and economic empowerment, SRH, and HIV prevention and treatment. The programme builds on lessons emerging from other initiatives and uses a mixed livelihoods approach to meet the diverse needs of older and younger adolescents. A bundle of high-impact behaviour change communication approaches, including peer support groups, has also been undertaken to strengthen knowledge and skills among adolescents on HIV prevention and treatment, SRH, violence prevention and gender equity.

■ *Mentoring and coaching*: During and subsequent to the training sessions, the programme connects adolescent participants with community-based mentors who coach them on livelihood options and life concerns. This includes referral for education, vocational training, savings groups and productive grants.

■ *Links to SRH and HIV services for adolescents*: The programme links adolescent participants from PSSN households with HIV and SRH services that are responsive to adolescents.

1.5 The plus intervention: Training and implementation

A timeline of the implementation of the training, intervention and research activities is provided in Figure 1.1.

Figure 1.1. PSSN adolescent Cash Plus timeline
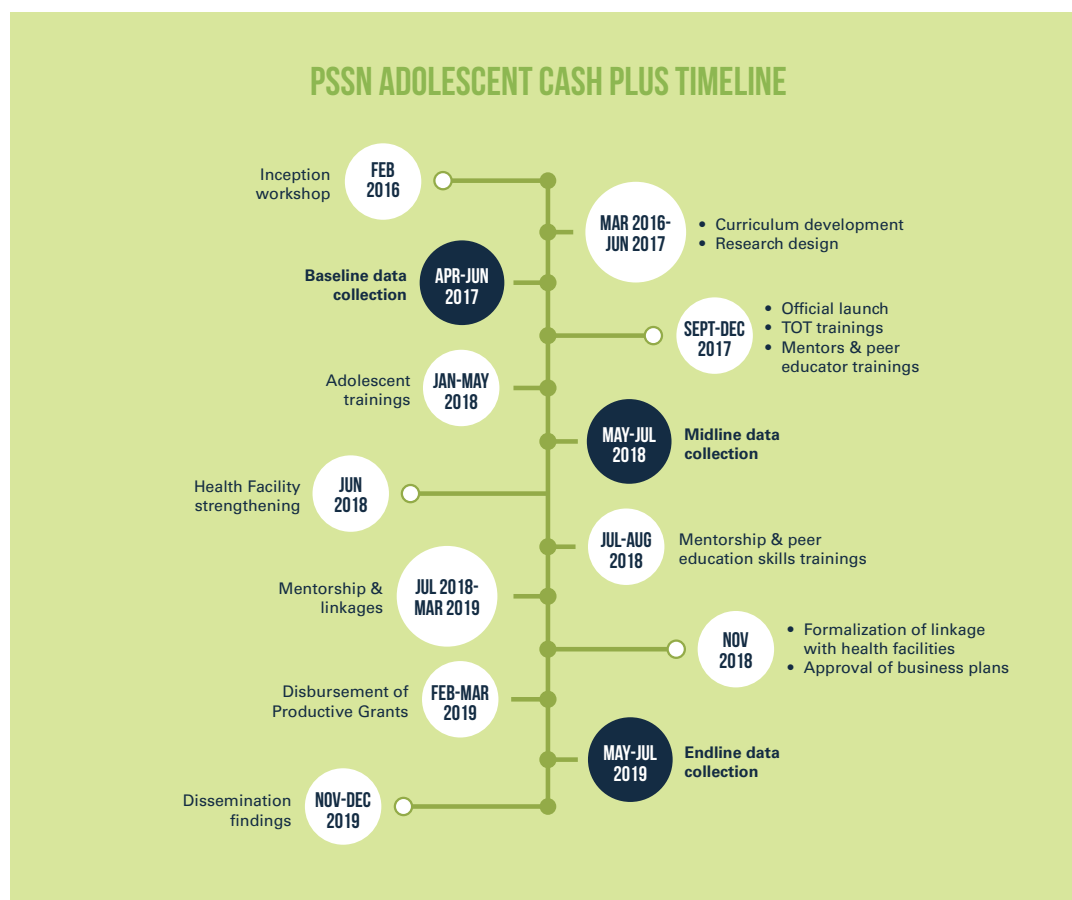
Programme training specialists followed a cascade model, that is, they first trained the trainers. The initial trainees included community development officers, planning officers, nurses, medical doctors, social welfare officers and agriculture and livestock officers. The schedule of the training of trainers and other intervention activities was as follows:

- The district trainers training session took place from 20 August to 1 September 2017. During the session, 20 trainers were trained, 10 from Busokelo and Rungwe and 10 from Mafinga and Mufindi.

- Coaches and peer educators were trained on 20–25 November 2017 in Mufindi and on 27 November–2 December in Rungwe. A total of 130 peer educators (58 from Busokelo and Rungwe and 72 from Mafinga and Mufindi) were trained. The man-to-woman ratio was 1 to 1 in both training sessions.

- The mentoring session took place after the 12-week training session, that is, June 2018–March 2019.

Direct face-to-face delivery of the livelihoods and HIV-SRH training occurred over 12 weeks between February and May 2018. Facilitators met with youth groups in each village for two to four hours once a week for 10 weeks, preceded by an opening week and followed by a closing week. The opening and closing weeks consisted of two-day workshops. The opening session focused on meeting each other and learning about the dangers and opportunities in the community. The closing session involved a graduation ceremony, at which parents and community members were invited to celebrate the achievements of the trainees. Livelihoods and HIV-SRH training occurred together in each session, one or two hours for each, on a weekly basis. The topics and activities covered in the delivery of the intervention included the following:

- *Livelihoods*: changes, dreams, goals, business plans, entrepreneurship, business record-keeping, saving, and the obligations and requirements of entrepreneurs

- *Life skills, HIV and SRH*: our community and our health, coping with puberty, relationships, HIV knowledge, prevention and protection, sexual risk-taking and protection, violence and gender-based violence, pregnancy, family planning, sexually transmitted infections (STIs), living with HIV or AIDS, alcohol and drugs, healthy living and nutrition, and addressing negative gender attitudes and norms

A more detailed outline of the training topics by week is provided in Appendix B. Following the 12-week period of intensive training, asset transfers and additional mentoring activities began and were planned to continue for up to nine months (expected to have ended in March 2019). These activities included the facilitation of links with training and apprenticeship activities, extension services, health facilities and peer education. The coaching and mentoring activities were tailored depending on the age and choice of future trajectory among the adolescents. The current report covers impacts through to the end of the face-to-face training, but before the asset transfers and mentoring occurred.

1.5.1 Scalability, sustainability and looking forward in pilot planning

Through the implementation within the frameworks of the Government (the livelihoods component of the TASAF III–PSSN programme) and by facilitating links to existing government services (primarily HIV-SRH services), this pilot project has increased the potential for the sustainability and scalability of the initiative. A previous adolescent SRH intervention conducted in the United Republic of Tanzania with public sector health workers demonstrates the feasibility of this approach.[24] Although the components of such interventions are envisioned within national sectoral action plans, they are often highly fragmented, of poor quality and rarely implemented in full. The current initiative adds unique value because it aims to develop or strengthen links to apply a more highly integrated systems approach. This tends to reduce the fragmentation of services and generate synergies to promote greater effectiveness.

Meanwhile, the initiative involves capacity-building to improve the provision of high-quality services to youth and provides rigorous evidence for monitoring effectiveness in achieving desired outcomes.

1.5.2 The importance of evidence

This pilot intervention, implemented within government structures, is being rigorously monitored through an impact evaluation to measure effectiveness. (The midline findings are presented in the current report.) Rigorous evidence is key to understanding the effectiveness of programming for the benefit of adolescents and how future programming can be improved and leveraged for better outcomes among youth. Several interventions in East Africa that have been implemented by non-governmental organizations or researchers have had similar objectives, including strengthening the capabilities of adolescents through bundled programming.[25] Some of these have been rigorously evaluated, while others have not. Most make recommendations for scale-up. Nonetheless, the context is different if an initiative is being implemented through government structures. Delivery is key, and testing in this setting is thus essential to any assumptions or recommendations about a scale-up. This intervention and evaluation aims to accomplish precisely that. It also makes a contribution by strengthening the national evidence base on programmes targeting adolescents and, more specifically, those programmes implemented by government.

24 Hayes, Richard J., et al. (2005) 'The MEMA kwa Vijana Project: Design of a community randomised trial of an innovative adolescent sexual health intervention in rural Tanzania', *Contemporary Clinical Trials*, vol. 26, no. 4, pp. 430–442; Larke, Natasha, et al. (2010) 'Impact of the MEMA kwa Vijana Adolescent Sexual and Reproductive Health Interventions on Use of Health Services by Young People in Rural Mwanza, Tanzania: Results of a cluster randomized trial', *Journal of Adolescent Health*, vol. 47, no. 5, pp. 512–522.

25 Austrian, Karen, and Eunice Muthengi (2014) 'Can Economic Assets Increase Girls' Risk of Sexual Harassment? Evaluation results from a social, health and economic asset-building intervention for vulnerable adolescent girls in Uganda', *Children and Youth Services Review*, vol. 47, part 2, pp. 168–175; Austrian, Karen, et al. (2018) 'Adolescent Girls Initiative-Kenya: Midline results report', Population Council, Nairobi; Bandiera, Oriana, et al. (2018) 'Women's Empowerment in Action: Evidence from a randomized control trial in Africa', CEPR Discussion Paper 13386 (December), Centre for Economic Policy Research, London.

2. CONCEPTUAL FRAMEWORK

The capability approach to development advocated by Amartya Sen envisions investments in individuals and emphasizes the importance of 'functioning' ('doing' and 'being') over a simple assessment of commodities or happiness.[26] In Sen's framework, development refers to an expansion of one's set of capabilities and, thus, to new opportunities to choose or decide a different future. Many poor and vulnerable adolescents have limited options to choose and thus have limited 'capabilities'. The GAGE initiative on gender and adolescence defines six capability domains among adolescents: (a) education and learning, (b) bodily integrity, (c) physical and reproductive health and nutrition, (d) psychosocial well-being, (e) voice and agency and (f) economic empowerment.[27]

The intervention and evaluation described in this report follow the capabilities approach developed by Sen and target several capabilities highlighted in the GAGE framework. They aim to increase the capabilities or assets of adolescents along the dimensions of education, livelihoods (economic), SRH, bodily integrity, and voice and agency. They also follow the theory of change illustrated in Figure 2.1. They identify relevant outcome indicators in the short and medium to long term among youth and hypothesize potential pathways of impact within a framework linked to the intervention components (cash, livelihoods training and HIV-SRH education). The intervention aims to increase the economic capital of youth through the PSSN component (strengthening household economic security), as well as investments for business among older youth (ages 18–19) through productive grants. It aims to improve educational capabilities and assets through face-to-face training, educational aspirations, and schooling or vocational training likewise through productive grants. It seeks to raise social capital (voice and agency) through education and coaching related to behaviour and life skills, peer support, self-esteem, and mentoring on future aspirations. It also aims to improve health capabilities and assets through education on knowledge and access to HIV-SRH services and violence prevention.

26 Sen, Amartya K. (2012) 'Development as Capability Expansion', ch. 37 in *Community Development Reader*, 2nd ed., edited by James DeFilippis and Susan Saegert, Routledge, New York, pp. 319–327.

27 GAGE Consortium (Gender and Adolescence: Global Evidence) (2017) 'Gender and Adolescence: Why understanding adolescent capabilities, change strategies and context matters', Overseas Development Institute, London.

Figure 2.1. Conceptual framework
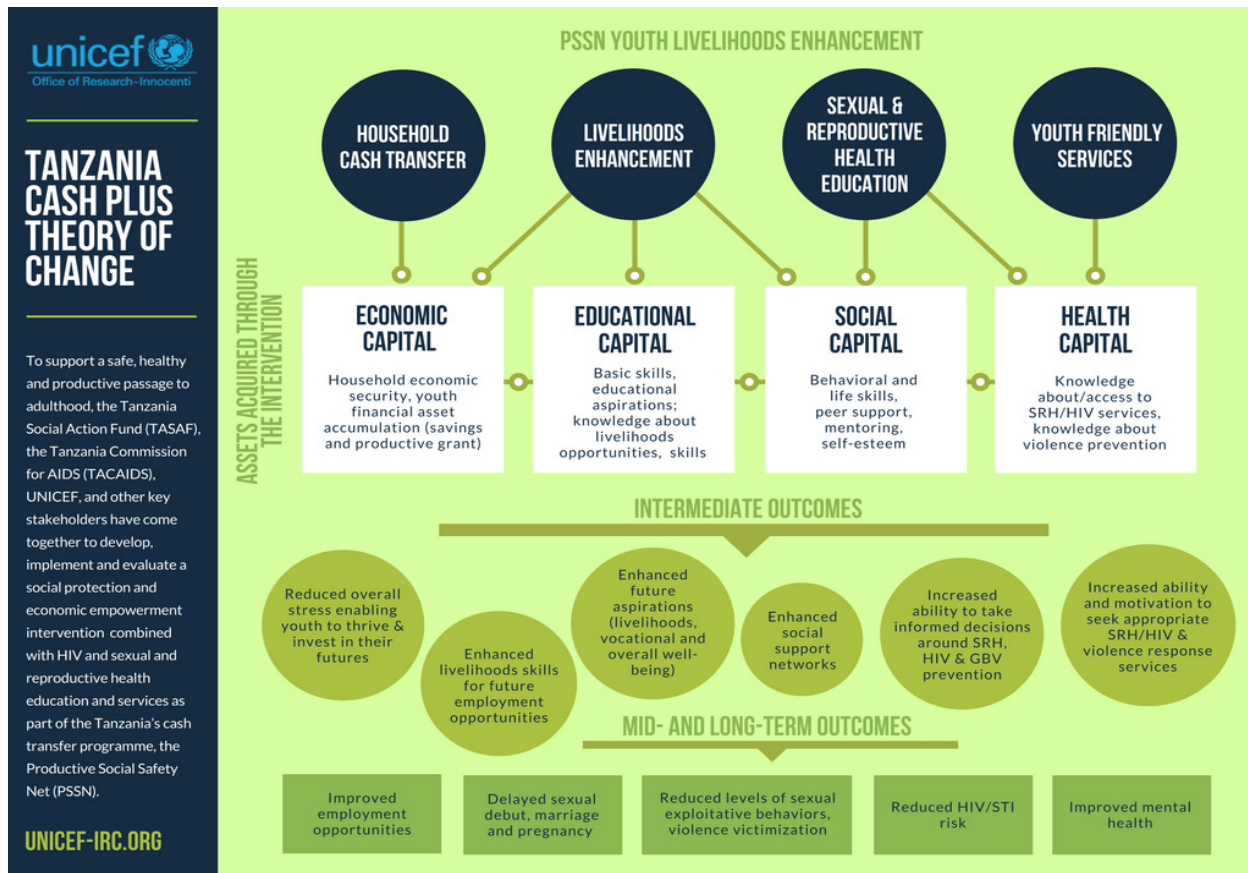
Subsequently, in the short term, the intervention may improve aspirations and skills related to livelihoods and economic opportunities, that is, expanded capabilities; increase the ability to make informed SRH decisions, negotiate in sexual relationships, and protect themselves from potentially abusive situations; and raise the ability of adolescents to seek appropriate HIV-SRH and violence response services. Improved future outlook and better economic security may also reduce stress among youth and their households, which has implications for subsequent well-being.

In the mid and long term, the intervention over the pathways and through the short-term outcomes outlined above may improve the future employment opportunities and income-generating ability of adolescents; delay sexual debut, marriage and pregnancy; reduce engagement in exploitative sexual partnerships and HIV risk behaviours; improve mental health; reduce violence victimization; and increase health seeking for HIV-SRH services.

These outcomes are measured through the adolescent, household, community and health facility questionnaires described below.

3. THE IMPACT EVALUATION FRAMEWORK AND SAMPLE

This section describes the overall design and sample selection for the impact evaluation.

3.1 Research questions

The overarching research question to be answered by the impact evaluation is how and to what extent can a plus component that is integrated within government structures in a cash transfer programme have a positive effect on youth livelihood skills, well-being and the transition to adulthood.

The primary questions of interest include the following:

- Do youth have increased livelihood knowledge and skills?

- Are youth engaged in more productive, safer employment activities?

- Do youth have increased knowledge about the HIV prevention, HIV treatment and reproductive health services available to them?

- Are youth accessing HIV testing and treatment and reproductive health services at a higher rate?

- Does the programme reduce violence, exploitative victimization and the perpetration of violence among youth?

- Does the programme delay sexual debut, marriage and pregnancy?

- Does the programme reduce risky sexual behaviours?

Secondary questions of interest include the following:

- Does the programme foster gender-equitable attitudes?

- Does the programme increase social assets?

- Does the programme improve youth psychosocial well-being?

- What are the pathways over which the programme affects outcomes of interest?

3.2 Study design

To answer these questions, a cluster randomized control trial study design was implemented to compare the results achieved by the plus component in the lives of youth relative to the results among youth receiving cash only, that is, the control group.

For administrative purposes, TASAF refers to the geographical areas in which the programme is implemented as PAAs. On the mainland, these are identical to Local Government Authorities. Then, within PAAs, there are wards and, within wards, villages and mtaas.[28] The unit of sampling or cluster for the current cash plus intervention and evaluation is the village. In this cluster randomized control trial design, clusters (villages) are randomized, and households are nested within villages.

The evaluation design has two study arms randomized by village (cluster). This allows an estimation of the impact on youth well-being of the combined youth livelihoods enhancement and SRH package

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28 A mtaa is an administrative unit in urban areas (municipalities, towns and cities) and equivalent to a village in rural areas.

among PSSN households. The randomization of villages to study arms was conducted in July 2017, after the implementation of the baseline surveys (April–June 2017), and was stratified according to PAA and village size (large versus small villages).

While there may be synergies stemming from the combination of the cash transfer programme and the plus component (the whole package is greater than the sum of the parts), the evaluation design does not allow an evaluation of the synergy effect. This is because such an expansion in the design was not feasible based on the number of youth and of villages necessary to power such a study statistically for the estimation of programme impacts. Moreover, the cash component was launched much earlier than the plus intervention (2015 or earlier versus 2017). Disentangling the impacts of the cash component, the plus component or the combination of both is not possible in the current evaluation design. Thus, the estimates presented in this report illustrate only the impacts of the plus component among youth in households receiving government cash transfers as part of the PSSN.

The number of youth per village reached by the intervention varies based on the adolescent population in PSSN households and the programme uptake. During the impact evaluation, interviews were sought with all eligible youth in each village in an intent-to-treat (ITT) design (65 villages per study arm). The baseline sample for the impact evaluation was 2,458 youth combined across treatment and control arms (1,287 youth interviewed in Mufindi and 1,171 youth interviewed in Rungwe). The study included male and female adolescents ages 14–19.

To assess programme impacts, three waves of data collection have been proposed, as follows:

- Baseline, pre-intervention implementation, completed April–June 2017

- Midline, 6 months post-intensive period of intervention, completed May–July 2018

- Endline, 18 months post-intensive period of intervention, expected May–July 2019

Youth in both treatment and control villages were interviewed during all survey waves in both study PAAs. The baseline surveys allowed an examination of whether youth in the two study arms were similar at baseline. The baseline report demonstrated that randomization was successful, and there was baseline balance among the indicators. This instilled confidence in the attribution of observed differences during follow-up rounds to the impacts of the intervention. Follow-up midline and endline surveys allow an assessment of changes over time and between the study arms attributable to the cash plus intervention.

In villages selected for the treatment arm (combined youth livelihoods enhancement, plus HIV-SRH), all youth ages 14–19 living in PSSN households will be offered the intervention. For the evaluation, all available, eligible youth (in treatment and control study arms) in study villages were interviewed for the baseline, and this has been repeated during the midline survey. It is not possible to predict which among the adolescents offered the programme will take it up. Thus, for this impact evaluation, all eligible adolescents in PSSN households were interviewed, and ITT impacts of the programme were estimated. This gauges the potential effectiveness of the programme were it to be scaled up to the population because, in a fully scaled-up programme, not all adolescents offered the programme would choose to participate. Adolescents who take up and adolescents who do not may differ in both observed (age, marital status, and so on) and unobserved characteristics (for instance, motivation). Estimating impacts on only those who take up the programme could thus lead to impact estimates that are misleading in terms of expectations about the results across a population were the programme to be scaled up.

Figure 3.1 illustrates how the evaluation sample was chosen starting with a list of all PSSN participating villages in both Mufindi and Rungwe (n = 211). Villages that fit the following criteria during baseline listings were eligible for the evaluation: (a) at least 10 and no more than 100 adolescents ages 14–19 according to TASAF listings and (b) no other TASAF activities, including evaluation with the World Bank and the National Bureau of Statistics. This left a total of 130 communities in the evaluation sample, of which half were randomized into the treatment group (cash plus) and half were randomized into the control group (PSSN only).

Figure 3.1. Community selection

PAA/ Districts chosen on TASAF & UNICEF criteria:
- Mufindi/Mafinga
- Rungwe/Busokelo

Village inclusion criteria:
- Those participating in PSSN (94 out of 141 in Mufindi/Mafinga and 117 out of 219 in Rungwe/Busokelo)
- Those with >10 and <100 adolescents age 14-19 years
- No overlap with other TASAF work

72 Villages fit criteria in Mufindi/Mafinga
All available youth ages 14-19 in PSSN household were interviewed (n=1,287)

58 Villages fit criteria in Rungwe/Busokelo
All available youth ages 14-19 in PSSN household were interviewed (n=1,171)

36 villages randomized to treatment (receive Cash Plus)

36 villages randomized to comparison (only receive PSSN)

27 villages randomized to treatment (receive Cash Plus)

27 villages randomized to comparison (only receive PSSN)

3.3 Randomization

Randomization into study arms was stratified by PAA and village size (large versus small). After baseline data were collected, the total number of eligible youth was summed by village in each PAA, and PAA medians were calculated (20.5 youth in Mafinga and Mufindi and 22.0 youth in Busokelo and Rungwe). This means that half the villages in the PAAs have more than 20.5 and 22.0 eligible adolescents, respectively. Then villages with youth totals below the PAA median were classified as small, and villages with youth totals above the PAA median were classified as large.

To promote transparency and facilitate buy-in by district governments and stakeholders, public randomization events were organized to select villages for the treatment. The randomization events were conducted separately in each PAA in July 2017 (3 July in Mufindi and 5 July in Rungwe), after baseline data collection had been completed. The events were led by Lusajo Kajula, a researcher at the UNICEF Office of Research—Innocenti and study coordinator. The participants in the randomization events included district and ward officials and TASAF staff. At the event in Rungwe (representing Busokelo and Rungwe), there were 33 participants, and there were 39 participants at the event in Mufindi (representing Mafinga and Mufindi).

The randomization events were conducted as follows. First, an overview of the intervention, the study, and the motivation for randomization was provided, and district participants were given the opportunity to ask questions. Tokens with the names of villages were divided into two hats, one for small villages and one for large villages. Then, an official randomly selected tokens from one hat, while

a second official read aloud the names on the tokens, and the UNICEF researcher recorded the names on a list in the order they had been selected. Once all the tokens had been drawn from the hat, the names of the villages on the list were read aloud, first, from the top of the list (the heads) and then at the bottom (the tails). Finally, a coin was tossed to determine which group (heads or tails) would receive the cash plus intervention. The process was then repeated for the tokens in the second hat.

3.4 Questionnaires

Four types of questionnaires were implemented at baseline, as follows:

- Household surveys with household heads or caregivers
- Youth surveys (quantitative and qualitative)
- Health facility surveys
- Community surveys

Youth quantitative questionnaires are multitopical and based on the programme's theory of change. Key outcomes measured include livelihoods skills and knowledge, economic activities, sexual debut, pregnancy, marriage, school attendance, aspirations, psychosocial well-being, violence victimization and perpetration, sexual exploitation, and health and sexual risk-taking behaviours. Furthermore, data are collected on potential moderating influences on programme impacts, including perceived social support. Wherever possible, survey items are pulled from national survey instruments, such as the Violence against Children Survey, Demographic and Health Surveys, and the World Health Organization's Multi-Country Study on Domestic Violence and Women's Health. Similar surveys have been implemented in the United Republic of Tanzania and throughout Eastern and Southern Africa through the Transfer Project.

The study involved in-depth, semi-structured (qualitative) surveys with a subsample of 32 youth to explore mechanisms and pathways for impacts on outcomes of interest. These were conducted in Swahili, digitally recorded, transcribed, and translated to English. The qualitative interviews are embedded in the longitudinal quantitative study. Because the sample is embedded, the full range of information from the household survey would also be available among these households, and the youth responses and challenges, as reported in the in-depth interviews, can be compared with the quantitative data collected from youth and households to understand the relationship between the two. Because of the sensitive nature of many topics, adolescent interviews were conducted in private locations where other household members could not hear what was being discussed. The interviews were administered by enumerators who were the same sex as the interviewees.

Data collection supervisors administered one community questionnaire to a group of knowledgeable individuals (for example, teachers and village leaders) in each community to assess topics such as access to markets, health facilities and schools; prices; village customs surrounding marriage (matrilineal, patrilineal, and so on) and caregiving (who would be expected to take in a child if the parent dies); and shocks. The aim of the community surveys is to understand service availability, cultural norms and the possible moderating impacts of community factors.

Health facility surveys were also administered to assess the age and gender breakdown of services accessed related to HIV and SRH.

3.5 Data collection training and activities

Midline enumerator training was carried out in May 2018, led by EDI with support from researchers at the UNICEF Office of Research—Innocenti.

Supervisor training took place on 3–5 May (three days) at the Fiosmimi Hotel in Bukoba and was conducted by the EDI coordination team (team leader, project coordinator and data processing officer). The training consisted of an introduction to the project, training on the community questionnaire that supervisors would be administering, and training on the household and youth questionnaires. Alongside the training on the tools, the supervisors received training on their roles and responsibilities in overseeing their teams, administration and finance, and quality control activities. The supervisors also received training on research ethics and the response plan for youth respondents. In total, five supervisors were trained. One of the five was later replaced by an experienced woman interviewer to avoid an all-man supervisor team.

The main interviewer training took place on 7–18 May with 42 trainees invited to take part. The training introduced trainees to the project and included in-depth training on the household and youth questionnaires. The training also included training on research ethics led by UNICEF Office of Research—Innocenti researchers. There were two days of outdoor practice on the household, youth and community tools, as well as an opportunity for supervisors to practice reporting to village offices. The first outdoor practice took place in Kagera and Mulayha on 14 May, and the second took place in Kagera and Mushozi on 16 May.

The two qualitative interviewers were trained alongside the main interviewer training session and were present during all sessions except for 11–12 May, when they received dedicated qualitative interviewer training. This training covered the basics of qualitative interviewing technique, in-depth training on the tools, and mock interviews. Qualitative interviewers took part in the same outdoor practice as the quantitative interviewers.

Household, youth (quantitative and qualitative) and community data collection was carried out by EDI between 22 May and 5 July 2018 using portable tablets and Surveybe, the Computer Assisted Personal Interviewing software. A sweeper team, consisting of two field teams, remained in the field until 25 July to interview youth who were not available during the main interview period.

The health centre training sessions included an introduction to the project, in-depth training on the health facility questionnaire, administration and finance, and quality control activities. The timelines for these training sessions and the data collection (rounds 2 and 3) were as follows:

- Round 2: from 20 February to 18 March 2018
- Round 3: from 17 July to 7 August 2018

3.6 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.[29] Enumerators received instruction on ethical data collection and informed consent during data collection training. Informed consent was obtained from all individuals ages 18 or more, and caregiver or parental consent and youth assent were obtained for all youth ages 14–17. A split sample approach was used to administer modules on violence victimization, that is, violence modules were alternately administered in one village among females and a second village among males. This approach serves to protect the safety and confidentiality of respondents, eliminating the chance that a man perpetrator and a woman victim living in the same community are both interviewed. Ethics approval for the study was granted by the Tanzania Commission for Science and Technology and the National Institute for Medical Research (Approval # NIMR/HQ/R.8a/Vol.IX/2784).

Informed consent includes the ethical components regarding the following: (a) transparency about the objectives and content of the study, without revealing to parents or caregivers the true nature of sensitive questions asked during the youth survey; (b) privacy and data security; (c) voluntary participation; (d) the right of participants to refuse or skip any questions without incurring any consequence; and (e) a follow-up to inform about or receive complaints and supply any further information about the study. The interviews last approximately 30–45 minutes per youth. Survey enumerators and youth were matched based on sex, that is, male enumerators interview males, and female enumerators interview females, and all interviews are conducted in private locations where other household members cannot hear what is being discussed. Enumerators used electronic tablets to input data, and questionnaires were administered in Swahili.

Following World Health Organization guidelines, organizers provided anonymized referral information to survey respondents who were asked questions about the experiences of violence.[30] This referral information included contact numbers for district social welfare officers. Social welfare officers in the PAAs were contacted in advance to ensure they were aware of these referrals and to verify the services available. In total, 33 per cent of adolescent respondents accepted the offer of information and were provided referral numbers at midline. In addition, enumerators also offered the respondents the option of sharing their contact information directly with the enumerators and 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); 52 of the 1,092 adolescents who were interviewed about experiences of violence chose this option. The World Health Organization guidelines were also followed in research on gender-based violence. In this case, enumerators were trained on gender-based violence, conducted the interviews in private settings, and skipped violence-related questions if a private setting could not be ensured.

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29 National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1978). *The Belmont report: Ethical principles and guidelines for the protection of human subjects of research.* Bethesda, MD.

30 Ellsberg, Mary, and Lori Heise (2005) *Researching Violence against Women: A Practical Guide for Researchers and Activists*, World Health Organization and Program for Appropriate Technology in Health, Washington, DC, http://www.who.int/reproductivehealth/publications/violence/9241546476/en/.

3.7 Data analysis

In the quantitative estimation of the impacts of the intervention, baseline and midline data from both treatment and control youth are used to compare changes between the two groups over time through an analytical approach, the analysis of covariance (ANCOVA) (see below).

Statistical significance is defined as a p-value lower than 0.05 ($p < 0.05$). If a programme impact estimate is statistically significant at the $p < .05$ level, one may conclude that the intervention had an impact on the associated outcome. If impact estimates are not significant at this level, then the evidence is insufficient to conclude that the programme caused changes with respect to the outcome. This may derive from a true lack of programme impact or insufficient statistical power to detect changes attributable to the intervention. For example, because the study was powered to detect changes in the full sample (males and females combined), the lack of significant impact estimates in subsamples by gender may arise because of a lack of statistical power. Combined estimates are therefore provided in the main report; differences by gender are supplied in the appendix tables In addition, descriptive information and graphic material are included to illustrate age and gender differences in outcomes over time.

Impact estimates may be interpreted as follows:

- For *binary outcomes* (for example, sexual debut), impact estimates represent the average percentage point change in the probability that an outcome occurs that is attributable to the intervention. For instance, as a result of the intervention, treatment adolescents were 4.5 percentage points less likely than adolescents in the control group to say they do not know where to obtain contraceptives.

- For *continuous outcomes* (such as gender-equitable attitude scales), the impact estimate represents the average change in the outcome attributable to the programme. Thus, the cash plus intervention increased gender-equitable attitudes by 0.263 points (on a scale ranging from 0 to 5). This indicates that the treatment group has, on average, gender-equitable attitudes that are 0.263 points more equitable leaning relative to the control group, and this difference is a result of the intervention.

In the description of the results below, the text refers to baseline balance among the panel sample and to attrition. Statistically significant differences in outcomes between study arms at baseline indicate that the sample is not balanced in that outcome. One may thus not be able to determine with certainty that the differences observed during follow-up waves on the same outcome are attributable to the intervention or to systematic differences that already existed at baseline between the treatment and control groups.

Attrition refers to the fact that some individuals interviewed at baseline were not interviewed at follow-up. They thus attrited, that is, they were lost to follow-up. Some attrition is normal in any longitudinal study because baseline interviewees move, die or otherwise become unavailable for the follow-up interviews. Two types of attrition are a concern in longitudinal studies: differential attrition and overall attrition. Overall attrition is the total share of individuals who attrit from baseline to follow-up regardless of treatment status. This can lead to less accurate and less representative estimates but does not threaten the internal validity of the study, that is, the ability to attribute differences between study arms at endline to impacts of the intervention. In contrast, differential attrition occurs if the characteristics of the individuals who leave the sample vary between treatment and control groups. This threatens the internal validity of the study because it can eliminate the balance between treatment and control groups that existed at baseline.

To explore the findings and the pathways of impact, complementary qualitative analysis was also conducted.

3.7.1 Quantitative analysis methodology

An ANCOVA specification was used whereby cash plus impacts are estimated as a function of the treatment indicator and of a set of control variables, including the baseline value of the outcome under consideration. ANCOVA is a more efficient estimation method than difference in differences if the correlation among outcome values at baseline and follow-up is low.[31] Within the set of outcomes measured both at baseline and midline, 73 per cent of outcomes have an autocorrelation below or equal to 0.2, which can be used as a threshold to define low autocorrelation.[32] The autocorrelation in outcomes in the current sample ranges from –0.02 (in youth participation in collecting nuts or other tree-fruits) to 0.75 (in school attendance).

The following model is estimated:

$$Y_{1ij} = \alpha_0 + \alpha_1 T_j + \alpha_2 Y_{0ij} + \alpha_3 X_{ij} + \varepsilon_{ij}, \qquad (3.1)$$

where Y_{1ij} is the midline value of the outcome under consideration for adolescent *i* living in community *j*; T_j is a dummy (binary) variable equal to 1 if the youth lives in a community where the Cash Plus Programme was implemented and 0 if the youth lives in a community receiving cash only; Y_{0ij} is a variable measuring the baseline value of the outcome under consideration; X_{ij} is a vector of controls, including gender, age at baseline, and PAA x size fixed effects; ε_{ij} is the error term. The estimated coefficient of interest is $\widehat{\alpha_1}$, which measures the impact of the Cash Plus Programme on the outcome of interest. In equation 3.1, the variable T_j is equal to 1 for all youth living in a treatment village, even if a youth did not actually attend the cash plus training. Hence, this equation estimates ITT impacts.

The analysis estimated the above model on the panel of youth who were interviewed at both baseline and midline. If the outcome of interest was only collected at midline, equation 3.1 was used, but without controlling for the baseline value of the outcome. In all regressions, standard errors were clustered at the community level.

ITT regressions are estimated both for the pooled sample of men and women youth and for the two separate subsamples by gender.

The impact of attendance at the cash plus training (average treatment on the treated, ATT) was also estimated. The decision to attend the cash plus training may be related to unobservable youth characteristics that may also influence the outcome of interest. Hence, a simple specification using youth cash plus attendance instead of the village treatment indicator in equation 3.1 would provide biased impact estimates. For this reason, information on ATT impacts was obtained using an instrumental variable approach, whereby the endogenous variable cash plus attendance is instrumented with the exogenous village treatment indicator.

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31 Difference in differences models compare changes in the treatment group between baseline and follow-up to changes in the control group over the same period. (The presence of the control group allows changes arising because of confounding factors, such as weather shocks, to be singled out, thus making it possible to isolate the impact of the intervention.) Difference in differences models fully control for baseline differences in means between the treatment and the control groups. This is inefficient if the baseline outcomes have little predictive power on outcomes at follow-up, that is, the correlation of outcomes at baseline and follow-up is low.

32 McKenzie, David J. (2012) 'Beyond Baseline and Follow-Up: The case for more T in experiments', *Journal of Development Economics*, vol. 99, no. 2, pp. 210–221.

Use of the two-stage least squares instrumental variable specification gives the following:

$$\textit{First stage: Attend Cash Plus}_{ij} = \beta_0 + \beta_1 T_j + \beta_2 Y_{0ij} + \beta_3 X_{ij} + \varepsilon_{ij} \qquad (3.2a)$$

$$\textit{Second stage: } Y_{1ij} = \gamma_0 + \gamma_1 \textit{Attend } C\hat{a}sh\ Plus_{ij} + \gamma_2 Y_{0ij} + \gamma_3 X_{ij} + \varepsilon_{ij}\ , \qquad (3.2b)$$

where $Attend\ Cash\ Plus_{ij}$ is a binary variable equal to 1 if the youth attended at least one cash plus training session, zero otherwise. In the first stage, this is estimated as a function of whether the youth lived in a cash plus village (T_j). The predicted value from the first stage ($Attend\ C\hat{a}sh\ Plus_{ij}$) is then used in the second stage, where the estimated coefficient $\hat{\gamma}_1$ measures the impact of actual attendance at cash plus training.

The following robustness tests were conducted on the estimates. First, inverse probability weights were added to the ANCOVA model to correct for overall attrition.[33] This procedure weights the observations in the panel sample so that they appear similar to the original sample at baseline. Second, difference in differences models are estimated to address baseline imbalances and differential attrition. (These results are included in a supplementary online appendix.) Both the inverse probability weights and the difference in differences results are largely consistent with the ANCOVA results included in this report. The main exceptions are the few outcomes that were unbalanced at baseline. For these, the difference in differences estimates differ in some cases from the ANCOVA estimates. These outcomes are listed in the attrition section, and the difference in differences impacts on these outcomes are discussed in the results sections (in both cases, see below).

3.7.2 Qualitative analysis methodology

Qualitative analysis was conducted in two phases: (a) rapid initial analysis to document observations during fieldwork and (b) in-depth analysis to raise the overall understanding of the lives and the transition to adulthood among the participants. All interviews were audio-recorded and transcribed in Swahili before being translated into English. The research team checked the validity of the English translations to ensure Swahili nuances were captured. Transcripts were analysed using QSR NVivo software.[34] A codebook was created using a priori themes from the interview guides that were developed; these themes were supplemented with themes that emerged during data analysis.[35] Initial coding structures were developed by the research coordinator and then, along with interview transcripts, shared with two other coders for recoding. In this way, the final coding structure was validated, ensuring consistency in the application of codes.[36]

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33 The predicted probability that youth are observed at follow-up was obtained based on equation 3.1, but with the term X augmented to include baseline variables, such as household dwelling characteristics and the baseline values of youth outcomes. The weights are obtained as the inverse of this probability.

34 See "NVivo," QSR International, Melbourne, Australia, https://www.qsrinternational.com/nvivo/nvivo-products.

35 Clandinin, D. Jean, and F. Michael Connelly (1994) "Personal Experience Methods," pp. 413–427 in *Handbook of Qualitative Research*, edited by Norman K. Denzin and Yvonna S. Lincoln, Sage, Thousand Oaks, Calif.; Weber, Robert Philip (1990) "Basic Content Analysis," Sage University Papers, Quantitative Applications in the Social Sciences Series, no. 49, Sage Publications, Newbury Park, Calif.

36 MacQueen, Kathleen M., Eleanor McLellan, Kelly Kay, and Bobby Milstein (1998) "Codebook Development for Team-Based Qualitative Analysis," *Cultural Anthropology Methods*, vol. 10, no. 2, pp. 31–36.

4. ATTRITION

Attrition occurs if youth from the baseline sample are missing in the midline sample. At baseline, 2,458 youth were interviewed (*see Figure 4.1*).[37] A total of 2,104 youth interviewed at baseline were reinterviewed at midline, representing a reinterview rate of 86 per cent. The impact analysis in this report examines data from the panel sample, that is, the responses of adolescents who were interviewed at both baseline and midline. The attrition rate of the study is in line with other longitudinal studies of adolescents in Eastern and Southern Africa.[38] Moreover, it does not differ significantly between treatment and control villages (see below), and the vast majority of youth characteristics in the panel sample at baseline remain balanced among youth in treatment villages and control villages. One may therefore have confidence that the estimated impacts accurately reflect the effects of the cash plus training sessions.

Figure 4.1. Youth sample, by response status at midline

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                    ┌──────────────────┐
                    │      2,458        │
                    │  Interviewed at   │
                    │     baseline      │
                    └──────────────────┘
              ┌───────────┴───────────┐
     ┌──────────────┐          ┌──────────────┐
     │    2,104     │          │ 354 Attrited  │
     │ Reinterviewed│          └──────────────┘
     └──────────────┘
            +
     ┌──────────────┐
     │ 286 Interviewed│
     │ at midline only│
     └──────────────┘
            =
     ┌──────────────┐
     │ 2,390 Total  │
     │ interviewed at│
     │   midline    │
     └──────────────┘
```
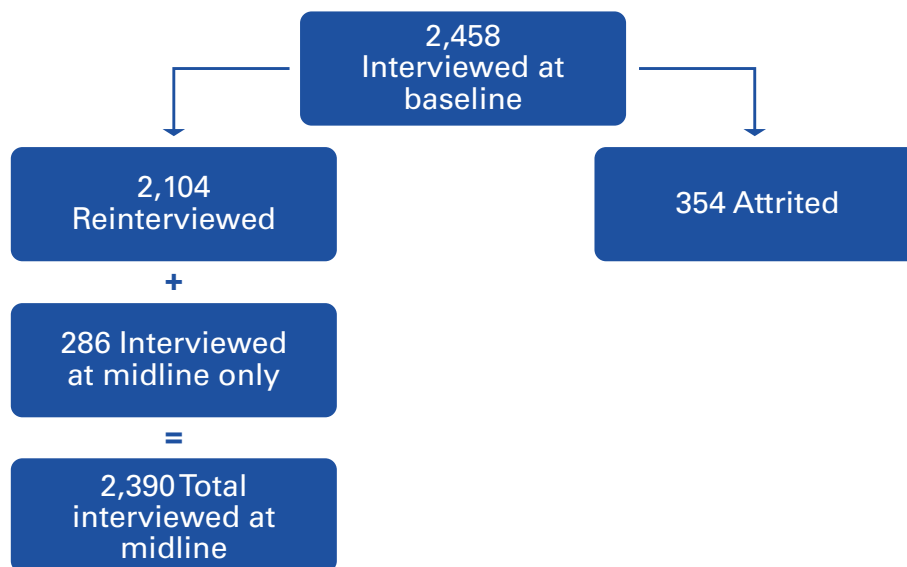
Youth were eligible for interview at midline if they were either (a) interviewed at baseline or (b) not interviewed at baseline, but reported at baseline that they were living in an eligible household and were in the 14–19 age group, even if, for example, they reported at midline that they were over age 20 and older than expected.[39] At midline, youth who had been interviewed at baseline were given precedence over eligible youth who had not been interviewed at baseline. In the case of youth no longer considered members of their baseline households, the baseline households would be briefly interviewed, and the youth would then be tracked to their new households (as long as these households were within existing PAAs) where the household survey would be conducted in full.[40]

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37 For information on the sample response at baseline, see TASAF (Tanzania Social Action Fund), et al. (2018) 'A Cash Plus Model for Safe Transitions to a Healthy and Productive Adulthood: Baseline report', April, UNICEF Office of Research—Innocenti, Florence.

38 For instance, see Austrian, Karen, et al. (2018) 'Adolescent Girls Initiative-Kenya: Midline results report', Population Council, Nairobi; Bandiera, Oriana, et al. (2018) 'Women's Empowerment in Action: Evidence from a randomized control trial in Africa', CEPR Discussion Paper no. 13386 (December), Centre for Economic Policy Research, London.

39 The inclusion of youth aged below 14 at baseline or midline would not have met the ethics review criteria.

40 The members of a household were defined as the individuals who normally eat their meals and reside together in the household. Youth were no longer considered part of a household if they had lived elsewhere for six months or more. The baseline household was the home in which the head of household was living at baseline. Within the panel sample (N = 2,104), 47 youth (about 2 per cent) had left their original baseline households and were tracked to new households at midline. Among tracked youth, 75 per cent were female, and 80 per cent were located in the same village or in a neighbouring village. The reasons given for moving were marriage or cohabitation (55 per cent of tracked youth), setting up a new household (19 per cent), work (4 per cent), school (2 per cent), and other or not reported (20 per cent).

Of the 354 youth who were not reinterviewed at midline, 61 per cent were reported as still residing at the baseline households, but temporarily away; approximately 36 per cent were living in different households, and the remainder were either deceased or their households could not be located (*see Table 4.1*). Among youth for whom the reasons for attrition were known, the majority were temporarily away to visit relatives or had left the baseline households for work elsewhere either permanently (19.8 per cent) or temporarily (11.9 per cent). A smaller share of youth had moved out of the baseline households for school (7.3 per cent) or marriage (6.2 per cent).

Table 4.1. Reasons youth were not interviewed

Reason	Number	%
Temporarily away: visiting relatives or friends	82	23.16
Temporarily away: work	42	11.86
Temporarily away: school	14	3.95
Temporarily away: other	10	2.82
Temporarily away: unknown	67	18.93
Moved out of household: work	70	19.77
Moved out of household: school	26	7.34
Moved out of household: marriage, cohabitation	22	6.21
Moved out of household: other	9	2.54
Household not found	8	2.26
Deceased	4	1.13
Total	**354**	**100**

The overall attrition from baseline to midline in the study was 14 per cent. If youth in the control and treatment villages attrit at different rates, the balance in the baseline characteristics between study arms could be eliminated (see above). This differential attrition implies that differences in youth outcomes between study arms at follow-up cannot be attributed with certainty to the intervention because they may derive from systematic differences already present at baseline. Whether attrition differs between treatment and control villages was tested by running a simple cross-sectional regression with an indicator of youth lost to follow-up as the dependent variable and the treatment as the independent variable. The regression includes PAA x size fixed effects, while the standard errors were clustered on communities. A significant coefficient on the treatment variable in the regression would represent evidence of the existence of differential attrition by treatment status. However, Appendix D, Table D.1 shows that this is not the case (p-value = 0.514). Thus, the internal validity of the impact evaluation is maintained.

Differential attrition is examined through the background characteristics of the sample. This is accomplished by running regressions that are similar to the above but using the treatment dummy to predict each baseline characteristic among the panel sample and the sample lost to follow-up. If the p-value on the treatment coefficient in Column 6 in the relevant tables in Appendix D is below 0.05, the panel sample and the sample lost to follow-up varied significantly by treatment status along the characteristic under consideration. Appendix D, Tables D.2–D.8 provide this analysis for baseline household characteristics. The focus in the analysis is on describing any imbalances within the panel sample, that is, the sample used to obtain the impact estimates. Of 84 indicators of household

characteristics at baseline, nine (11 per cent) vary significantly in treatment villages relative to control villages within the panel sample. However, these characteristics were initially unbalanced in the full baseline sample (see baseline report).[41] These are mostly household wealth indicators. For example, Appendix D, Table D.5 shows that, within the panel sample, households in treatment villages exhibit a significantly lower wealth index compared with households in control villages. So, any protective programme impact of cash plus may be underestimated and can thus be considered a lower bound. Appendix D, Tables D.9–D.12 provide the same analysis for baseline youth variables, none of which showed evidence of differential attrition in the panel sample. Appendix D, Tables D.13–D.29 report on attrition among outcome variables. Of the 89 outcomes measured at both baseline and midline, seven (8 per cent) vary significantly in treatment villages relative to control villages within the panel sample. Of these seven, five were initially unbalanced in the full baseline sample (participation and hours worked in the TASAF PWP; Ideal occupation: business owner; ever had a spouse or cohabiting partner; single or never married). The remaining two indicators of the seven were balanced in the full baseline sample but are unbalanced in the midline panel sample, thus showing evidence of differential attrition (has a girlfriend or boyfriend; experienced emotional abuse). For all seven indicators showing baseline imbalance in the panel sample, comments are supplied on the results in difference in differences models.

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41 See TASAF (Tanzania Social Action Fund), et al. (2018) 'A Cash Plus Model for Safe Transitions to a Healthy and Productive Adulthood: Baseline report', April, UNICEF Office of Research—Innocenti, Florence.

5. YOUTH UPTAKE OF THE PROGRAMME

This evaluation is aimed at measuring the impacts of the cash plus intervention on the knowledge, attitudes and behaviours of participants. In the absence of non-compliance, all eligible participants, that is, those residing in treatment villages, would attend the training sessions, and all non-eligible participants, that is, those residing in control villages, would not attend. A comparison of participants and non-participants would be sufficient to measure programme impacts. In this intervention, as is often the case in these types of programmes, some adolescents in the treatment villages who were offered the opportunity to participate did not take up the training. If the demographic and socio-economic characteristics of programme participants (the compliers) and of those people who are eligible but not participating (the non-compliers) are different, estimates of the effects of taking part in the programme will not be representative across the population, that is, they will not accurately predict the effects one can expect if the programme is scaled up.

Based on information available from the youth and household surveys, there were a total of 1,174 adolescents eligible to participate in the cash plus training exercises. Of these, 557 participated (a 47.4 per cent programme uptake), that is, they took part in at least one of the sessions. However, a total of 683 adolescents took part in the cash plus training exercises. The additional 126 individuals participating resided outside the eligible villages. This represents around 10 per cent of the youth interviewed in control villages. In terms of the programme evaluation, this represents the programme take-up among non-eligible individuals.

The study examines the differences between those in the treatment arm who participated in the training (the compliers) and those who did not participate (the non-compliers). Among all eligible adolescents, there were no differences between participants and non-participants with respect to educational attainment or school attendance. However, there is evidence of selection in programme take-up based on age, sex and literacy rates. Those who participated in the training are, on average, more likely to be literate, female and slightly younger than those who did not participate. In other variables related to the SRH outcomes, such as pregnancy status, the differences between compliers and non-compliers were not significant.

Among those who did not participate in the training, the most commonly reported reasons provided by respondents during the adolescent interviews were that they had not heard about the programme (29 per cent), that they had been in school (23 per cent), and that they had not been informed or had not been selected (23 per cent). A smaller share reported that the training location was too far or that they were not interested.

Because of these issues with non-compliance, the study reports on two approaches to impact measurement. The first approach involves the ITT effect, which measures the effect of residing in an eligible (treatment) village, irrespective of whether the adolescents actually took part in the training. This estimate covers the generalizable impact that one may expect were the programme to be scaled up to the entire population. This is so because making a programme available does not mean that all who may participate will participate. Programme impacts may thus be generalizable to two segments of the population: those who participate and those who do not participate. The second approach relies on the average ATT estimates, that is, estimates of the impacts of the treatment among those who participate in the sessions.[42] While the ATT estimates reveal more about the efficacy of the intervention

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42 ATT estimates are generated by using assignment into treatment (residing in an eligible village) as an instrumental (independent) variable for actual attendance. This is a two-stage estimation procedure. First, the likelihood of take-up is estimated and, then, the impacts among those most likely to have participated are estimated.

among participants, they are less relevant in reaching an understanding of the impacts that can be expected if the programme is scaled up to the entire population. Thus, antiretroviral drugs may be highly efficacious when taken as prescribed, but they may be less effective in practice as people may not take them because they have forgotten, fear the side effects, or face difficulties refilling prescriptions. Tightly controlled drug trials may help gauge the efficacy of the drugs (similar to the case of the ATT estimates), but, for policy and planning purposes, public health officials will also want to possess accurate estimates of the impacts when the drugs are made available across the population (i.e., the ITT impacts).

6. PARTICIPATION IN TRAINING

This section describes attendance at training sessions and the monitoring of the activities carried out in each session as reported weekly by facilitators.

6.1 Attendance

The training and monitoring data included information on 63 of 65 participating villages. The analysis covered attendance rates by village per week. The programme is comprised of 10 sessions, one per week, plus a two-day introductory session and a two-day closing workshop. This means that the intervention is comprised of 12 sessions. However, given that the closing week was delayed, some villages conducted one or two weeks of review sessions before the actual closing weeks. Many villages therefore reported that they had a total of 14 weeks of intervention. Some villages, however, reported up to 17 weeks. A plausible explanation for the latter case is an inadequate supply of reporting sheets at the time of reporting, which would result in recall bias during the process of completing the sheets in the weeks after implementation. Other reporting errors on attendance sheets – recorded weekly on paper among the villages and then entered digitally for analysis – may also be possible.

Figure 6.1 illustrates average weekly attendance rates per village. Attendance rates vary greatly by village. Some villages exhibit attendance rates of less than 20 per cent, while others show attendance rates of almost 90 per cent. The overall attendance rate was 51.3 per cent. Average weekly attendance rates across all villages were fairly stable, at around 50 per cent *(see Figure 6.2)*.

Figure 6.1. Average weekly attendance, by village
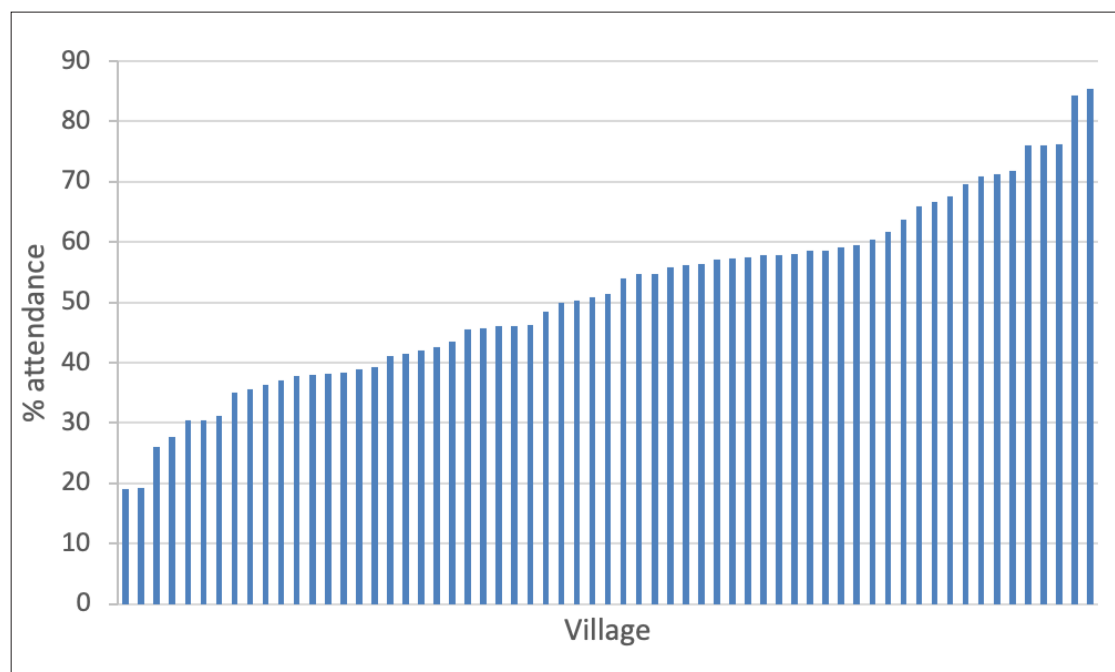
Figure 6.2. Average weekly attendance, all villages
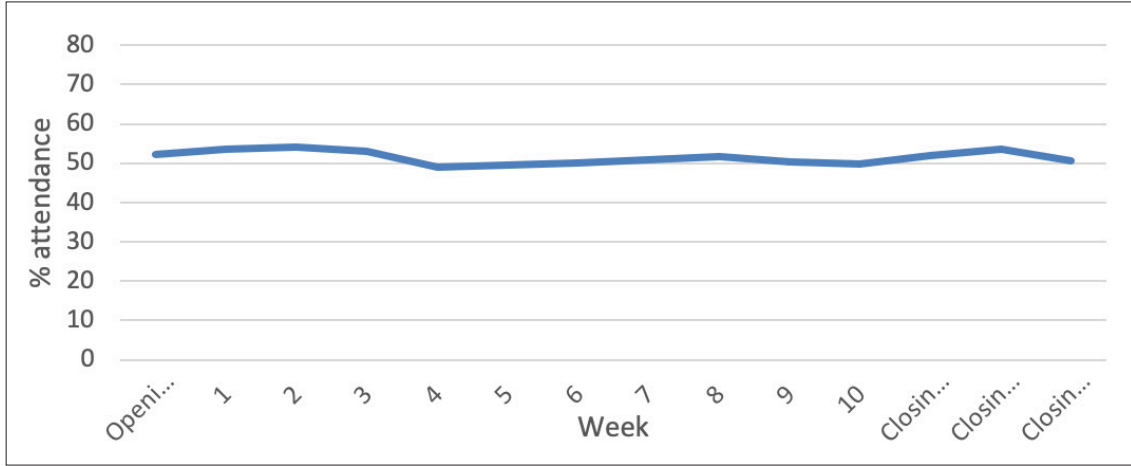
Note: A total of 17 villages that reported they had training sessions for more than 14 weeks are excluded.

Because trainers were not consistent in documenting the identities of youth in the training and monitoring data, it was not possible to identify youth as planned. Indeed, the total number of youth used to calculate attendance changed each week. Average weekly attendance rates by village were therefore calculated based on different denominators (total youth) each time. However, after an investigation involving a summing of the average attendance rates by village, an estimate of the total attendance of about 1,302 adolescents was obtained. This total was triangulated with official records and proved to be roughly consistent. Moreover, attendance rates of 50 per cent are in line with information provided in the youth survey (47.4 per cent).

Among youth who participated in the training, only about 25 per cent attended all 12 sessions, while 30 per cent attended only one or two sessions *(see Figure 6.3)*. The main reasons why participants attended so few sessions included that they had heard about the programme too late (23 per cent), that they were at school or working during the session periods (43 per cent), that the location of the training was too far away (12 per cent), and that they had not been selected or informed (16 per cent).

Figure 6.3. The distribution of attendance among participants, by session
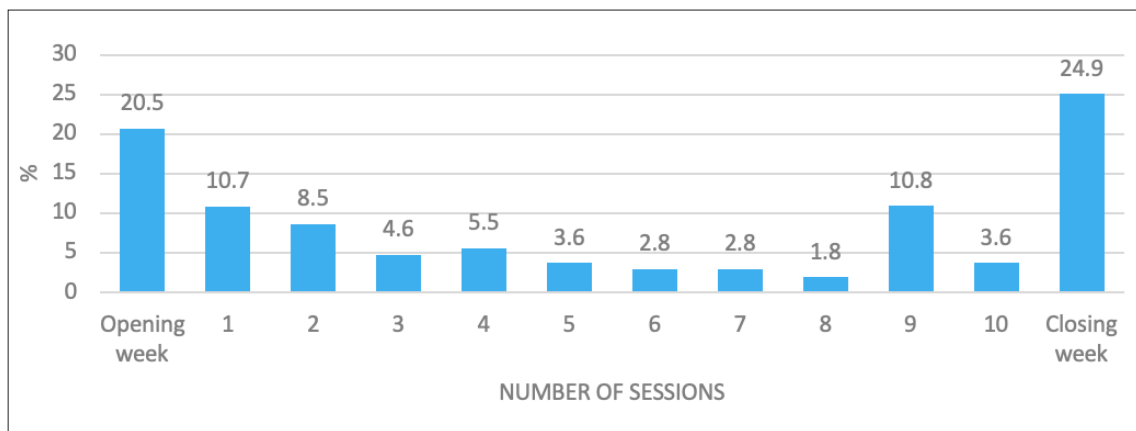
According to the responses during the youth interviews, 47 per cent of the youth were in school. This may explain the poor attendance, especially if these youth were involved in school activities during the periods when training sessions were being conducted. Indeed, during the early stages of the intervention, some training sessions were held during school hours, especially on Saturdays. This scheduling conflict was addressed and rectified towards the middle of the training programme. The responses during the youth survey reveal that, among the adolescents who took part in the training sessions, 10 per cent missed school to attend, and information on this issue is lacking in the case of 17 per cent. The average number of sessions attended did not vary by educational level.

6.2 Activity tracking

The intervention topics were distributed across the weekly sessions so that each session covered a separate topic *(see Table 6.1)*. Each week, sessions covered one topic in SRH and one topic in livelihoods. There was also an opening week with introductory sessions and a closing week divided into two days, one for revisions and one for the graduation ceremony.

Table 6.1. Shares of villages, by activity implemented, %

Week	Topic: SRH	Villages, %	Topic: livelihoods	Villages, %
Opening week	Introductory sessions 1, 2, 3: livelihoods and SRH			67.8
1	Coping with puberty	65.0	Transformation	58.3
2	Relationships	60.0	Dreams	73.3
3	What I know about HIV	54.4	Business concepts	64.9
4	Sexual risk-taking and prevention	61.0	Generate your business idea	76.3
5	Violence and gender-based violence	93.2	SWOT analysis	96.6
6	Pregnancy	58.3	Developing simple business plan	73.3
7	Family planning	75.9	Record-keeping	93.1
8	STIs	66.1	Saving for business	79.7
9	Living with HIV and AIDS	81.4	Responsibilities of entrepreneurs	81.4
10	Alcohol and drugs	88.1	Long-term life and business plans	76.3
Closing week	Livelihoods and SRH			
	Closing week 1: healthy living and revisions			75.5
	Closing week 2: send-off ceremony			35.9

Note: SWOT = strengths, weaknesses, opportunities and threats.

Appendix C, Tables C.1 and C.2 illustrate the weekly activities and the share of villages implementing each of these. Table 6.1 provides the share of villages performing the programme activities that should be covered in each week. During some weeks (for example, in week 3 'what I know about HIV'), slightly more than 50 per cent of villages reported that they had performed all relevant programme activities, while, during other weeks, more than 80 per cent of the villages reported that they had performed all the activities (such as week 10 'alcohol and drugs'). However, a look at each activity *(see Tables C.1 and*

C.2) reveals that most activities are carried out in more than 80 per cent of the villages. This means that there was no clear pattern in the skipping of activities by villages.

During the sessions on livelihoods, there were disparities by week. During week 1 (transformation), fewer than 60 per cent of the villages reported that they had implemented all activities, but, in week 5 (analysis of strengths, weaknesses, opportunities and threats [SWOT]), almost 100 per cent of the villages reported that they had implemented all the activities.

7. HEALTH CARE FACILITIES

As of August 2018, enumerators had surveyed primary health care facilities via questionnaires distributed throughout the study region three times over the study period. Information was collected on facility characteristics, equipment, adolescent-friendly services, drugs and medical supplies, and personnel. By implementing health facility questionnaires, the study was able to capture characteristics that may act as moderators of programme impacts. For example, the programme may have stronger impacts on SRH utilization in locations where facilities offer more services or have more personnel. A total of 91 public sector primary health care facilities were located in 69 villages within the study.

7.1 Data collection

Round 1 of the health care facility survey training and data collection was conducted in conjunction with baseline data collection for other survey instruments (household, youth, community and qualitative surveys) between 22 April and 29 May 2018. The survey was administered to 102 health facilities, of which 91 were considered part of the study sample and included in the baseline report. These 91 facilities were revisited during round 2, from 20 February to 16 March 2018. The relevant training occurred on 12–14 February. Round 3 of data collection occurred from 17 July to 7 August 2018 (training: 9–11 July). It covered an additional nine health care facilities identified by the UNICEF Tanzania Country Office because they potentially serviced cash plus communities that had not been included in previous rounds. These nine health facilities are excluded from the analysis of trends presented below (facility characteristics, surgical services, drugs and supplies, and personnel), but are included in indicators where the survey instrument changed, resulting in a lack of comparability between waves (adolescent-friendly environment and staff, services available to adolescents, utilization of services by youth). Thus, only the findings of round 3 are presented on these outcomes.

7.2 Facility characteristics

Figure 7.1 presents the basic characteristics of health care facilities in each round. The share reporting that they had electricity grew over time, at approximately half at round 1 (53 per cent) and 66 per cent by round 3. Increases also occurred in the share of facilities reporting that they possessed a protected water source (from 53 to 63 per cent), a refrigerator (85 to 99 per cent), and a waiting room (4 to 11 per cent). Changes in how the question on refrigerators was asked resulted in a dip at round 2 to only 9 per cent.

Figure 7.1. The means of basic characteristics of health care facilities, by round (N = 91)
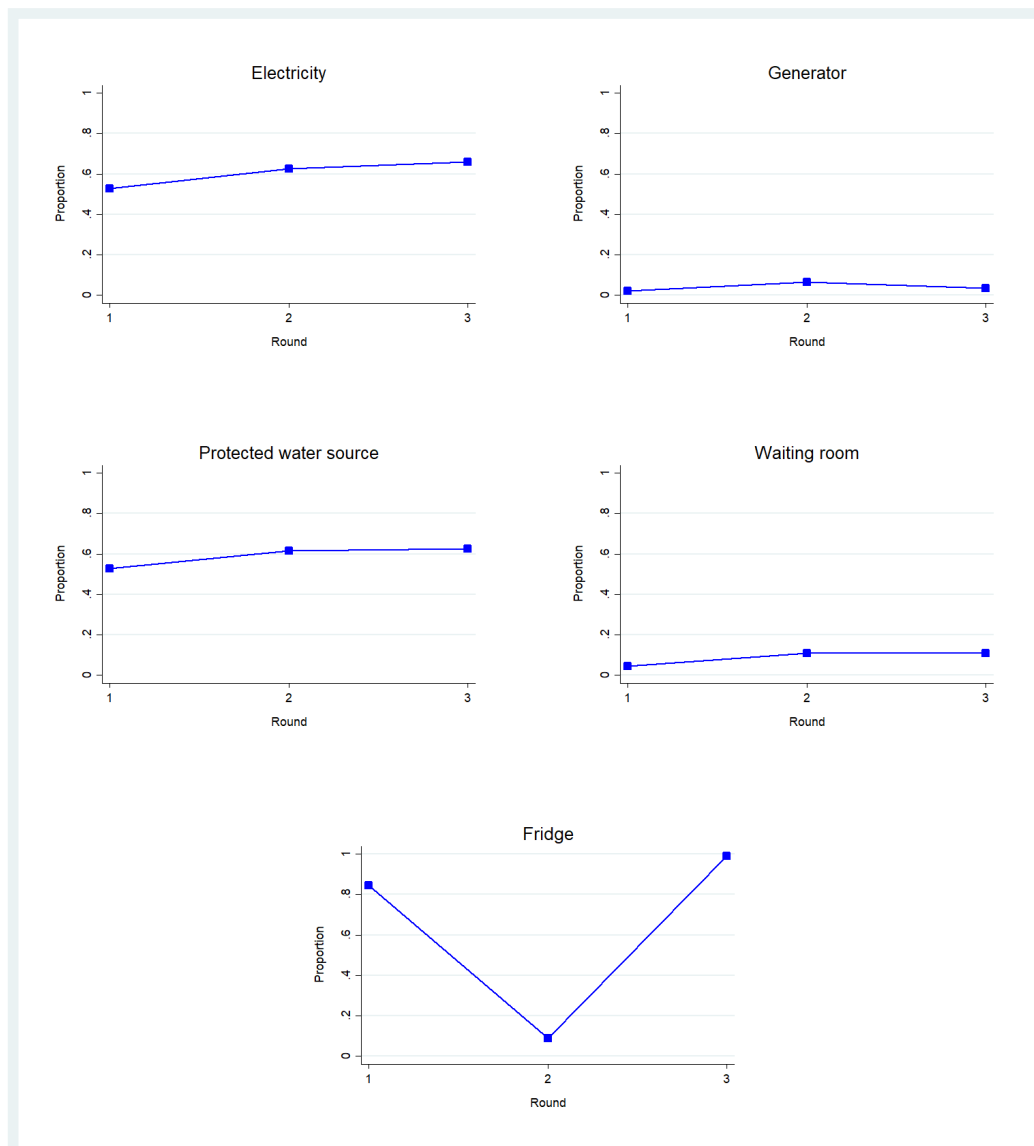
The health facility survey also included several questions about adolescent-friendly services *(see Table 7.1)*. Due to changes in the survey and the way in which questions were asked, the results of only round 3 of the data collection are shown. In only about half of the facilities had current staff been trained in youth-friendly HIV and family planning services. In only one third had current staff been trained in gender-based violence services. About the same proportion, one in three, reported that they had implemented changes to make services more youth friendly following the previous survey round (the previous 12 months for new facilities). Examples of youth-friendly changes include separate waiting areas for youth, expanded hours, and attitudes training among health care workers on the access of adolescents to HIV-SRH services. Only 5 per cent of facilities had added waiting rooms for youth, and 34 per cent had implemented youth-friendly hours or extended opening hours to make them more youth friendly. The survey also asked whether staff participated in school meetings to inform parents, guardians and teachers (0 per cent) or in meetings with the community to discuss the health services available to adolescents and the importance of utilizing these services (37 per cent). The survey likewise inquired about the availability of referral systems for adolescent clients (12 per cent), regular supervisory visits related to adolescent-friendly services by the Ministry of Health or other trainers (13

per cent), and the use of suggestion boxes for the benefit of adolescents (2 per cent). In addition, the survey included three questions on inclusion policies to learn whether facilities take into account the ability to pay in determining fees for the treatment of adolescents (more than half the facilities do so) and whether all adolescents (including unmarried adolescents) are provided access to contraceptive services (92 per cent) and HIV services (100 per cent).

Table 7.1. Adolescent-friendly characteristics, round 3 (N = 100)

Characteristic	Mean
Adolescent-friendly trained staff	
HIV services	0.52
Family planning	0.55
Gender-based violence services	0.34
Adolescent-friendly changes since the previous round*	
Any	0.37
Youth waiting rooms	0.05
Hours for youth	0.34
Adolescent-friendly documents	
Policies, guidelines, procedures	0.57
Materials for community	0.39
Communication*	
School meetings	0.00
Community meetings	0.37
Other adolescent-friendly services	
Referral system	0.12
Supervisory visits	0.13
Suggestion box	0.02
Inclusion policies	
Ability to pay	0.54
Contraceptives for all youth	0.92
HIV services for all youth	1.00

* The previous 12 months for new facilities.

7.3 Services and supplies

The surgical and testing services, by round, are summarized in Figures 7.2 and 7.3. Only 5 per cent of facilities have an operating theatre (down from a reported 9 per cent at round 1), indicating that few (2 per cent at round 3) are capable of performing C-sections. Whereas, at round 1, 65 per cent reported they performed circumcisions, the share had fallen dramatically, to only 15 per cent, at round 3. However, during follow-up rounds, interviewees were asked about circumcisions performed in the facility by facility staff, whereas, at baseline, the question also covered circumcisions performed at the facility by other organizations. The difference in rates between rounds may thus be attributed to how the question was asked. Only one facility in five had a laboratory on site at round 1; by round 3, the share was down to almost one facility in ten. Nonetheless, most facilities test for a number of illnesses. At all three rounds, 100 per cent tested for malaria using rapid diagnostic tests, as well as for HIV. By

round 3, nearly all facilities were conducting tests for pregnancy (98 per cent), and all were able to test for 95 other STIs. However, only 7 per cent were able to conduct a Pap test at each round, though anæmia tests increased from 18 per cent to 23 per cent. By round 3, only 4 per cent of facilities were testing for malaria using a malaria parasite smear.

Figure 7.2. The means of surgical services, by round (N = 91)
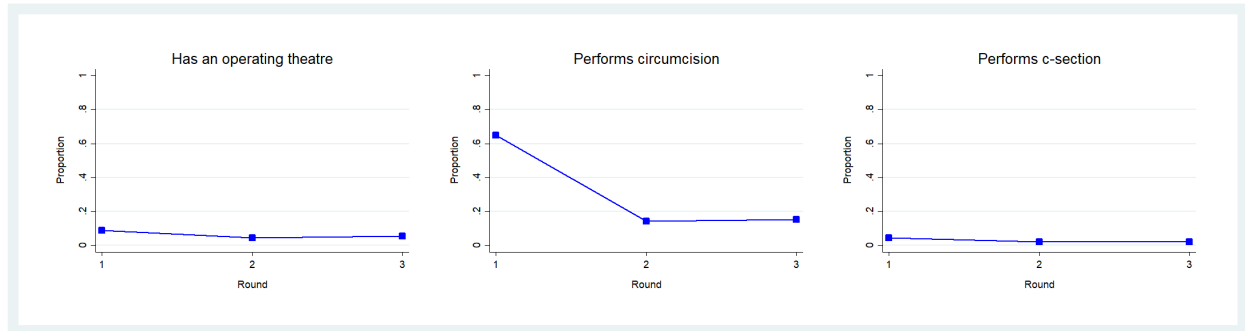
Figure 7.3. The means of laboratory testing services, by round (N = 91)
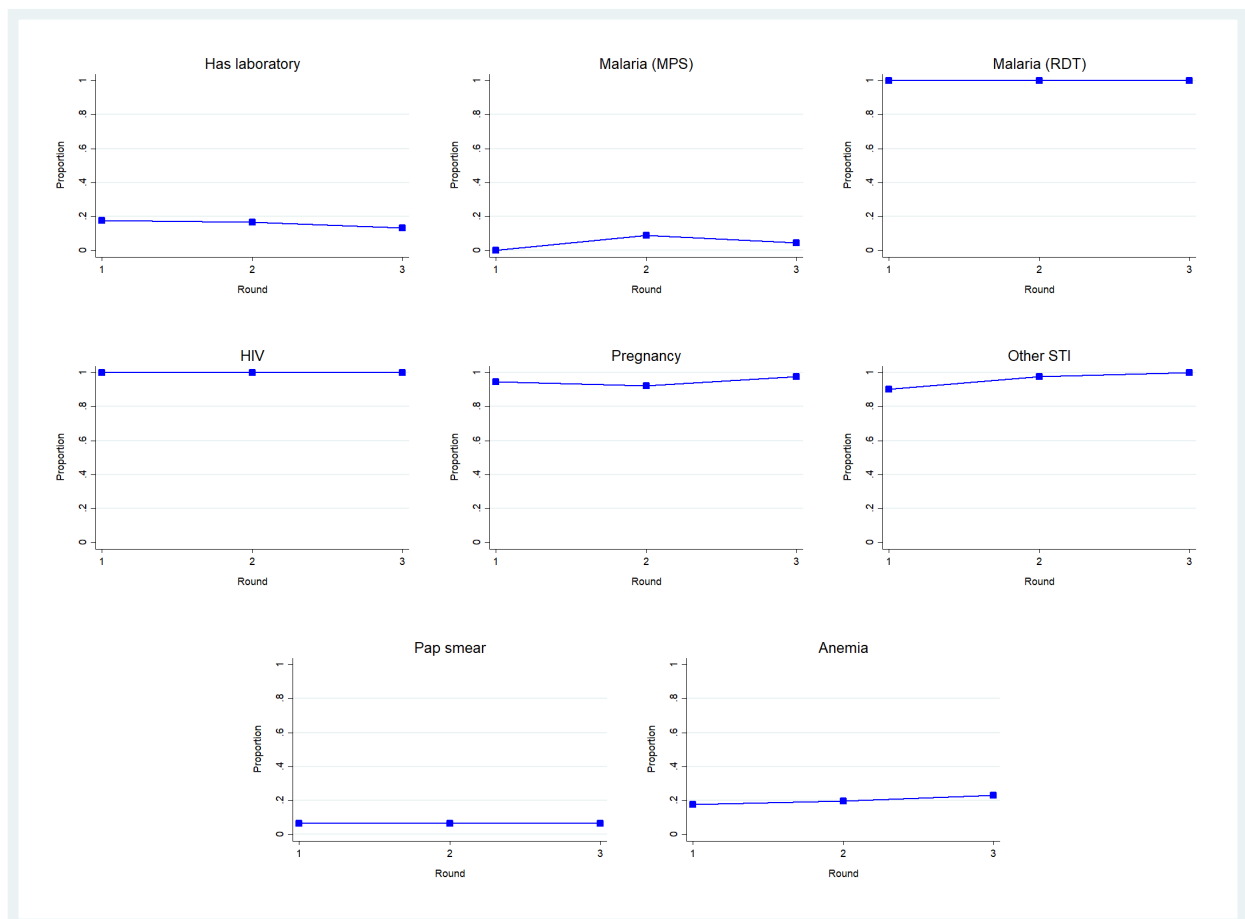
The Pap test is a simple and quick screening test used to detect pre-cancer and cancer processes in the cervix. It is effective and cost-effective and has been pivotal in reducing the number of cervical cancer deaths in high-income countries.[43] Chronic anæmia, which is a condition characterized by low

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43 Safaeian, Mahboobeh, Diane Solomon, and Philip E. Castle (2007) 'Cervical Cancer Prevention; Cervical Screening: Science in evolution', *Obstetrics and Gynecology Clinics of North America*, vol. 34, no. 4, pp. 739–760.

levels of healthy red blood cells, can have many negative effects on youth. It is associated with poor school performance and attendance, retarded intrauterine growth, miscarriage and maternal morbidity and mortality.[44] Adolescent girls in particular are at high risk of negative outcomes related to chronic anæmia, putting their own health and that of future generations at risk.[45]

Table 7.2 presents details on the types of services offered by health facilities in the study areas at round 3. Respondents first reported whether the service was available at the facility for any visitors (column 1), and then they reported whether the service was directly provided to adolescents (column 2). The number of hours each service is available per week for adolescents was also reported. The final column represents the average number of hours the service is available per day. All or nearly all of health facilities offer outpatient consultations, deliveries, well baby clinics, antenatal clinics, family planning, HIV testing and counselling and other STI testing and counselling, postnatal care, and prevention of mother-to-child transmission of HIV using antiretroviral treatment. Three quarters of the facilities offer outreach services. Only around one facility in three provides treatment for HIV or gender-based violence services, and almost none have a mobile clinic (3 per cent). These services are almost always also available for adolescents. The availability ranges from about an hour a week at mobile clinics to all day for deliveries.

Table 7.2. Service availability, round 3 (N = 100)

Service	Has service (%)	For adolescents (%)	Average hours a day for adolescents (N)
Outpatient consultations	1.00	1.00	8.18
Deliveries	1.00	1.00	23.63
Well baby clinics	1.00	0.99	5.50
Antenatal clinics	1.00	1.00	5.88
Family planning	0.99	0.99	6.61
Mobile clinics	0.03	0.03	0.15
HIV testing, counselling	0.99	0.99	7.48
Other STI testing, counselling	1.00	1.00	7.17
HIV treatment	0.37	0.37	2.82
Gender-based violence services	0.36	0.35	6.85
Outreach	0.78	0.78	1.34
Postnatal care	1.00	1.00	7.38
Prevention of mother-to-child transmission	0.97	0.97	6.33

The participants in the qualitative interviews explained that not all villages had health facilities, and they had to go elsewhere when they needed these services.

Young people from this village go to a dispensary in the neighbouring village. We may go to the dispensary in a group of up to five people, and we go there and test [for HIV].
– Boy, Mufindi, Iringa Region

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44 Chen, Lenis P., et al. (2011) 'The Impact of Anemia on Maternal Mortality: An updated review', *FASEB Journal*, vol. 25, no. 1 Supplement, 779.12; Haas, Jere D., and T. A. Miller Brownlie (2001) 'Iron Deficiency and Reduced Work Capacity: A critical review of the research to determine a causal relationship', *Journal of Nutrition*, vol. 131, no. 2S-2, pp. 676S–690S.

45 Brabin, Loretta, and Bernard J. Brabin (1992) 'The Cost of Successful Adolescent Growth and Development in Girls in Relation to Iron and Vitamin A Status', *American Journal of Clinical Nutrition*, vol. 55, no. 5, pp. 955–958.

It is a vocational college, but they have a department that gives family planning services and testing for HIV right there at the college.
– Girl, age 19, Rungwe, Mbeya Region

At each health facility, information on select drugs and supplies was also provided during each round. Supervisors collected information on whether the facility normally carries the item and if the item was actually in stock at the time of the survey. Figure 7.4 shows the drugs in stock at the time of the three rounds. Among the commonly available modern contraceptives, the availability of male condoms declined over the three waves (87 per cent; 80 per cent at round 3). The availability of contraceptive pills and contraceptive injectables rose (respectively, from 82 to 96 per cent and from 78 to 97 per cent). The less commonly available forms of contraception include female condoms, which were slightly less available at round 3 (down from 15 to 12 per cent). Intrauterine devices were available in more health facilities at round 3 (from 19 to 29 per cent). There was also a rise in the availability of emergency contraceptive pills (from 35 to 43 per cent at round 3) and contraceptive implants (from 40 to 64 per cent). Round 2 shows an increase in the availability of supplies relative to rounds 1 and 3, which may have been related to seasonality or recent shipments of medical supplies to the study regions.

Figure 7.4. Availability of supplies, by round (N = 91)
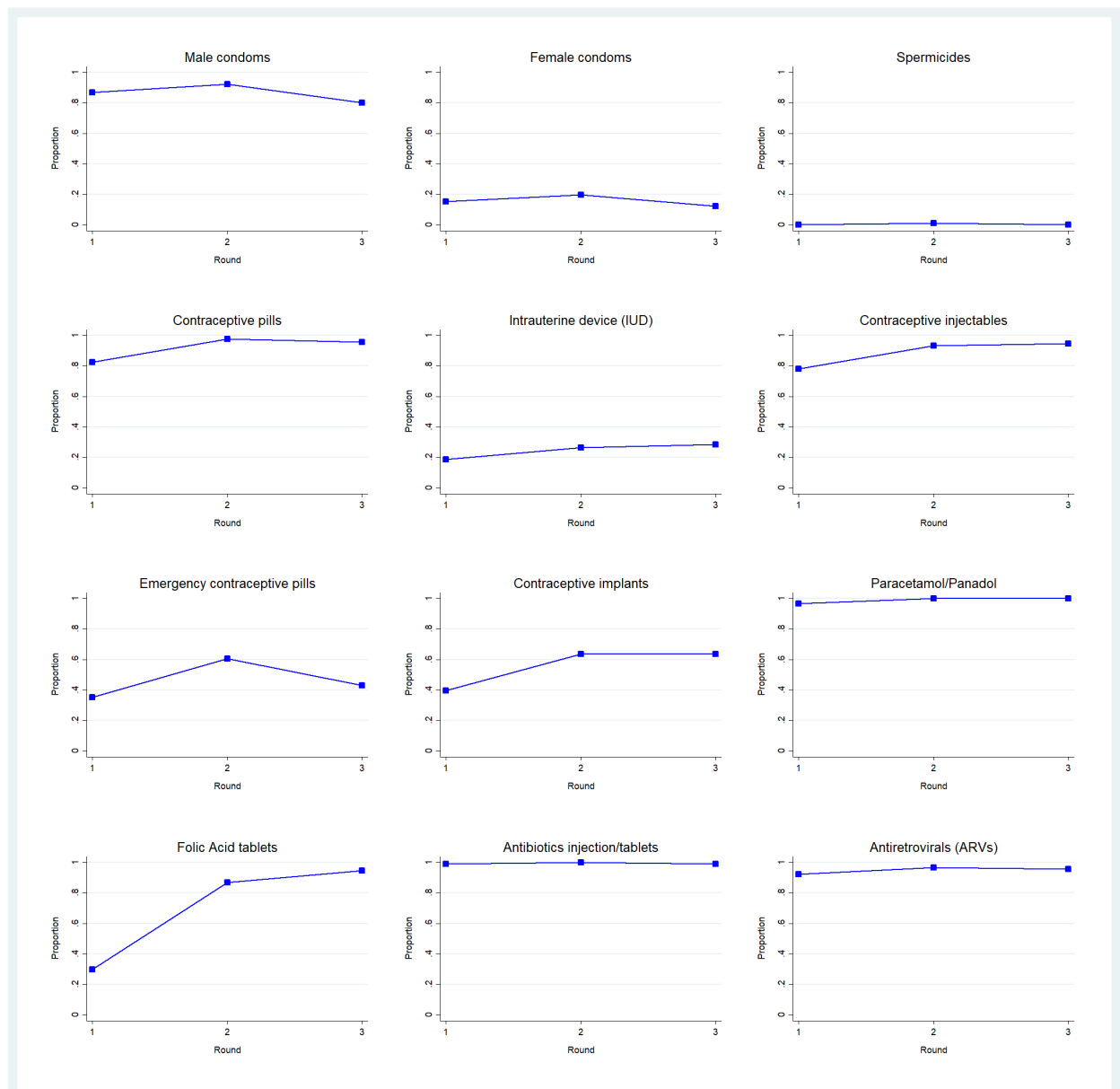
Common drugs, such as paracetamol, folic acid tablets, antibiotics and antiretroviral drugs to treat HIV, were available in nearly all the health facilities at round 3. It is recommended that pregnant women take folic acid tablets to improve their micronutrient status during pregnancy and to prevent anæmia and spinal cord deformities of the fœtus.

7.4 Personnel

Figure 7.5 presents summary statistics on the type of personnel employed at health facilities, by round. Information was also collected on the sex composition of staff and if staff were employed part time or full time. As nearly all staff were employed full time, this parameter is not covered here. Each panel in Figure 7.5 shows the availability of a particular category of staff at the health facilities. Across rounds, there were few medical officers, assistant medical officers, pharmacists or pharmacy assistants. The most common types of employees across rounds are medical assistants and clinical officers, medical attendants, and enrolled nurses and midwives.

Figure 7.5. The means of types of personnel at facilities, by round (N = 91)
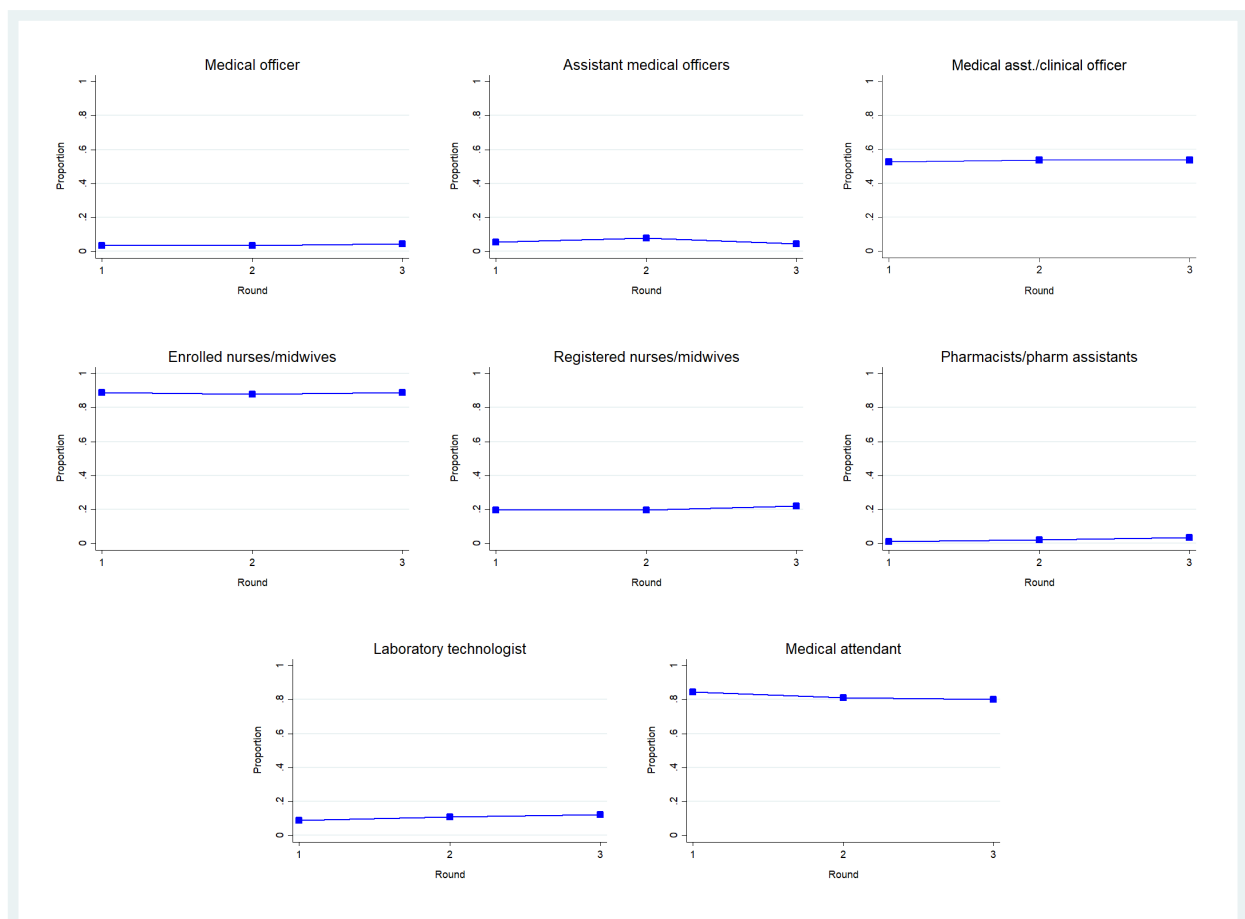
Each facility also reported on the number of youth ages 14–19 who had visited the facility during the 30 days prior to the survey. The survey captured the primary reason for the visits, but youth could be counted more than once if they accessed multiple services. On average, 3.3 males and 10.7 females visited for HIV testing during the month prior to the survey *(see Table 7.3)*. Overall, many more females accessed primary health facilities than males. Almost all visits for family planning or contraceptives were by females. More than twice as many females as males visited clinics for STI testing and HIV treatment, although males were more likely to go to clinics for condoms. Overall, most youth visited

health centres to access HIV and STI testing, followed by family planning and contraceptives, and prenatal care. The least utilized services were for STI treatment, gender-based violence services and anæmia treatment.

Table 7.3. Motive for health facility visits by youth, previous 30 days, by gender, round 3 (N = 100)

Service	Male (N)	Female (N)	All (N)
Family planning, contraceptives	0.21	3.89	4.10
HIV testing	3.34	10.65	13.85
STI testing	0.18	1.38	1.56
HIV treatment	1.26	2.07	1.93
STI treatment	0.00	0.07	0.07
Prenatal care	—	2.48	2.48
Postnatal care	—	1.53	1.53
Anæmia	0.01	0.92	0.67
Condoms	0.98	0.02	0.53
Voluntary medical male circumcision for HIV prevention	0.37	—	0.19
Gender-based violence services	0.07	0.20	0.16
General illness, information	5.01	7.75	12.76
Proxy-means test, cash transfer	—	0.74	0.71
All services	10.20	29.63	39.83

Note: Not all facilities collected data on each service, resulting in missing values for some services. Youth could be counted for more than one service. — = not applicable because the service is gender specific.

8. SCHOOLING, ECONOMIC PARTICIPATION AND TIME USE

This section describes programme impacts on adolescents in terms of schooling, participation and the amount of time spent in economic activities and performing household chores.

Main findings

School dropouts did not change as a result of the Cash Plus Programme.

The programme increased youth participation in economic activities. The increase was mainly driven by greater participation in household livestock herding.

The programme did not affect the number of hours spent in economic activities.

Youth engagement in household chores is not affected, except for more participation and hours in collecting firewood, which may be used in livestock herding.

8.1 Schooling

Because of the target ages of the youth in the evaluation sample, some of the youth are still in school. At baseline, 54 per cent of youth were attending school: 22 per cent in primary school and 32 per cent in secondary school. Females are significantly more likely to attend school than males. This gender difference was mostly driven by older females in secondary school. During implementation of the Cash Plus Programme, an effort was made to schedule the training sessions outside school hours, so as to avoid youth missing school to participate in the programme.

The study tests whether the programme had any influence on schooling.[46] It considers seven outcomes: whether youth dropped out of school between baseline and midline (refers only to youth who were attending school at baseline); whether youth currently attend school; whether youth currently attend primary school; whether youth currently attend secondary school; whether youth completed no education; whether youth completed some primary school; and whether youth completed primary school or higher.[47] There is no evidence of differential attrition arising from these education variables. In the panel and in the attritor samples, baseline education is not significantly different between treatment and control groups.

Figure 8.1 shows locally weighted scatterplot smoothing graphs of school dropout rates among youth, by gender and age at baseline. This indicator is only measured at midline. It is defined as a dummy variable equal to 1 if a youth was attending school at baseline but is not attending school at midline. The figure shows separate patterns for females and males. Among females (left panel), older youth residing in treatment villages are less likely to have dropped out at midline compared with their peers in control villages. Among males (right panel), the differences in school dropout rates between study arms are smaller, except for males aged 18, who are more likely to have dropped out in intervention villages than in control villages.

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46 A similar analysis is performed in assessments of the impact of the Empowerment and Livelihood for Adolescents Programme. For the case of Uganda, see Bandiera, Oriana, et al. (2018) 'Women's Empowerment in Action: Evidence from a randomized control trial in Africa', CEPR Discussion Paper 13386 (December), Centre for Economic Policy Research, London. For the case of Tanzania, see Buehren, Niklas, et al. (2017) 'Evaluation of an Adolescent Development Programme for Girls in Tanzania', Policy Research Working Paper 7961, World Bank, Washington, DC.

47 Cash plus impacts were also estimated on years of education completed. Across various specifications, no statistically significant impact was found. The same holds for the indicator measuring whether youth ever completed any livelihood training or vocational programme other than cash plus (results not shown).

Figure 8.1. School dropout rates among youth between baseline and midline, by treatment status and gender
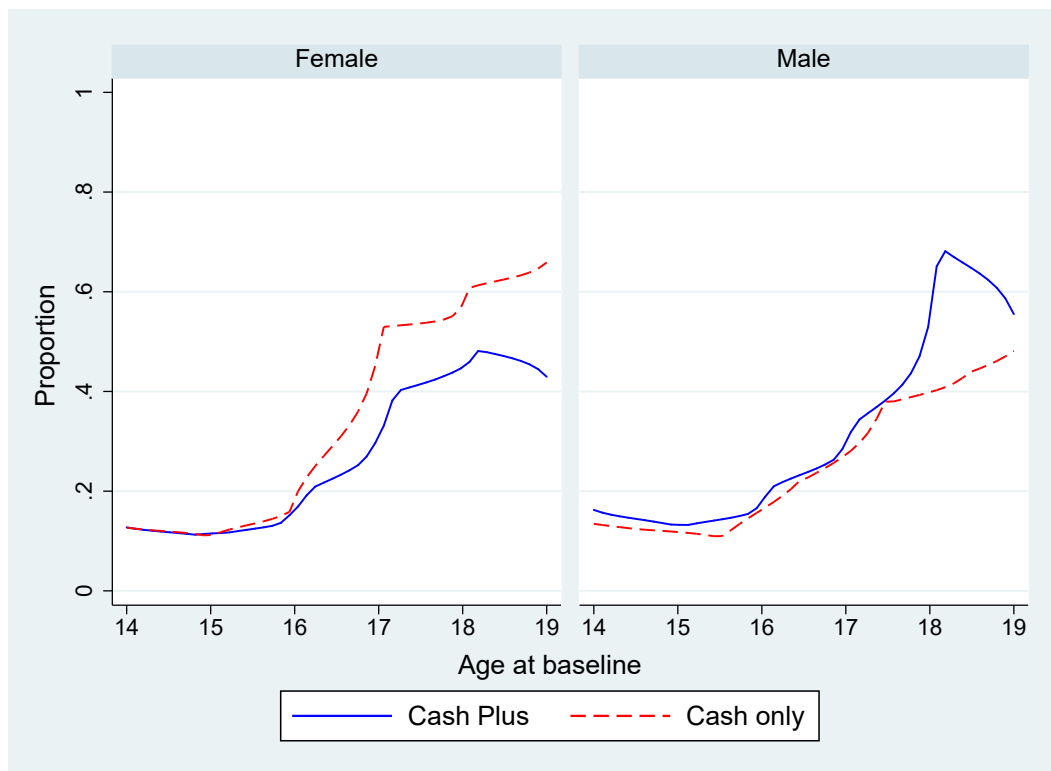
However, the estimated impacts of the Cash Plus Programme on school dropout rates are not statistically significant *(see Table 8.1)*. Column 1 reports ITT estimated effects, while column 2 reports ATT effects. No statistically significant impact of the programme on school dropout rates or any other education outcome was found.[48]

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48 We also estimated impacts on dropout from secondary or primary school separately. Again, we did not find any statistically significant impact (results not reported).

Table 8.1. Cash plus impacts on schooling (ANCOVA)

Indicator	ITT Impact (1)	ATT Impact (2)	Baseline mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Dropped out of school[a]	−0.001	−0.004	–	0.190	0.190
	(0.02)	(0.06)			
Currently attending school	−0.014	−0.035	0.561	0.488	0.469
	(0.01)	(0.04)			
Attends primary school	0.012	0.031	0.232	0.090	0.109
	(0.01)	(0.03)			
Attends secondary school	−0.025	−0.065	0.329	0.399	0.361
	(0.02)	(0.04)			
Highest grade completed: none	0.001	0.002	0.026	0.032	0.037
	(0.01)	(0.02)			
Highest grade completed: some primary	0.020	0.053	0.328	0.176	0.217
	(0.02)	(0.04)			
Highest grade completed: primary or higher	−0.020	−0.051	0.646	0.792	0.746
	(0.02)	(0.04)			
N	2,104	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.

a. Dropout rates are only available at midline for youth who were attending school at baseline (N = 1,181). Regressions on dropouts only control for gender, age at baseline, and PAA x size fixed effects.

*p < .05 **p < .01

The same findings hold in the case of estimates of the impacts by gender *(see Appendix E, Table E.1)*. Hence, overall, there is no evidence of a negative impact of cash plus on education outcomes. This finding demonstrates that providing livelihoods training to school-age youth does not encourage youth to drop out of school to participate in the programme. Indeed, during the programme design phase, it was decided that youth who continue in school should be eligible to participate in the training so as not to determine unintended effects on school dropout rates. The impacts on schooling were also estimated among the subsamples of older females and males, that is, individuals aged 17 or more at baseline (19 years or more at midline). This revealed that females in intervention villages were significantly less likely to have dropped out of school by midline relative to their peers in control villages (results not shown).

8.2 Economic participation and time use

Cash plus training includes elements of economic empowerment, such as support in identifying viable livelihood opportunities and role models, while considering personal attitudes and interests. These elements of the training are expected to increase youth involvement in economic activities, that is, youth are offered assistance in actively seeking job opportunities or starting a job. The Cash Plus Programme may also change the type of economic activities in which youth engage by providing youth with more productive and safer livelihood opportunities. Past evaluations of programmes similar to the Cash Plus Programme training found mixed results depending on various factors, such as the amount of time youth were exposed to the training and the quality of implementation. In the context of Uganda, for example, vocational and life skills training increased self-reported entrepreneurial skills among girls, which translated into significantly greater involvement in microentrepreneurial activities. In this case, the training was carried out over a period of two years, and impacts were measured four years after the start of the programme.[49] In the United Republic of Tanzania, a similar programme had no statistically significant impacts on a range of economic outcomes, as measured immediately following two years of training.[50] A related literature review examined the impact of programmes providing stand-alone business training. Overall, training programmes exhibited weak impacts on the adoption of specific business practices and, consequently, on business growth.[51] The cash plus impacts on adolescent economic activities were measured at midline immediately after the end of the training period, though it may take some time for the youth participants to undertake new economic initiatives through the application of the knowledge they received. Moreover, at the time of the midline data collection, youth had not yet received any mentoring, nor any productive grants, which are components of the intervention implemented at later stages. These factors are likely to limit the extent of the observed impacts on youth economic activities at midline.

The cash plus training is not expected to have a direct impact on adolescent participation in household chores. However, the participation of youth in household chores could decline if youth increase their economic activities. Moreover, there could be an increase in participation in household chores by males, given that the cash plus training included sessions and discussions aimed at challenging gender roles and stereotypes. Cash plus impacts were estimated on youth participation and hours worked in economic activities during the week before the interviews and in household chores during the day before the interviews. Six types of economic activity were considered: household farm work, excluding livestock; household livestock herding; fishing for the household; work in a household non-agricultural business; paid work outside the household; and participation in the TASAF PWP. Five types of household chores were likewise considered: collecting water; collecting firewood or other fuel materials; collecting nuts or other tree fruits; taking care of children, cooking or cleaning; and caring for elderly or sick household members. There is no evidence of differential attrition from these variables, except for participation and hours worked in the TASAF PWP. These outcomes were unbalanced across the full baseline sample initially. Thus, at baseline, youth in treatment villages were significantly more likely to participate and generally worked a greater number of hours in the TASAF PWP relative to youth in control villages. This baseline imbalance was maintained at midline within both the panel and attritor samples *(see Appendix D, Table D.14)*. Hence, in the descriptions of impact estimates below, difference in differences results on this outcome are also examined.

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49 See Bandiera, Oriana, et al. (2018) 'Women's Empowerment in Action: Evidence from a randomized control trial in Africa', CEPR Discussion Paper 13386 (December), Centre for Economic Policy Research, London.

50 See Buehren, Niklas, et al. (2017) 'Evaluation of an Adolescent Development Programme for Girls in Tanzania', Policy Research Working Paper 7961, World Bank, Washington, DC.

51 Kluve, Jochen, et al. (2016) 'Do Youth Employment Programs Improve Labor Market Outcomes? A quantitative review', *World Development*, vol. 114, pp. 237–253; McKenzie, David J., and Christopher Woodruff (2014) 'What Are We Learning from Business Training and Entrepreneurship Evaluations around the Developing World?' *World Bank Research Observer*, vol. 29, no. 1, pp. 48–82.

At baseline, about 80 per cent of the youth had participated in an economic activity during the week before the interviews. Of the youth who had engaged in an economic activity, about 55 per cent had participated in two or more of the activities considered. The most common activities were household farm work, excluding livestock (a 65 per cent participation rate at baseline) and household livestock herding (44 per cent). About 15 per cent of the youth had engaged in paid work outside the household. Participation rates in a household non-agricultural business and TASAF PWP were relatively low (5 per cent and 3 per cent, respectively). The vast majority of the youth had participated in household chores at baseline, and about 75 per cent had engaged in two or more of these activities during the day before the interviews. The most common household chores performed by youth are collecting water (65 per cent) and taking care of children, cooking or cleaning (72 per cent). As highlighted in the baseline report, there are significant gender differences in youth participation rates in economic activities and household chores. Girls are relatively more likely to engage in household chores, and boys are relatively more likely to participate in economic activities.

Figure 8.2 reports youth participation in any economic activity during the week before the interviews, by interview wave and treatment status and separately for females and males. The panels for females (top) show that youth in intervention villages increased their participation in economic activities between the baseline and midline, while the panels for males (bottom) do not show a similar increase. These trends are driven by participation in household farm work, the most common economic activity, which appears to rise mainly among females *(see Figure 8.3)*. Household livestock herding, the second most common economic activity, increased among both males and females *(see Figure 8.4)*.

Figure 8.2. Participation in any economic activity, by gender and time
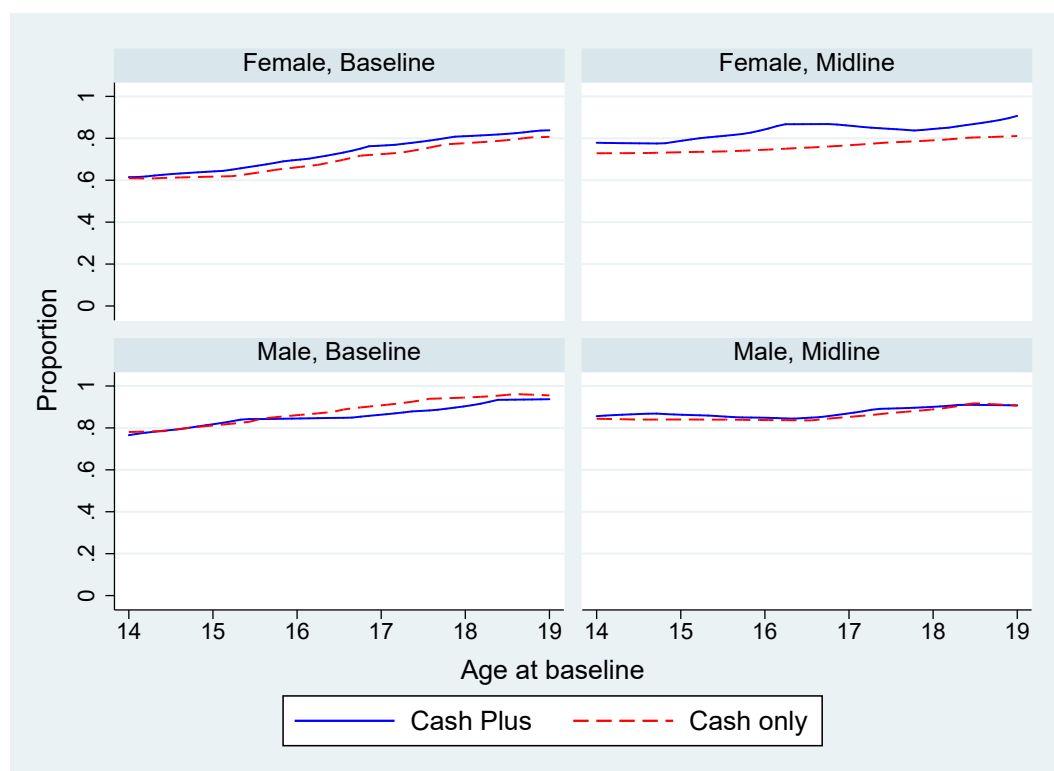
Figure 8.3. Participation in household farm work, excluding livestock, by gender and time
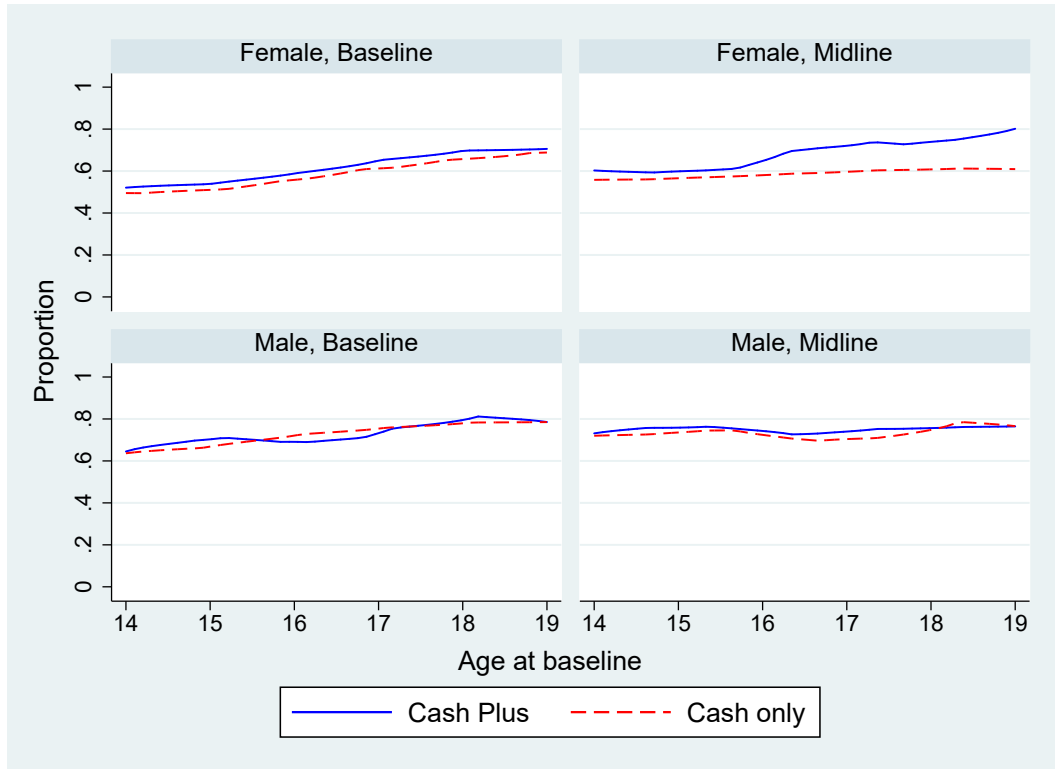
Figure 8.4. Participation in household livestock herding, by gender and time
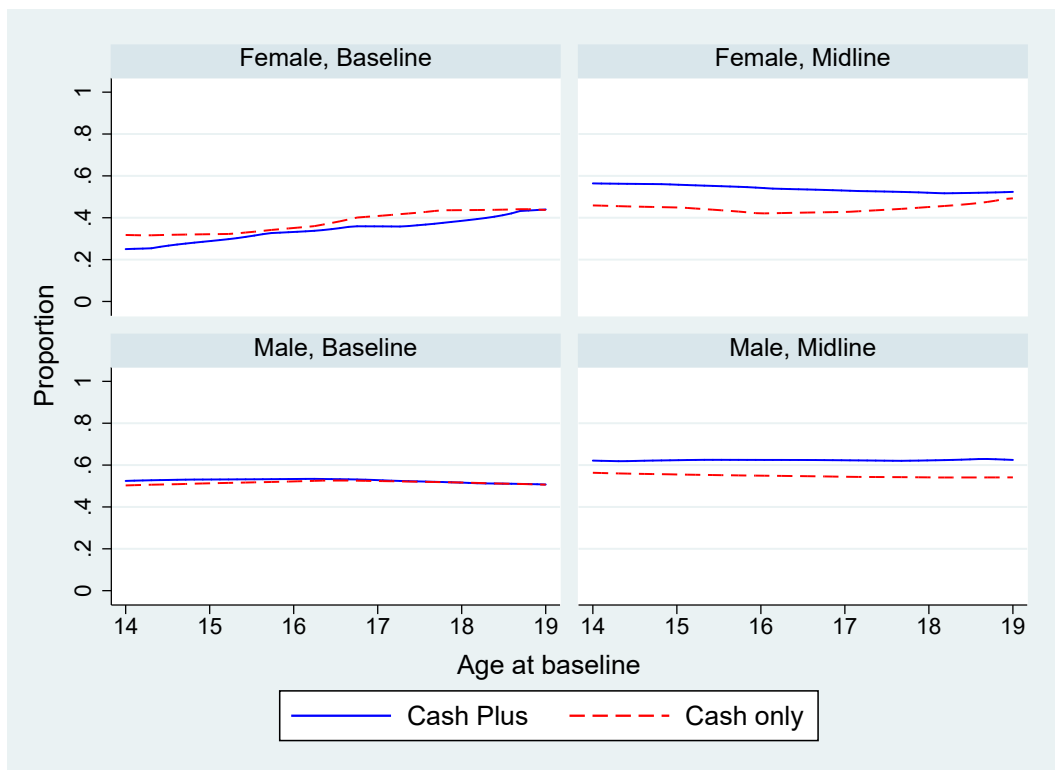
Table 8.2 reports estimated impacts on youth participation in economic activities during the week prior to the interviews. Consistent with the evidence in Figure 8.2, the first row of the table shows that, relative to youth in control villages, youth in villages where the cash plus training had been implemented were significantly more likely to have participated in economic activities during the week prior to the interviews. The positive impact of cash plus on youth participation in economic activities was mainly driven by a rise in youth participation in household livestock herding. Youth in cash plus villages were 8 percentage points more likely to have participated in this activity relative to youth in control villages (a 17 per cent increase over the control group average of 50 per cent at midline). This rise may be related to youth who had started herding as a business or, as indicated in the qualitative findings (see below), to accumulate resources to invest in education or in a different economic activity later. Youth participation in the TASAF PWP also appears to have risen markedly. Thus, youth in cash plus villages are about 4 percentage points more likely to have performed public works relative to youth in villages with cash only (an almost 50 per cent increase over the control group average at midline). However, youth participation in the TASAF PWP was unbalanced between the treatment and control groups at baseline. Youth in the treatment group were more likely to have participated in the PWP relative to youth in the control group. Difference in differences estimates do not show any statistically significant impact of the cash plus training on youth participation in the TASAF PWP *(see the supplementary appendix, Tables S2.2 and S3.2, available online)*. Therefore, one may not conclude that the cash plus training had an impact on youth participation in the TASAF PWP.

Table 8.2. Cash plus impacts on participation in economic activities (ANCOVA)

	ITT Impact (1)	ATT Impact (2)	Baseline mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Any economic activity	0.039*	0.101*	0.779	0.809	0.849
	(0.02)	(0.05)			
Household farm work	0.047	0.121	0.654	0.659	0.710
	(0.03)	(0.07)			
Household livestock herding	0.083**	0.214**	0.439	0.503	0.589
	(0.03)	(0.07)			
Fishing for the household	0.001	0.001	0.013	0.033	0.036
	(0.01)	(0.02)			
Household business	−0.021	−0.054	0.050	0.057	0.035
	(0.01)	(0.03)			
Primary owner and decision maker	−0.007	−0.018	0.019	0.022	0.015
	(0.01)	(0.02)			
Paid work outside the household	0.007	0.018	0.154	0.139	0.142
	(0.02)	(0.05)			
TASAF Public Works Programme	0.036*	0.092*	0.026	0.074	0.110
	(0.02)	(0.04)			
Looking for a job in the previous 7 days	0.022	0.056	0.054	0.073	0.096
	(0.01)	(0.03)			
N	2,104	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

The qualitative findings add information on the differences among those individuals who conducted businesses before and after the livelihood training. This is clear in excerpts from the focus group discussions.

Even before training I thought which job should I do? I harvested beans; I came to sell; after I sold, I got capital. I kept chickens, and, after the chickens became seven, I sold them and bought rice; so I started selling rice.
– Girl, age 15, Rungwe, Mbeya Region

Before I started training, I was cooking buns, but, after I started training, we were taught simple business plans. I started selling soap, salt and juice.
– Girl, age 14, Rungwe, Mbeya Region

Youth also described how they engage in both farming and caring for livestock.

When I wake up in the morning, I sweep and then prepare breakfast. When I finish my breakfast, I go to the farm to work, after which I return home to cook lunch. I then feed the pigs, and that's all.
– Girl, age 20, Mufindi, Iringa Region

Participants who reported that they had started businesses prior to the training cited financial difficulties at home as the main reason for their interest in business.

You look at how the system of life goes at home, and a person, when you reach 16 or 17 years, you must know how life goes. You will be surprised you need money, and then you ask from Mama and Mama says she doesn't have any; that's why you have to evaluate and act.
– Girl, age 15, Rungwe, Mbeya Region

When I saw I didn't have school exercise books, I asked Mama for capital. I told her, "Mama can I have one hen?" It grew; it had chicks, and I gave her back one hen. That's how I got capital.
–Girl, age 16, Mufindi, Iringa Region

A peer educator explains that youth participation in economic activities is usually aimed at helping the whole family.

It [business] is for the family. Like planting trees; you may find a whole family working in unity…it's a family's activity.
– Peer educator, age 18, Mufindi, Iringa Region

Appendix E, Table E.2 reports estimated ITT impacts, by gender. The first row shows that programme impacts on youth participation in any economic activity are driven by females. While lower in magnitude and not statistically significant, estimated impacts are positive in the male subsample as well. A look at each type of economic activity reveals that the programme boosted participation in household livestock herding significantly among both males and females.

Following the intervention, males are also significantly more likely actively to seek jobs. Males in cash plus villages are 5 percentage points more likely to have looked for a job during the week before the midline interview, compared with males in control villages (a 63 per cent difference over the midline average of 8 per cent in the control group). For females, the impact on job searches is not statistically significant, and the point estimate is close to zero. This may be related to gender norms that hinder females in looking for economic opportunities outside the household.

Appendix E, Table E.2 also shows a statistically significant reduction in the participation of girls in household non-agricultural businesses. Among boys, the estimated impact is also negative, but close to zero. This gender difference in impacts may be related to the different types of non-agricultural

activities performed by females and males at baseline: females are more likely to engage in petty trading, which is replaced post-intervention by safer and more stable activities, such as household livestock herding; males are more likely to engage in more stable and profitable non-agricultural businesses, such as crafts or brickmaking, which are considered worthwhile professions.

Table 8.3 reports estimated effects on the earnings and hours worked in economic activities. The programme did not affect the total amount of time spent by youth in the combined indicator, any economic activity, during the week before the interview, nor the amount of time spent in each activity separately. Earnings were also unchanged. Furthermore, there were no impacts on entrepreneurial attitudes (see Section 10 below). Appendix E, Table E.3 does not show any evidence of differential impacts by gender on hours worked. The only exception is in non-agricultural business sales, which significantly declined in the female sample, consistent with the reduction in female participation in household non-agricultural business. (Among males, the estimated impact is also negative, but smaller in magnitude and not statistically significant.)

Table 8.3. Cash plus impacts on hours worked and earnings in economic activities (ANCOVA)

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Hours in any economic activity	0.894	2.297	13.357	16.355	17.297
	(0.99)	(2.53)			
Hours in household farm work, excluding livestock	0.592	1.523	7.712	8.925	9.518
	(0.64)	(1.66)			
Hours in household livestock herding	0.793	2.035	2.979	3.651	4.500
	(0.41)	(1.08)			
Hours in fishing for the household	0.019	0.050	0.043	0.153	0.183
	(0.05)	(0.13)			
Hours in household business	−0.285	−0.733	0.690	1.057	0.763
	(0.31)	(0.80)			
Hours in paid work outside the household	−0.331	−0.851	1.815	2.082	1.735
	(0.50)	(1.29)			
Business sales past 4 weeks (thousands of TZS)	−1.200	−3.081	1.689	2.269	1.114
	(0.87)	(2.27)			
Business profit or loss past 4 weeks (thousands of TZS)	−0.233	−0.598	0.288	0.578	0.340
	(0.30)	(0.77)			
Hours in paid work outside the household	−0.331	−0.851	1.815	2.082	1.735
	(0.50)	(1.29)			
Daily amount received at last payment in paid job (thousands of TZS)	0.244	0.627	0.002	1.198	1.278
	(0.22)	(0.57)			
Hours in TASAF Public Works Programme	0.104	0.268	0.119	0.487	0.597
	(0.18)	(0.47)			
N	2,104	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

The qualitative findings highlight that, sometimes, hours worked and type of economic activity may not be determined by the adolescents but rather by the persons paying them. Indeed, paid work outside the household often represents a tenuous, inconsistent source of employment and income. Some adolescents report that they require incomes to meet needs beyond themselves, as explained by one female adolescent from Mufindi who has a child.

I go to work so that I can get maize for lunch and supper for myself and my child after I have finished work; it depends on the [employer]; some people may keep you working until six or seven. Some stop work at four; it depends where you go.
– Girl, age 18, Mufindi, Iringa Region

There was a lack of quantitative impacts on entrepreneurial attitudes, but, in an in-depth interview, one male adolescent describes being focused on improving his family's living conditions in food and shelter.

Another thing, if I had at least a little money, [I could put] a roof on the house [pointing to a roofless house] for our mother to live in. She lives there. The situation is difficult, but we still depend on her. I have plans to undertake a small business to earn some money so my younger siblings can eat, live in a good house.
– Boy, age 19, Rungwe, Mbeya Region

While the boy describes the sad circumstances of his family and the poor condition of their house, he seems to have a positive attitude towards his own plans for his family.

Cash plus training did not affect youth participation as measured by an overall indicator (any household chore) or by the total hours worked in any such activity during the day before the interview *(see Tables 8.4 and 8.5)*. However, there was a positive and statistically significant impact on the likelihood that youth collected firewood or other fuel material. This impact could be related to the increase in youth participation in household livestock herding if firewood or similar materials is used in animal raising. Alternatively, firewood could be used in cooking food to sell, such as buns. The positive impacts on the probability of collecting firewood seem to be driven by the female sample, while the increase in hours collecting firewood is driven by males *(see Appendix E, Tables E.4 and E.5)*.

Table 8.4. Cash plus impacts on participation in household chores (ANCOVA)

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Any chore	0.009	0.023	0.890	0.907	0.911
	(0.01)	(0.04)			
Collecting water	0.020	0.052	0.654	0.796	0.814
	(0.02)	(0.05)			
Collecting firewood	0.074*	0.192*	0.362	0.399	0.479
	(0.03)	(0.08)			
Collecting nuts	0.034	0.088	0.110	0.091	0.127
	(0.02)	(0.05)			
Taking care of children, cooking or cleaning	0.015	0.039	0.715	0.597	0.592
	(0.02)	(0.06)			
Taking care of the elderly or sick	0.024	0.061	0.230	0.186	0.209
	(0.02)	(0.06)			
N	2,104	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.

*p < .05 **p < .01

Table 8.5. Cash plus impacts on hours worked in household chores (ANCOVA)

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Hours in any chores	0.182	0.469	3.066	3.115	3.274
	(0.16)	(0.41)			
Hours in collecting water	−0.002	−0.006	0.738	0.952	0.950
	(0.05)	(0.13)			
Hours in collecting firewood	0.125*	0.322*	0.514	0.577	0.711
	(0.05)	(0.13)			
Hours in collecting nuts	0.038	0.099	0.147	0.160	0.204
	(0.04)	(0.09)			
Hours in taking care of children, cooking or cleaning	0.009	0.022	1.287	1.134	1.098
	(0.07)	(0.18)			
Hours in taking care of elderly or sick	0.018	0.047	0.381	0.291	0.311
	(0.04)	(0.10)			
N	2,104	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Adolescents who are students also qualitatively described the chores in which they are engaged from the time they wake up until they go to school and, then, after they return from school.

I greet my parents and the other older people with whom I live. After that, I sweep the compound. After sweeping, I get ready for school. Upon arriving at school, we do general cleaning, and, at eight o'clock, we start classes. We have lessons up to five o'clock in the evening. After I reach home, I wash the dishes and may cook, or I am sent to the market.
– Girl, age 18, Rungwe, Mbeya Region

I do the house cleaning inside and out. I wash dishes, and I cook. After that, I go to gather firewood.
– Girl, age 16, Rungwe, Mbeya Region

When I wake up in the morning, I brush my teeth first. Then, I sweep up and wash the dishes. At 10 o'clock, I make tea. At noon, I make lunch, and, if it's needed, I fetch water. In the evening, I cook supper, and that's it.
– Boy, age 20, Mufindi, Iringa Region

After washing my face, I have breakfast and go to work. When I come back, I fetch water. Then, I gather firewood and cook, and, after supper, we go to bed.
– Boy, age 16, Mufindi, Iringa Region

On a normal day, I harvest maize, and, after that, I fetch water. At around one, after a little nap, I go to the mosque. After prayers, I return home and eat lunch. Then, I take a bath and go meet my friends.
– Boy, age 18, Mufindi, Iringa Region

The qualitative interviews did not reveal any different patterns in the chores among adolescents in Mufindi and Rungwe.

9. THE MENTAL HEALTH OF YOUTH

Main findings

By midline, the programme had exerted no impact in terms of symptoms of depression or stress.

Poverty and poor mental health are mutually reinforcing. The conditions associated with living in poverty, such as persistent food insecurity, exposure to violence, and other adverse outcomes, can increase stress and depression.[52] Poor mental health can contribute to a host of detrimental social and health outcomes, including increased substance abuse, adolescent pregnancy and dropping out of school, which perpetuate the cycle of poverty. Adolescents are particularly at risk. Depression causes the largest burden of disease among young people.[53] Because of wide recognition of these issues, there is increased demand for interventions and policies that can mitigate the adverse impacts of poor mental health. Researchers and advocates are beginning to examine whether social protection programmes may help improve poverty-induced mental health problems.[54]

Two studies, one in Zomba, Malawi, and the other in Kenya, have demonstrated the ability of cash transfer programmes to improve mental health outcomes among youth. In Malawi, the evaluation of a cash transfer programme showed positive impacts on mental health among females.[55] (Males were not part of the study.) However, the impacts disappeared once the transfers were no longer provided. The Cash Transfer for Orphans and Vulnerable Children Programme in Kenya improved mental health among males, but not females.[56] Thus, there is potential for social protection programmes to improve poverty-induced mental health problems, but impacts may vary by gender or other characteristics.

9.1 Symptoms of depression

The analysis involved the measurement of mental health at both baseline and midline using a shortened version of the Centre for Epidemiological Studies–Depression Scale (CES-D). The internationally validated, 10-item short-form of the CES-D includes 10 questions on the feelings and behaviours of respondents during the previous seven days, such as "How often did you feel that everything you did was an effort?" and "How often were you bothered by things that don't usually bother you?"[57] The frequency of responses to each question is gauged according to a four-point scale. To calculate the CES-D, scores are summed for all 10 questions, ranging from 0 to 30. Higher scores reflect more depressive symptoms. To define the presence of depressive symptoms, a binary indicator was then created to assess whether youth scored greater than or equal to 10 on the CES-D. This cut-off

52 Lund, Crick, et al. (2008) 'Mental Health and Poverty: A systematic review of the research in low- and middle-income countries', *South African Journal of Psychiatry*, vol. 14, no. 3, p. 104.

53 World Health Organization, 'Adolescents and Mental Health', WHO, Geneva, <www.who.int/maternal_child_adolescent/topics/adolescence/mental_health/en>, accessed 6 July 2019.

54 Attah, Ramlatu, et al. (2016) 'Can Social Protection Affect Psychosocial Wellbeing and Why Does This Matter? Lessons from cash transfers in sub-Saharan Africa', *Journal of Development Studies*, vol. 52, no. 8, pp. 1115–1131.

55 Baird, Sarah Jane, Jacobus de Hoop, and Berk Özler (2013) 'Income Shocks and Adolescent Mental Health', *Journal of Human Resources*, vol. 48, no. 2, pp. 370–403.

56 Kilburn, Kelly, et al. (2016) 'Effects of a Large-Scale Unconditional Cash Transfer Programme on Mental Health Outcomes of Young People in Kenya', *Journal of Adolescent Health*, vol. 58, no. 2, pp. 223–229.

57 Boey, Kam Weng (1999) 'Cross-validation of a Short Form of the CES-D in Chinese Elderly', *International Journal of Geriatric Psychiatry*, vol. 14, no. 8, pp. 608–617; Bojorquez, Ietza, and Nelly 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*, vol. 32, no. 4, pp. 299–307; Cheung, Yin Bun, Ka Yuet Liu, and Paul S. F. Yip (2007) 'Performance of the CES-D and Its Short Forms in Screening Suicidality and Hopelessness in the Community', *Suicide and Life-Threatening Behavior*, vol. 37, no. 1, pp. 79–88; Kilburn, Kelly, et al. (2018) 'Examination of Performance of the Center for Epidemiologic Studies Depression Scale Short Form 10 among African Youth in Poor, Rural Households', *BMC Psychiatry*, vol. 18, no. 1, p. 201.

has been used in previous studies implemented in Africa.[58] Cronbach's alpha, a measure of inter-item reliability, applied to the CES-D in the overall sample, produces a value of 0.79 at baseline and a value of 0.74 at midline, indicating good consistency across indicators. A score greater than 0.70 is generally considered acceptable.[59]

The ITT and ATT analyses found no impacts on depressive symptoms *(see Table 9.1)*. There were also no impacts revealed by a disaggregation by gender *(see Appendix E, Table E.6)*. Among youth at midline, 26 per cent of the treatment and 25 per cent of the control group exhibited depressive symptoms, that is, they had a score equal to or greater than 10 on the CES-D. Rates were similar for both males and females at baseline. However, females in both the treatment and control groups reported lower rates of depressive symptoms (14 per cent and 19 per cent, respectively) at midline than at baseline (27 per cent) *(see Figure 9.1)*. Rates were relatively higher among males in both the treatment group and the control group (33 per cent and 32 per cent, respectively).

Table 9.1. Cash plus impacts on mental health indicators

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Reports depressive symptoms (CES-D ≥ 10)	−0.012	−0.032	0.288	0.256	0.249
	(0.02)	(0.06)			
ELDI (0–39)	−0.150	−0.384	3.456	3.325	3.119
	(0.24)	(0.61)			
N	2,104	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses. ELDI = enhanced life distress index.
*p < .05 **p < .01

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58 Onuoha, Francis N., et al. (2009) 'Negative Mental Health Factors in Children Orphaned by AIDS: Natural mentoring as a palliative care', *AIDS and Behavior*, vol. 13, no. 5, pp. 980–988.

59 Nunnally, Jum C., and Ira H. Bernstein (1994) *Psychometric Theory*, 3rd ed., McGraw-Hill, New York.

Figure 9.1. Depressive symptoms (CES-D – 10 > 10) among youth, baseline and midline, by gender
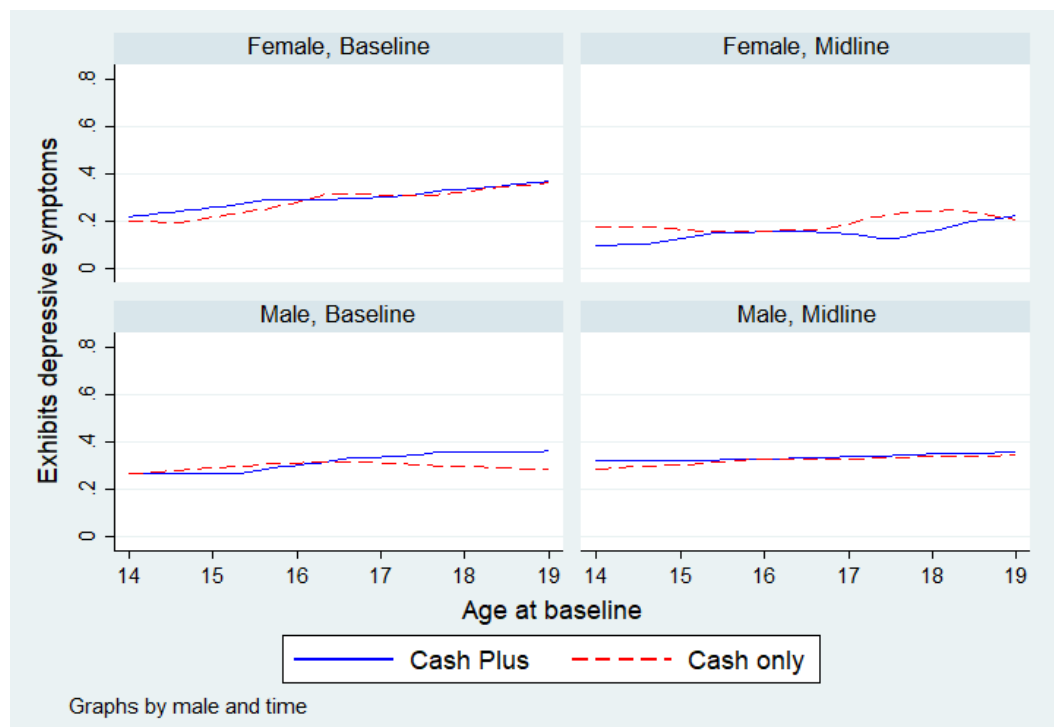
The living conditions described by youth in low-income families may contribute to the manifestation of depressive symptoms. When asked about their lives, some youth report feelings of hopelessness.

Life is generally bad. We have no house. We have no land, but one plot. We have no livestock. [Pauses in silence.] It goes badly.
– Boy, age 17, Rungwe, Mbeya Region

To speak the truth, it is not good, and I am completely dissatisfied. Even food is a problem. Well, one day, you eat well, and, another day, you have nothing to eat. That's the situation; it is hard. If you look at our surroundings, the house itself is in bad shape; we do not even have a [proper] roof.
– Boy, age 19, Rungwe, Mbeya Region

It is bad because we have no farms; we have no land where we can cultivate maize… We have no maize.
– Boy, age 14, Rungwe, Mbeya Region

The economic condition of my household is really bad. There are days when we spend the whole day with nothing to eat. In general, we survive by God's grace.
– Girl, age 18, Mufindi, Iringa Region

From the descriptions of these youth and their obvious sense of hopelessness because of the lack of food, the lack of farmland in villages in which the most common economic activity is farming, and the lack of adequate permanent shelter, it is possible to understand how they might become chronically anxious or stressed, which could lead to depression.

The situation at home is not so good. I don't know where to start. Sometimes, when you need something, it is not there, or it is not available at the time you want it, and you have to wait until you

can get it. This is why I say the situation is not so good. For example, I need a school sweater or shoes. When I phone my mother to tell about what I need, I have to wait for her to look for the money before I can obtain what I need. This is why I say the situation is not so good.
– Girl, age 16, Mufindi, Iringa Region

While it may seem from this explanation that the girl should not always expect to get what she wants, it is important to remember contextual issues such as the geography of Mufindi, where it may become extremely cold. The lack of a sweater or shoes for school could be traumatic for a child.

9.2 Stress

Stress levels were measured using the enhanced life distress index (ELDI).[60] The ELDI is a tool developed by UNICEF as an alternative method for measuring chronic stress. Other measures developed in the United States may be inadequate for capturing stress in the sub-Saharan African context.[61] To calculate the ELDI, the enumerators or interviewers ask respondents if they have worried about any of 13 items over the previous seven days. The item categories include economic stressors, such as employment, education and lack of access to food, as well as relationship stressors in the household or with romantic partners, and other stressors, such as risk of theft or pregnancy. For each item eliciting an affirmative answer, respondents are then asked how distressed they were. Each stressor is ranked on a 1–3 scale, with higher numbers indicating greater distress. (A score of 0 is assigned to Items about which a respondent feels no stress.) The resulting scores on all 13 items may thus range from 0 to 39. Cronbach's alpha for this index is 0.76 at baseline and 0.70 at midline, suggesting that the index shows good reliability.

No significant programme impacts were found on the ELDI scores *(see Table 9.1)*. These null results are consistent by gender *(see Appendix E, Table E.6)*. The ELDI was already quite low at baseline, where the mean score was 3.5 for the pooled sample and remained low at midline, at 3.3 and 3.1 for the control and treatment groups, respectively. A similar pattern is found in the ELDI on depressive symptoms among females: less distress is reported at midline relative to the baseline for both treatment and control groups *(see Figure 9.2)*. The ELDI scores for males were similar between baseline and midline. There is no evidence of attrition issues in the measurement of mental health during the survey *(see Appendix D, Table D.18)*.

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60 The ELDI is a new quantitative measure of stress being developed by researchers led by Tia Palermo and Jacob de Hoop at the UNICEF Office of Research—Innocenti. It is loosely based on the life distress index developed by Thomas and colleagues and described in Thomas, Edwin J., Marianne Lawrence Yoshioka, and Richard D. Ager (1994) 'Life Distress Inventory', pp. 127–130 in *Couples, Families, and Children*, vol. 1 of *Measures of Clinical Practice: A sourcebook*, 2nd ed., edited by Joel Fischer and Kevin Corcoran, Free Press, New York.

61 Hjelm, Lisa, et al. (2017) 'Poverty and Perceived Stress: Evidence from two unconditional cash transfer programs in Zambia', *Social Science and Medicine*, vol. 177, pp. 110–117.

Figure 9.2. Average ELDI, baseline and midline, by gender
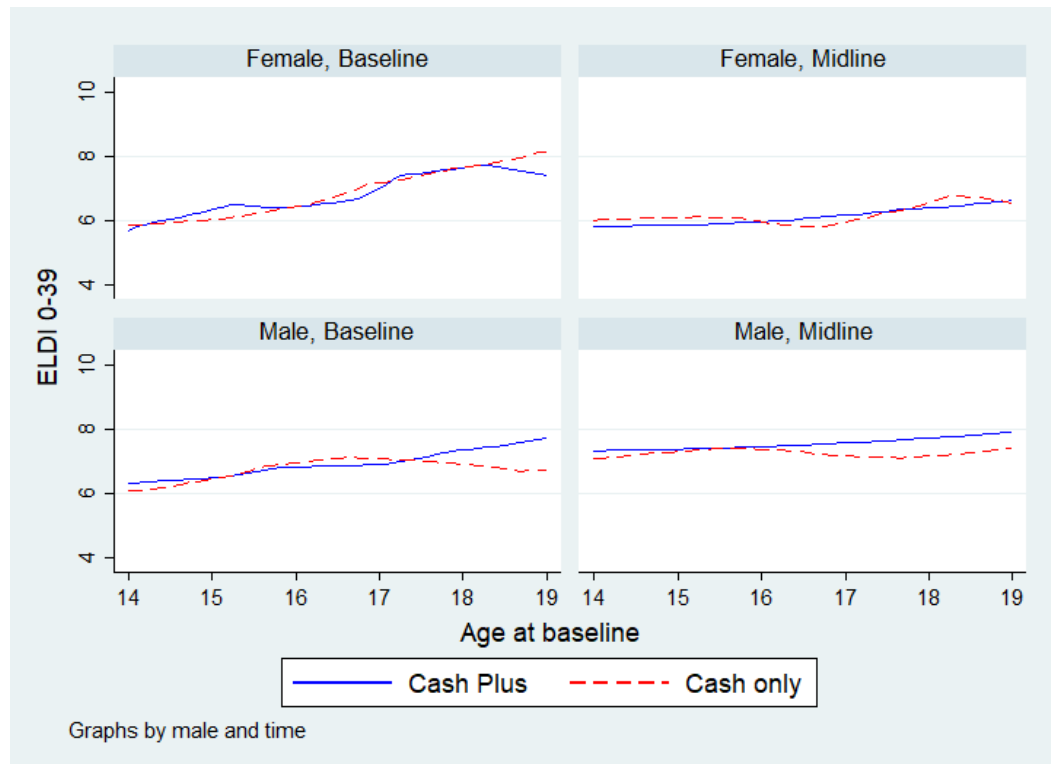
Mental health problems among females may be exacerbated by early pregnancy, and these problems tend to be reinforced by poverty. This is clear from qualitative discussions among young girls in Rungwe who were living in poverty and still living at the family home with their children. These young mothers describe their responsibilities as young mothers living in poor families, while being obliged to carry out other domestic tasks and sometimes also working.

When my son wakes up, I give him porridge and bathe him. I take my breakfast and put my son back, to sleep. When he is finally asleep, I continue with other chores, such as doing the laundry. After that, I prepare lunch. When my son wake, I feed him, and then I eat lunch.
– Girl, age 20, Rungwe, Mbeya Region

When I finish, I prepare porridge for my child and ugali [maize porridge] for myself. I then go to the farm where I work until evening. I return and find my mother is already boiling water for porridge because I get back when it is already dark. Some days, I return [from work] at night, and, other days, when it is still light. I prepare porridge and bathe my child, and then we go to sleep.
– Girl, age 19, Rungwe, Mbeya Region

10. ADOLESCENT ASPIRATIONS, ATTITUDES AND SUPPORT

Main findings

The programme exerted a positive effect on occupational aspirations, namely, an increase in the share of adolescents who wished to become entrepreneurs and own a business.

The programme had no impacts on educational aspirations.

There were no impacts on life satisfaction, the locus of control (self-sufficiency), self-esteem, entrepreneurial attitudes or social support.

Inquiring about aspirations may reveal what adolescents desire or hope to achieve from their youth or in life. Indicators of self-esteem and the locus of control, that is, self-sufficiency, measure the degree to which adolescents believe they have control over events and outcomes in their lives rather than being under the control of external forces that govern their decisions. Social support refers to the degree of support adolescents receive from their peers, families and so on.

Given the curriculum of the livelihoods and SRH training sessions, which included discussions about dreams, livelihood skills, business plans and ideas, the responsibilities of entrepreneurs, long-term life goals, and so on, the cash plus intervention may be supposed to have influenced adolescents in considering these issues. Such influences and outcomes have received less attention in the literature on cash transfers.

Aspirations play an important role in future life choices and, ultimately, in life outcomes.[62] Quaglia and Cob (1996, p. 130) have offered a definition of aspiration that is widely used: "[the] ability to identify and set goals for the future, while being inspired in the present to work toward those goals."[63] This definition considers the constraints and opportunities individuals face and therefore represents a more realistic approach to the concept of aspirations relative to a mere desire to achieve a goal.

This section examines educational and occupational aspirations in terms of educational attainment – no education, some primary, some secondary, vocational or tertiary – and the occupations in which adolescents may wish to engage, such as teacher, doctor or other health care professional, governmental or parastatal agent, business owner and so on. There is no evidence of baseline imbalances in these outcomes, except for choosing business owner as an ideal occupation. Youth in villages receiving only cash were slightly more likely to choose business owner relative to youth in cash plus villages. Hence, for this outcome, the analysis also refers to difference in differences results.

Table 10.1 shows the effects of the cash plus intervention on educational and occupational aspirations. According to the main estimates, neither of these outcomes had changed as a result of the intervention by midline. On educational aspirations, the share of youth who aspired to complete tertiary education was already high at baseline, at 63.5 per cent, and had increased in both the control group and the treated group at midline. Youth were also asked about their occupational aspirations. At baseline, the most highly desired occupation was teacher (41 per cent), followed by doctor or health care professional (23 per cent). Approximately 5 per cent and 4 per cent of youth hoped to work for the government or become business owners, respectively. The 'other' category includes all other jobs chosen by fewer than 4 per cent of youth. The main estimates show that occupational aspirations had not changed significantly by midline. However, difference in differences estimates, which correct for any baseline imbalance, show a statistically significant programme impact on the probability of choosing business owner as the ideal occupation, which was unbalanced at baseline *(see the supplementary online appendix, Table S7.2)*.

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62 Leavy, Jennifer, and Sally Smith (2010) 'Future Farmers? Exploring youth aspirations for African agriculture', Policy Brief no. 037, Future Agricultures Consortium, Brighton, UK.

63 Quaglia, Russell J., and Casey D. Cobb (1996) 'Toward a Theory of Student Aspirations', *Journal of Research in Rural Education*, vol. 12, no. 3, pp. 127–132.

Table 10.1. Cash plus impacts on educational and job aspirations

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Educational aspirations					
Ideal level of education: none	0.005	0.012	0.029	0.006	0.011
	(0.00)	(0.01)			
Ideal level of education: some primary	−0.001	−0.002	0.038	0.018	0.019
	(0.01)	(0.01)			
Ideal level of education: some secondary	0.028	0.071	0.286	0.199	0.226
	(0.02)	(0.05)			
Ideal level of education: some tertiary	−0.029	−0.073	0.635	0.747	0.715
	(0.02)	(0.06)			
Ideal level of education: vocational	−0.000	−0.001	0.012	0.031	0.030
	(0.01)	(0.02)			
Occupational aspirations					
Ideal occupation: teacher	0.019	0.049	0.411	0.361	0.377
	(0.02)	(0.06)			
Ideal occupation: doctor, health care professional	−0.015	−0.038	0.233	0.241	0.232
	(0.02)	(0.04)			
Ideal occupation: government, parastatal	−0.003	−0.008	0.054	0.015	0.012
	(0.01)	(0.01)			
Ideal occupation: business owner	0.006	0.016	0.038	0.037	0.042
	(0.01)	(0.02)			
Ideal occupation: other	−0.012	−0.030	0.264	0.347	0.337
	(0.02)	(0.06)			
N	2,104	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

The qualitative findings, however, highlight ways in which adolescents may have started thinking about the means to gain vocational skills.

I would need training, say, going to a garage to learn, so as to realize my dreams. Other training might involve meeting up with a carpenter and requesting an apprenticeship with him.
– Boy, age 19, Rungwe, Mbeya Region

While this youth does not seem to have decided yet between becoming a mechanic or a carpenter, he understands that the training he would need to realize his occupational aspirations would include an apprenticeship, which was a topic discussed during the training.

The programme may also have affected subjective well-being or the perceived quality of life. Understanding this outcome is important because improvements in this dimension of well-being have been linked to better educational and health outcomes, increases in productivity, savings and consumption, and better social relationships.[64] Many studies analysing the relationship between social protection transfers and subjective well-being have been conducted in sub-Saharan Africa, and all of these have found positive effects.[65]

We measure subjective well-being, or perceived quality of life, through responses to the question, "Imagine a ladder where, on the bottom, the first step represents the worst possible life for you, and the highest step, the tenth, represents the best possible life for you. On which step of the ladder would you say you are today?" There were no significant changes because of the intervention. The perceived quality of life increased among both the treated group and the control group at a similar rate *(see Table 10.2, first row)*.

Table 10.2. Cash plus impacts on attitudes

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Quality of life ladder: 1 (worst) to 10 (best)	0.070 (0.17)	0.180 (0.45)	3.780	5.134	5.219
Locus of control index	0.010	0.025	3.197	3.282	3.289
	(0.02)	(0.05)			
Individuals are primarily responsible for their own success or failure in life	−0.016 (0.02)	−0.040 (0.06)	0.637	0.654	0.638
Self-esteem index	−0.005	−0.013	3.937	3.769	3.768
	(0.05)	(0.12)			
Entrepreneurial attitude index	0.007	0.018	–	0.727	0.733
	(0.01)	(0.02)			
Social support index	−0.036	−0.092	3.995	3.954	3.921
	(0.03)	(0.08)			
N	2,104	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

64 Attah, Ramlatu, et al. (2016) 'Can Social Protection Affect Psychosocial Wellbeing and Why Does This Matter? Lessons from cash transfers in sub-Saharan Africa', *Journal of Development Studies*, vol. 52, no. 8, pp. 1115–1131.

65 Daidone, Silvio, et al. (2015) 'Social Networks and Risk Management in Ghana's Livelihood Empowerment against Poverty Programme', Innocenti Working Paper, no. 2015–06, UNICEF Office of Research–Innocenti, Florence; Haushofer, Johannes, and Jeremy Shapiro (2016) 'The Short-Term Impact of Unconditional Cash Transfers to the Poor: Experimental evidence from Kenya', *Quarterly Journal of Economics*, vol. 131, no. 4, pp. 1973–2042; Kilburn, Kelly, et al. (2018) 'Paying for Happiness: Experimental results from a large cash transfer program in Malawi', *Journal of Policy Analysis and Management*, vol. 37, no. 2, pp. 331–356; Natali, Luisa, et al. (2018) 'Does Money Buy Happiness? Evidence from an unconditional cash transfer in Zambia', *SSM–Population Health*, vol. 4, pp. 225–235.

In addition, the analysis examined indicators of self-esteem and beliefs in self-sufficiency and indicators of locus of control, which measure the degree to which youth believe that they have control over the outcomes of events in their lives rather than that external forces direct their lives. Adolescents were asked about the extent of their agreement with a set of statements according to a range from 1 (strongly agree) to 5 (strongly disagree). The response values were rescaled so that a higher value indicates a higher level of self-esteem and locus of control. An index of self-esteem and an index of locus of control were then created. Each index ranges from 1 (low self-esteem or locus of control) to 5 (high). In a separate analysis of another indicator, adolescents were asked whether they agreed or disagreed with the following statement: "each person is primarily responsible for his or her own success or failure in life." Because the responses are scaled differently relative to the others, this indicator was not included as part of the locus of control index. Entrepreneurial attitudes were also analysed. Enumerators read a set of four statements describing the (potential) entrepreneurial drive of adolescents, such as "I persist until my plans are fulfilled", or "I am always coming up with new ideas and solutions to problems." Youth were then asked whether these statements were true or false.[66]

Average values were computed for all these indicators *(see Table 10.2)*. The index of the locus of control and the index of self-esteem range from 1 to 5. Adolescents reported rather high self-esteem (close to 4, on average). The average locus of control index is relatively lower, about 3.3, indicating that respondents believe external forces play a large role in determining outcomes in their lives. The programme did not improve the level of self-esteem or the belief in self-sufficiency among participants. The same holds for the entrepreneurial attitude index, which averaged 0.7 on a scale of 0 to 1. However, these findings should be interpreted in view of the context. The lack of positive programme impacts may derive from the length of exposure to the intervention or from the economic conditions and economic barriers poor people face, the number of shocks people experience, cultural and religious norms, barriers to schooling, the poor quality of education, and so on. Moreover, perceptions of low self-sufficiency or lack of locus of control may explain why educational aspirations have not changed as a result of the programme. External forces and perceived constraints seem to play a large role in the lives of adolescents.

Participants were also asked about the extent of social support they receive when, for example, they are making decisions or wish to share emotions. Social support can be associated with physical and mental health. It has been found to help protect individuals facing acute stressors, such as shocks or disasters.[67] Cash transfers or cash plus interventions can have a direct impact on the social support available to youth. However, as described in the conceptual framework, it is more likely that social support will act as a moderator of the impacts of cash transfer programmes and thereby promote the translation of such interventions into positive outcomes among youth.

Adolescents were asked about the extent of their agreement or disagreement with a set of statements about various kinds of support, for example, from friends or family, according to a range from 1 (strongly agree) to 5 (strongly disagree). An index was constructed in the same way as in the case of the other indicators *(see the bottom of Table 10.2)*. Adolescents enjoy, in general, substantial social support. The intervention did not seem to affect the amount of social support. However, the analysis by gender does reveal some negative impacts. Thus, the intervention led to a decline in the social support index among males *(see Appendix E, Table E.8)*. To reveal which of the indicators was driving the observed impacts, the analysis examined each of the questions on social support separately and found

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66 Valdivia, Martín (2015) 'Business Training Plus for Female Entrepreneurship? Short- and medium-term experimental evidence from Peru', *Journal of Development Economics*, vol. 113, pp. 33–51.

67 Solomon, Susan D., et al. (1987) 'Social Involvement as a Mediator of Disaster-Induced Stress', *Journal of Applied Social Psychology*, vol. 17, no. 12, pp. 1092–1112.

that the intervention led to a decline in the share of youth who indicated they "get the help and support I need from my family." It is unclear how the programme would have induced this negative change. No evidence of baseline imbalances or selective attrition was found with respect to the variables analysed in Table 10.2.

The qualitative findings indicate that most adolescents receive emotional, material and social support mainly from family and neighbours. One female adolescent who is also a young mother describes the assistance provided by a neighbour.

Only one woman helps me resolve work issues. She always spends the day with my child. If I have no food, she helps with food for my child and for me. This lady is my neighbour; she moved to our village following her marriage. Seeing how I am struggling with life, she decided to encourage and help me.
– Girl, age 18, Mufindi, Iringa Region

One adolescent appears to suggest that she relies on the support of TASAF rather than other people.

I stay with many people. Because I spend the day with them, maybe they help me with a problem at work, but I do not depend much on them. The assistance we get from TASAF helps us a lot. Hoping a person will help you is not easy.
– Girl, age 18, Mufindi, Iringa Region

11. ATTITUDES TO GENDER

Main findings

The programme increased gender-equitable attitudes among males, particularly in the areas of violence and domestic chores.

Among females, the programme did not have any statistically significant impacts on any of the measures analysed.

Defined according to societal expectations with respect to the roles, rights and responsibilities of men and women, gender norms are associated with myriad outcomes related to health and well-being.[68] Inequitable views on gender roles can raise the risk of intimate partner violence, early sexual debut and risky sexual behaviours as well as lead to greater incidence of HIV and other STIs.[69] The cash plus curriculum provided opportunities for information sharing, discussion and activities related to the following relevant topics:

- The differences between gender and sex
- Gender stereotypes and roles and how they affect boys and girls
- Relationships with family and community
- Community expectations about relationships and boys and girls in the community
- Gender-based violence

A shorter, 24-item version of the Gender-Equitable Men (GEM) Scale that has also been used in East Africa was implemented to assess changes in gender-equitable attitudes that may be attributed to the intervention.[70] The full, 35-item scale has been used and validated in African settings, including among adolescents.[71] In consideration of the length of the questionnaire and the time required to administer the full scale, the analysis relied on the 24 items that appeared most relevant to the intervention and the study sample. GEM Scale items address attitudes along four dimensions: violence, reproductive health and disease prevention, sexual relationships, and domestic chores. The response options available on each item are agree, partially agree, and do not agree at all. A value of 1 was assigned to each statement with which a respondent agreed or partially agreed. Following the survey, the values associated with all responses were summed to create the scale. Lower scores indicate less support for gender-equitable attitudes, and higher scores indicate more equitable attitudes. Given the young age of some of the respondents, it was concluded that those responding "don't know" to statements about some of the items might lack experience on the topics discussed. These missing values were therefore dropped from the overall scale or subscale, as appropriate.

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68 Vu, Lung, et al. (2017) 'Inequitable Gender Norms from Early Adolescence to Young Adulthood in Uganda: Tool validation and differences across age groups', *Journal of Adolescent Health*, vol. 60, no. 2, pp. S15–S21.

69 Conroy, Amy A. (2014) 'Gender, Power, and Intimate Partner Violence: A study on couples from rural Malawi', *Journal of Interpersonal Violence*, vol. 29, no. 5, pp. 866–888; Jewkes, Rachel K., Jonathan B. Levin, and Loveday A. Penn-Kekana (2003) 'Gender Inequalities, Intimate Partner Violence and HIV Preventive Practices: Findings of a South African cross-sectional study', *Social Science and Medicine*, vol. 56, no. 1, pp. 125–134; Varga, Christine A. (2003) 'How Gender Roles Influence Sexual and Reproductive Health among South African Adolescents', *Studies in Family Planning*, vol. 34, no. 3, pp. 160–172.

70 Vu, Lung, et al. (2017) 'Inequitable Gender Norms from Early Adolescence to Young Adulthood in Uganda: Tool validation and differences across age groups', *Journal of Adolescent Health*, vol. 60, no. 2, pp. S15–S21.

71 Pulerwitz, Julie, and Gary Barker (2008) 'Measuring Attitudes toward Gender Norms among Young Men in Brazil: Development and psychometric evaluation of the GEM Scale', *Men and Masculinities*, vol. 10, no. 3, pp. 322–338; Pulerwitz, Julie, et al. (2015) 'Changing Gender Norms and Reducing Intimate Partner Violence: Results from a quasi-experimental intervention study with young men in Ethiopia', *American Journal of Public Health*, vol. 105, no. 1, pp. 132–137; Vu, Lung, et al. (2017) 'Inequitable Gender Norms from Early Adolescence to Young Adulthood in Uganda: Tool validation and differences across age groups', *Journal of Adolescent Health*, vol. 60, no. 2, pp. S15–S21.

Subscales were created for each dimension. Cronbach's alpha for the subscales was 0.87, showing good internal validity. The violence subscale (a total of five items) includes items such as "there are times when a woman deserves to be beaten", "a woman should tolerate violence to keep her family together", and "a man using violence against his wife is a private matter that should not be discussed outside the couple." The reproductive health and disease prevention subscale includes statements such as "it's a woman's responsibility to avoid getting pregnant", "a man should be angered or shocked if his wife asks him to use a condom", and "a real man produces a male child." Statements such as "a woman should not initiative sex", "you do not talk about sex, you just do it", and "men need sex more than women do" are included in the sexual relationship subscale. The domestic chores subscale includes items such as, "giving the children baths and feeding the children are the mother's responsibility", "a man should have the final word on decisions in his home", and "a woman should obey her husband in all things."

The analysis found no evidence of selective attrition or baseline imbalances related to the gender attitude outcomes in the panel sample. Table 11.1 presents estimates of impacts of the cash plus intervention on gender attitudes. The average gender-equitable attitudes increased in both the treatment and control groups (15.6 and 14.7, respectively) over the baseline (12.5 pooled mean). The programme increased gender-equitable attitudes on the household chores decision-making subscale by 0.263, but not on any of the other subscales or the overall scale among the full sample. In the sample of adolescents, males exhibited more gender-equitable attitudes compared with females on average, and the intervention increased these gender-equitable attitudes among males (with little to no impacts among females) *(See Appendix E, Table E.9, columns 2–4, 6–8)*. Among males, the intervention had a positive impact on gender-equitable attitudes, as measured by the full 24-item scale *(see Appendix E, Table E.9, column 5)*. By the end of the 12-week intervention, males in treated communities reported gender-equitable attitudes on 1.37 more items (among the 24 total), compared with males in control communities. Analysis of the subscales indicate that the intervention increased gender-equitable attitudes among males, particularly on violence (a rise of 0.28 in six total items) and domestic chores (a rise of 0.49 in five total items) *(see Figure 11.1)*. Among females, the intervention did not have any statistically significant impacts on any of the subscales or on the overall scale *(see Figure 11.2)*. In the domain analysis, the ATT estimates were consistent with the ITT estimates, though the coefficients of the ATT estimates were slightly larger, as expected.

Table 11.1. Cash plus impacts on indicators of attitudes on gender

Indicator	ITT Impact (1)	ATT Impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
GEM scale (0–24)	0.776	2.039	12.475	14.685	15.558
	(0.40)	(1.06)			
N	1,279	1,279	1,279	666	613
Violence subscale (0–6)	0.120	0.305	3.686	3.841	3.976
	(0.09)	(0.21)			
N	1,907	1,907	1,907	981	926
Reproductive health subscale (0–5)	0.167	0.419	2.779	3.171	3.358
	(0.09)	(0.23)			
N	1,606	1,606	1,606	840	766
Sexual relationship subscale (0–8)	0.144	0.384	4.298	5.393	5.564
	(0.14)	(0.36)			
N	1,505	1,505	1,505	774	731
Household chores subscale (0–5)	0.263**	0.671**	1.719	1.937	2.237
	(0.10)	(0.24)			
N	2,012	2,012	2,012	1,034	978

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
$*p < .05$ $**p < .01$

Figure 11.1. The GEM domestic chores subscale, baseline and midline, by gender
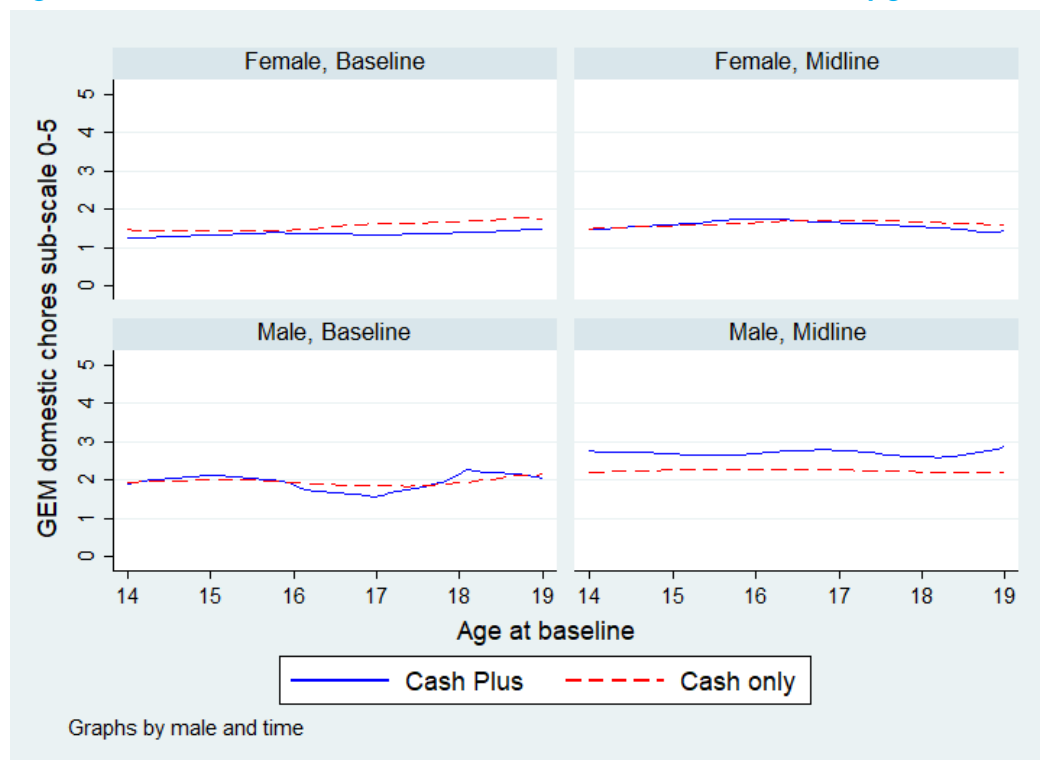
Figure 11.2. GEM Scale, baseline and midline, by gender
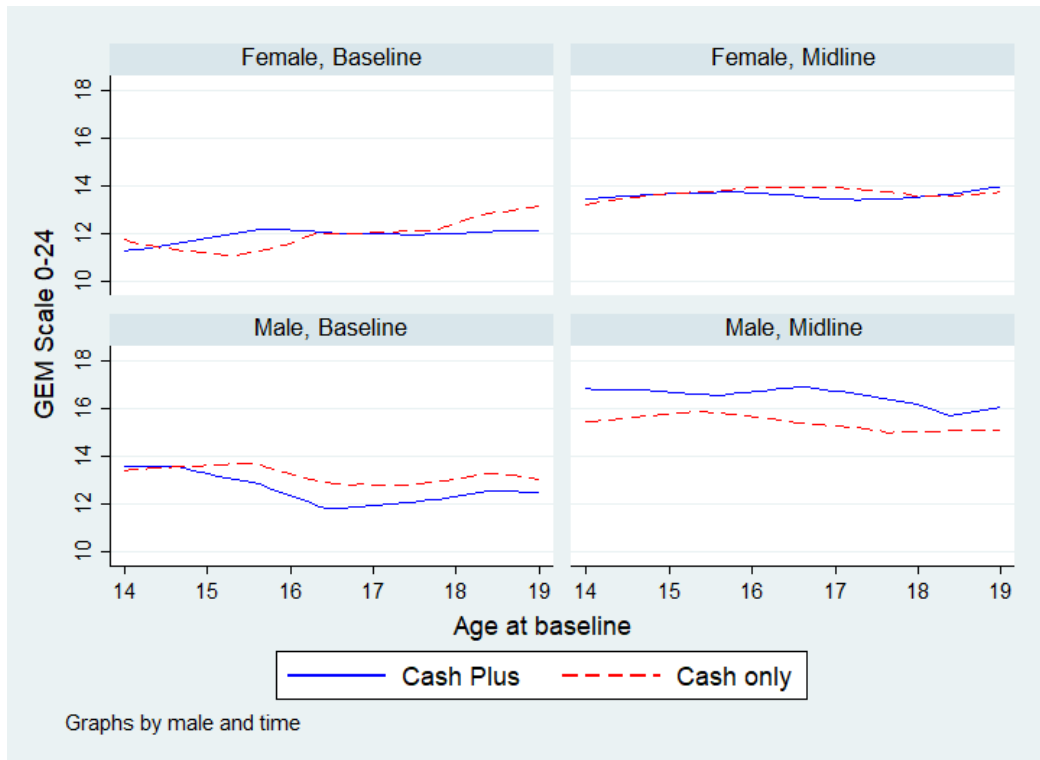
12. PARTNERSHIPS, SEXUAL BEHAVIOUR AND HIV KNOWLEDGE

Main findings

The programme increased HIV knowledge, including knowledge that sex with one uninfected monogamous partner can reduce the risk of contracting HIV. This programme impact was larger among females. The impacts on this outcome were not statistically significant among males.

As a result of the intervention, adolescents increased their knowledge on reproductive health. They were less likely to report that they did not know about contraception or condoms. The intervention increased knowledge about one modern contraceptive method or more.

No impacts were found on sexual debut, romantic partnership formation or on the characteristics of the first sexual experience.

There were no impacts on fertility, contraceptive use, transactional sex or perceived HIV risk or testing.

In the United Republic of Tanzania, adolescent girls are at high risk of early marriage and pregnancy. One girl in three (31–37 per cent) is married before age 18, and 43 per cent of females ages 20–24 give birth before age 18.[72] Early marriage has adverse effects on both the children entering these marriages and their children, perpetuating the intergenerational cycle of poverty and disadvantage. Characteristics associated with the increased risk of early marriage include rural residence, poverty and low educational attainment.[73] The United Republic of Tanzania has not made progress in reducing child marriage rates over the past 20 years, whereas other countries in the region have achieved advances.[74] Despite evidence on two other countries in sub-Saharan Africa, Ethiopia and Malawi, showing that cash transfers can delay marriage among adolescent girls, a recent evaluation in the United Republic of Tanzania indicated that the PSSN did not delay marriage.[75] Moreover, while delays in pregnancy have been attributed to cash transfer programmes in Kenya, Malawi and South Africa, no such impacts have been linked to the PSSN.[76] Studies have also found delays in sexual debut in Kenya, Malawi and South Africa attributable to cash transfers.[77] Similar to effects on marriage and pregnancy, there were no delays in sexual debut as a result of the PSSN alone. Thus, in the Tanzanian context, more targeted interventions or complementary links to services may be needed to influence these outcomes.

72 Population Council, et al. (2015) *The Adolescent Experience In-Depth: Using data to identify and reach the most vulnerable young people, Tanzania 2009–2012*, Population Council, New York.

73 Jensen, Robert T., and Rebecca Thornton (2003) 'Early Female Marriage in the Developing World', *Gender and Development*, vol. 11, no. 2, pp. 9–19; United Nations Population Fund (2012) 'Marrying Too Young: End child marriage', UNFPA, New York.

74 Koski, Alissa, Shelley Clark, and Arijit Nandi (2017) 'Has Child Marriage Declined in Sub-Saharan Africa? An analysis of trends in 31 countries', *Population and Development Review*, vol. 43, no. 1, pp. 7–29.

75 TASAF (Tanzania Social Action Fund), UNICEF (United Nations Children's Fund), and REPOA (Policy Research for Development) (2018) *Tanzania Youth Study of the Productive Social Safety Net (PSSN) Impact Evaluation: Endline report*, UNICEF Office of Research—Innocenti, Florence, https://transfer.cpc.unc.edu/wp-content/uploads/2018/04/PSSN-Youth-Endline-Report-2018.pdf.

76 Baird, Sarah Jane, Craig T. McIntosh, and Berk Özler (2011) 'Cash or Condition? Evidence from a cash transfer experiment', *Quarterly Journal of Economics*, vol. 126, no. 4, pp. 1709–1753; Handa, Sudhanshu, et al. (2015) 'Impact of the Kenya Cash Transfer for Orphans and Vulnerable Children on Early Pregnancy and Marriage of Adolescent Girls', *Social Science and Medicine*, vol. 141, pp. 36–45; Heinrich, Carolyn J., John F. Hoddinott, and Michael Samson (2017) 'Reducing Adolescent Risky Behaviors in a High-Risk Context: The effects of unconditional cash transfers in South Africa', *Economic Development and Cultural Change*, vol. 65, no. 4, pp. 619–652.

77 Baird, Sarah Jane, et al. (2010) 'The Short Term Impacts of a Schooling Conditional Cash Transfer Program on the Sexual Behavior of Young Women', *Health Economics*, vol. 19, no. S1, pp. 55–68; Handa, Sudhanshu, et al. (2014) 'The Government of Kenya's Cash Transfer Programme Reduces the Risk of Sexual Debut among Young People Age 15–25', *PLoS One*, vol. 9, no. 1, p. e85473; Heinrich, Carolyn J., John F. Hoddinott, and Michael Samson (2017) 'Reducing Adolescent Risky Behaviors in a High-Risk Context: The effects of unconditional cash transfers in South Africa', *Economic Development and Cultural Change*, vol. 65, no. 4, pp. 619–652.

12.1 Partnerships

Among the sample of adolescents, only 1 per cent reported at baseline that they had ever been married or cohabited *(see Table 12.1, column 3)*, which is much lower than the corresponding nationwide rate. Among the 15–19 age group in the poorest quintile, 26.3 per cent had been married in 2015–2016, according to the Tanzania Demographic and Health Survey. The discrepancy in these shares may be driven by the interview selection criteria in the cash plus sample, namely, youth living in the households of PSSN beneficiaries. Thus, youth who may have left PSSN households to cohabitate or marry and start their own families were excluded from the sample. Because there has been no retargeting or new enrolment in the PSSN since 2015, these new households are not likely to be part of the PSSN, thus explaining the low marriage and cohabitation rates in the sample. Marriage and cohabitation rates did rise slightly, to 3 per cent, at midline.

Table 12.1. Cash plus impacts on partner and relationship indicators (ANCOVA)

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Ever had spouse or cohabiting partner	0.000	0.001	0.010	0.034	0.028
	(0.01)	(0.02)			
Single, never married	–0.000	–0.001	0.990	0.966	0.972
	(0.01)	(0.02)			
Has a girlfriend or boyfriend	–0.016	–0.040	0.166	0.317	0.294
	(0.03)	(0.06)			
N	2,104	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

The share of respondents who reported they had girlfriends or boyfriends rose from 17 per cent at baseline to 32 per cent among the control group and 29 per cent among the treatment group at midline *(see Table 12.1, columns 4–5)*. Nonetheless, no programme impacts on marriage, cohabitation, or having a boyfriend or girlfriend have been found. This is not surprising, given the relatively short exposure to the intervention at midline, where one might expect changes in knowledge, attitudes and aspirations. Changes in behaviour and transitions to adulthood may take longer to become manifest and may yet emerge at endline.

No issues arose in selective attrition or baseline imbalance in the marriage outcomes. However, the boyfriend-girlfriend indicator is associated with selective attrition and baseline imbalance. Among the sample lost to follow-up, participants in the treatment arm were more likely to have reported at baseline that they had boyfriends or girlfriends relative to participants in the control arm. Moreover, among the panel at baseline, 15 per cent of the treatment group and 18 per cent of the control group reported that they had boyfriends or girlfriends. Difference in differences estimates are consistent with the main estimates in showing no statistically significant impacts *(see the supplementary online appendix, Table S10.2)*. Given the imbalances, potential future impacts relative to this outcome should be interpreted with caution.

12.2 Sexual debut and the characteristics of first sex

Because adolescent girls in poor households may enter into sexual relationships to obtain food or other necessities, the analysis examined impacts related to sexual debut. At midline, no evidence of selective attrition or baseline imbalances were found with respect to sexual debut or age at first sex or whether first sex was forced, pressured or the result of a trick. Nonetheless, while this does not threaten internal validity, baseline participants lost to follow-up exhibited higher rates of sexual debut at baseline (18–21 per cent versus 12–13 per cent among the panel sample). On indicators of first sex, the analysis examined only respondents who reported at baseline that they had never had sex (N = 1,761) because one might expect programme impacts on outcomes related to first sex among this group. No impacts of the cash plus intervention were found on delays in sexual debut. Among participants who had had sex by midline, there were no programme impacts on the age at first sex (the average age was 16 years) or whether first sex was forced (the relevant share was 10–11 per cent) *(see Table 12.2)*.

Table 12.2. Cash plus Impacts on first sex: the non–sexually debuted at baseline (single difference)

Indicator	ITT impact (1)	ATT impact (2)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Ever had sex	−0.004	−0.011	0.119	0.115
	(0.02)	(0.04)		
N	1,761	1,761	897	864
Age at first sexual intercourse	−0.137	−0.353	16.112	15.969
	(0.29)	(0.74)		
N	203	203	107	96
Sexually debuted: first sex forced, pressured or the result of a trick	−0.009	−0.025	0.113	0.102
	(0.04)	(0.11)		
N	204	204	106	98

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age at baseline, and PAA x size fixed effects. Youth who reported sexual debut at baseline were excluded from the analysis. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

The examination by gender also found no programme impacts on sexual debut or age at first sex. Among males, there was an increase in the number of partners as a result of the programme (6.5 percentage points more likely), but the sample size on which this was estimated (N = 195 males who had sexually debuted) was small and the impacts should be interpreted with caution.

The exposure to the programme by midline was short, so impacts on delayed sexual debut may still emerge by endline because adolescents will continue to be mentored and receive asset transfers between midline and endline.

Among participants in the qualitative interviews, some girls said that their first sexual experiences occurred after the men had cajoled or lied to them. Others said that, after they had become pregnant and given birth, they had been left to care for the children alone and without financial or material support from the children's fathers.

I told him that we should go for an HIV test, and he refused. When I told him I was pregnant, he completely changed. He told me he had a wife and that was the end.
– Girl, age 19, Mufindi, Iringa Region

There was no one to educate me…My lover convinced me that, if I accepted him, he would pay for my education, and I agreed. He wanted us to have sex, but I refused. I couldn't do that while still in school, and I told him to wait until I had finished my studies. I later relented and did it. He told me he could enrol me in a tailoring course and that I could continue sewing even if I became pregnant. He deceived me and got me pregnant, and now I am living at home.
– Girl, age 18, Rungwe, Mbeya Region

While I was pregnant, my partner told me he had another partner. After I gave birth, he wouldn't give me anything for the child, not a hat or a pair of socks, not even money to buy body lotion for the child. I said there was no problem, that he hasn't broken my hands, and I can therefore take care of my child on my own. He can assist whenever he feels like it.
– Girl, age 19, Mufindi, Iringa Region

Many of these girls must deal with stressful situations while young, poor and pregnant or already mothers.

12.3 Fertility

Topics in the cash plus curriculum that related to fertility included the following:

- Information on the steps to take if they or their partners become pregnant, including medical care and the responsibilities of each partner

- Information on ways to advocate within the community to ensure optimum care before, during and after giving birth

- Information on the risks of abortion

Female participants were asked whether they were currently pregnant or had ever been pregnant. To examine programme effects at midline, the analysis excluded participants who had reported at baseline that they had been pregnant or had gotten someone pregnant. Individuals lost to follow-up were more likely to have sexually debuted by baseline. Thus, the share of respondents in this midline panel sample who had ever been pregnant was smaller than the corresponding share at baseline. Males were asked whether they had ever gotten anyone pregnant. By midline, 8.7 per cent of the females in the control group and 8.1 per cent of the females in the treatment group had ever been pregnant *(see Table 12.3)*. Among males, 1.6 per cent of the control group and less than 1.0 per cent of the treatment group reported that they had ever gotten anyone pregnant. No programme impacts were found on pregnancy-related outcomes at midline. There were no issues in the panel sample with selective attrition or baseline imbalances related to these pregnancy outcomes.

Table 12.3. Cash plus impacts on fertility indicators (single difference)

Indicator	ITT impact (1)	ATT impact (2)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Ever pregnant	−0.011	−0.022	0.087	0.081
	(0.02)	(0.04)		
N	846	846	450	396
Currently pregnant	−0.001	−0.002	0.020	0.020
	(0.01)	(0.02)		
N	846	846	450	396
Males: ever got someone pregnant	−0.009	−0.030	0.016	0.005
	(0.01)	(0.02)		
N	1,144	1,144	567	577

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses. Youth reporting at baseline that they had ever been pregnant or had ever gotten anyone pregnant were removed from the analysis.
$*p < .05 **p < .01$

12.4 Contraceptive knowledge and use

The cash plus intervention curriculum covered the following topics related to family planning:

- Information on the most common forms of family planning available and the advantages and disadvantages of each

- Choosing the best method of contraception and accessing available family planning services

- Information on the double protection of condoms: as a means of contraception and of disease prevention

- Negotiating condom use with one's partner

To examine the impacts of this curriculum, the analysis assessed the knowledge of all youth about modern methods of contraception. Among youth who reported they had sexually debuted, it assessed the use of a such methods. For the analysis, modern methods were defined to include male or female sterilization, injectables, implants, intrauterine devices, pills, male or female condoms, diaphragms, foam or jelly, the lactational amenorrhoea method, or emergency contraceptive pills. Non-modern methods tend to be less effective. They include the withdrawal method and the rhythm method. The strategy in analysing the relevant outcomes among youth differed between the examination of knowledge alone and the examination of the use of contraception. Longitudinal data were investigated to gauge changes in knowledge over time. Meanwhile, because adolescents were sexually debuting during the year between baseline and midline and because the goal was to capture impacts on any individual who had sexually debuted by midline, a single difference approach was applied to identify programme impacts on the use of condoms and modern contraceptive methods.

At baseline, 72.1 per cent of the sample knew of at least one modern method of contraception *(see Table 12.4, column 3)*. This share rose in both study arms over time, but it rose more among the treatment group, 89.2 per cent versus 86.4 per cent in the control group. As a result of the intervention, treatment youth were, on average, 3.5 percentage points more likely than the control group to know about one or more modern method of contraception – 9 percentage points more likely according to ATT estimates *(see Table 12.4, columns 1–2)*. Knowledge of any method (traditional or modern) also rose, but there were no programme impacts on this indicator. Gender-specific analysis suggests that the increase in contraceptive knowledge was driven by the female sample, who experienced a 6 percentage points increase in knowledge about modern contraceptives *(see Appendix E, Table E.12)*. There is no evidence of selective attrition or baseline imbalances on knowledge and use of contraception.

Table 12.4. Cash plus Impacts on contraceptive knowledge (ANCOVA)

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Has knowledge about contraceptives	0.024	0.062	0.763	0.882	0.901
	(0.02)	(0.04)			
Has knowledge about modern contraceptives	0.035*	0.090*	0.721	0.864	0.892
	(0.02)	(0.05)			
N	2,053	2,053	2,053	1,051	1,002

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Despite increases in knowledge, there were no changes in the current use of modern methods of contraception after the 12 weeks of cash plus training, and any impacts on these behavioural outcomes may take longer to emerge. The share of respondents reporting that they had used condoms during the last previous sexual encounter stayed constant, at 41 per cent, from baseline to midline *(see Table 12.5, columns 3–5)*. There was also little change in the current use of modern methods of contraception among respondents who had sexually debuted. The share changed from 52.4 per cent at baseline to 50.8 per cent and 54.3 per cent among the control and treatment groups, respectively *(see Table 12.5)*.

Table 12.5. Cash plus impacts on contraceptive use (single difference)

Indicator	ITT impact (1)	ATT impact (2)	Midline cash only Mean (3)	Midline cash plus Mean (4)
Last sex: used condom	−0.006	−0.014	0.410	0.412
	(0.05)	(0.12)		
N	409	409	227	182
Currently using contraception: among sexually debuted	0.036	0.089	0.520	0.553
	(0.05)	(0.12)		
N	443	443	246	197
Currently using modern contraception: among sexually debuted	0.039	0.095	0.508	0.543
	(0.05)	(0.12)		
N	443	443	246	197

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.

*p < .05 **p < .01

There were no issues related to selective attrition or imbalances at baseline among these indicators. An examination of these indicators by gender revealed no programme impacts. However, there were differences in condom use. Thus, males were more likely than females to report that they had used condoms at the most recent sexual encounter. Among females, condom use at the most recent encounter was 27.9 per cent at baseline and, at midline, 27.3 per cent and 28.7 per cent among the control and treatment groups, respectively. Among males, the corresponding shares were 57.8 per cent at baseline and, at midline, 58.6 per cent and 56.8 per cent.

12.5 Sexual behaviours and HIV risk

There are numerous topics covered in the curriculum related to risky sexual behaviours. The training highlighted the risks related to the following behaviours:

- Having more than one concurrent sexual partner
- Changing sexual partners frequently
- Having oral, vaginal or anal sexual contact without a condom or without STI testing
- Merely trusting that your partner has no STI or HIV without testing
- Having a sexual partner who is much older
- Using unreliable methods of birth control or using birth control inconsistently
- Exchanging sex for money, favours, gifts, a job
- Forcing individuals to engage in sex, raping

The curriculum involved discussions on community norms and practices, such as the idea that girls are often expected to have sex with older men who are more sexually experienced. The training included discussions on how communities have the responsibility to (a) ensure that girls are protected from sexual harassment and abuse by men and (b) ensure that girls are not put into the position of deciding to have sex in exchange for material considerations, for example, because of hunger, the need to feed younger siblings, and so on. There were also discussions about the greater biological and social vulnerability of girls to HIV and the need for physical protection (contraception) and negotiation skills among the sexually active.

To assess programme impacts related to these topics, the survey asked sexually debuted participants about their sexual behaviours during the previous 12 months, especially behaviours associated with an elevated HIV risk, including number of partners, concurrent partners, condom use, and disparate ages of partners at the most recent sexual encounter.

For respondents who had sexually debuted between survey waves, missing baseline values were recoded to zero for longitudinal analyses. Attrition analyses on these outcomes refer to only those participants on whom there were data reported at baseline. Among those who had sexually debuted and on whom there was information on the number of sexual partners (n = 443), the average number of sexual partners in the previous 12 months was 1.34 among the control group and 1.35 among the treatment group *(see Table 12.6)*. The average number of sexual partners was 1.10 among both study arms for females and 1.65 among the control group and 1.69 among the treatment group for males *(see Appendix E, Table E.14)*. Participants reporting concurrent sexual relationships in the previous 12 months represented 2.0 per cent of the control group and 4.6 per cent of the treatment group at midline (n = 442). The rates of concurrent relationships in the previous 12 months were higher among males than among females (3.7 per cent and 10.2 per cent among the control and treatment groups, respectively, among males and less than 1 per cent among both study arms among females). The intervention appeared to increase these rates among males by 6.5 percentage points, although the pathway of the impact on this outcome is unclear.

Table 12.6. Cash plus impacts on indicators of recent sex (ANCOVA)

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Number of sexual partners in previous 12 months	0.023	0.055	0.616	1.337	1.345
	(0.08)	(0.21)			
N	443	443	443	246	197
Among sexually debuted: concurrent sexual partners in the previous 12 months	0.025	0.061	0.025	0.020	0.046
	(0.02)	(0.04)			
N	442	442	442	245	197
Most recent sex: partner older by five years or more	−0.013	−0.032	0.100	0.176	0.154
	(0.03)	(0.07)			
N	409	409	409	227	182
Most recent sex: partner older by 10 years or more	−0.005	−0.012	0.012	0.022	0.016
	(0.01)	(0.03)			
N	409	409	409	227	182

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Among participants on whom relevant information is available (n = 409), those reporting that they had sex with a partner five years (10 years) older in the previous 12 months represented 17.6 (2.2) per cent and 15.4 (1.6) per cent of the control and treatment groups, respectively, up from 10.0 (1.2) per cent at baseline. Males did not report older partners in this sample. However, 31.3 per cent and 27.7 per cent of control and treatment females, respectively, reported partners five or more years older.

Among participants who had sexually debuted and on whom information is available on condom use (n = 409), 41 per cent reported that they had used condoms during the most recent sexual encounter across both study arms *(see Table 12.6).* There were no issues of selective attrition or baseline imbalances in the panel on these indicators of recent sex *(see Appendix D, Table D.24).*

The qualitative interviews included focus group discussions among peer educators in Mufindi on the specific sexual health topics the adolescents had learned about.

We have learned how to prevent contracting sexually transmitted infections, such as HIV, chlamydia, and gonorrhoea, and we have taught them [youth] about family planning.
– Peer educator, age 19, Mufindi, Iringa Region

There was no evidence of selective attrition or baseline imbalances among the panel sample. In interpreting the lack of impacts at midline on these sexual behaviour indicators, one should recall that impacts on these behavioural outcomes will likely take time to become manifest, including along

pathways, such as knowledge about methods of contraception and HIV, that are more likely to be affected even during the short exposure between baseline and midline.

12.6 Transactional sex

The curriculum covered engaging in sex because of economic incentives or other material needs, such as hunger or to be able to feed younger siblings. Because poverty drives many of the incentives for transactional sex that are associated with meeting basic needs or filling material wants and because a greater risk of HIV infection is associated with transactional sex, the survey included questions about the motivations and financial transactions involved in sexual partnerships among youth.[78] Participants were asked to list the motives for starting their current or most recent relationships. A variable was then created to indicate whether any of these reasons were financial.

Among participants reporting at midline that they had had a sexual relationship and among those who answered questions related to transactional sex (n = 490), 27.8 per cent and 29.4 per cent of the control and treatment groups, respectively, reported that financial reasons motivated the start of their current or most recent relationships *(see Table 12.7; columns 4–5)*. This was up from 11.1 per cent among the pooled sample at baseline (column 3). An examination of patterns by gender reveals that, at midline, 45 per cent of females in the treatment group (44.2 per cent of females in the control group) and 10.2 per cent of males in the treatment group (6.5 per cent of males in the control group), respectively, report that they had started their current or most recent sexual partnerships for financial reasons *(see Appendix E, Table E.15)*. This is up from 17.4 per cent of females and 3.1 per cent of males at baseline. Among the control and treatment groups, 47.8 per cent and 40.8 per cent, respectively, reported that they had been given money by their current or most recent partners (up from 24.7 per cent at baseline). The shares reporting that they would leave the relationships if their partners did not financially support them were 5.5 per cent and 3.2 per cent among the control and treatment groups, respectively (compared with 4.1 per cent at baseline). Asked if they had ever provided money, favours or gifts to partners to engage in sexual relationships, 5.1 per cent and 6.4 per cent of the control and treatment groups, respectively, responded affirmatively *(see Table 12.7)*. There were no programme impacts on these outcomes at midline *(see Table 12.7, column 1)*. Selective attrition and baseline imbalances among the panel were not found to be issues with respect to these transactional sex indicators in the pooled sample. There were no significant impacts in the analyses by gender on these outcomes *(see Appendix E, Table E.15)*.

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78 Kamndaya, Mphatso, et al. (2016) 'The Role of Material Deprivation and Consumerism in the Decisions to Engage in Transactional Sex among Young People in the Urban Slums of Blantyre, Malawi', *Global Public Health*, vol. 11, no. 3, pp. 295–308.

Table 12.7. Cash plus impacts on transactional sex indicators (ANCOVA)

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Financial reasons motivated current or start of most recent relationship	0.019	0.046	0.111	0.278	0.294
	(0.04)	(0.10)			
Given money by current or most recent partner	−0.067	−0.162	0.247	0.478	0.408
	(0.04)	(0.11)			
Would leave relationship if partner did not provide financial support	−0.024	−0.057	0.041	0.055	0.032
	(0.02)	(0.05)			
Provided money, favours or gifts for sex during the previous 12 months	0.012	0.030	0.045	0.051	0.064
	(0.02)	(0.04)			
N	490	490	490	272	218

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

The qualitative interviews offer several illustrations of sexual exploitation because of poverty. One girl describes how she was tricked into having sex with the promise of a better life.

This is the reason that made me get into the relationship, although I did so when I was still young. I was only 15 years old. Because of hardships, I left here [Mufindi] to go to Dar es Salaam to work. Someone took me there, and, there, I met a young man. This young man is the one who deceived me, seeing that I had left the village to come to the city. He promised he would help me out of my difficulties. He promised that, if I bore him a child, he would provide me with a good life. He was actually doing housework for a woman who was living near where I worked. Since I knew absolutely nothing, he deceived me.
– Girl, age 18, Mufindi, Iringa Region

12.7 HIV knowledge

A main focus of the health-related curriculum was knowledge about HIV, particularly prevention, testing and treatment. The analysis assessed whether adolescents had heard about HIV, the sources of their information and what they knew. The training emphasized that a monogamous sexual relationship with an uninfected partner can reduce the risk of HIV. Knowledge on this indicator at midline was 73.2 per cent among the control group and 79.0 per cent among the treatment group *(see Figure 12.1)*. Youth in the treatment group were 5.8 percentage points more likely than youth in the control group to know about this as a result of the intervention. (According to the ATT estimates, the treatment group was 14.8 percentage points more likely to know.) The impact was driven by females, who were 11.8 percentage points more likely to know this as a result of the intervention *(see Appendix E, Table E.16)*. Impacts on this outcome among males were not statistically significant.

Figure 12.1. Knowledge that sex with an uninfected monogamous partner can reduce HIV risk
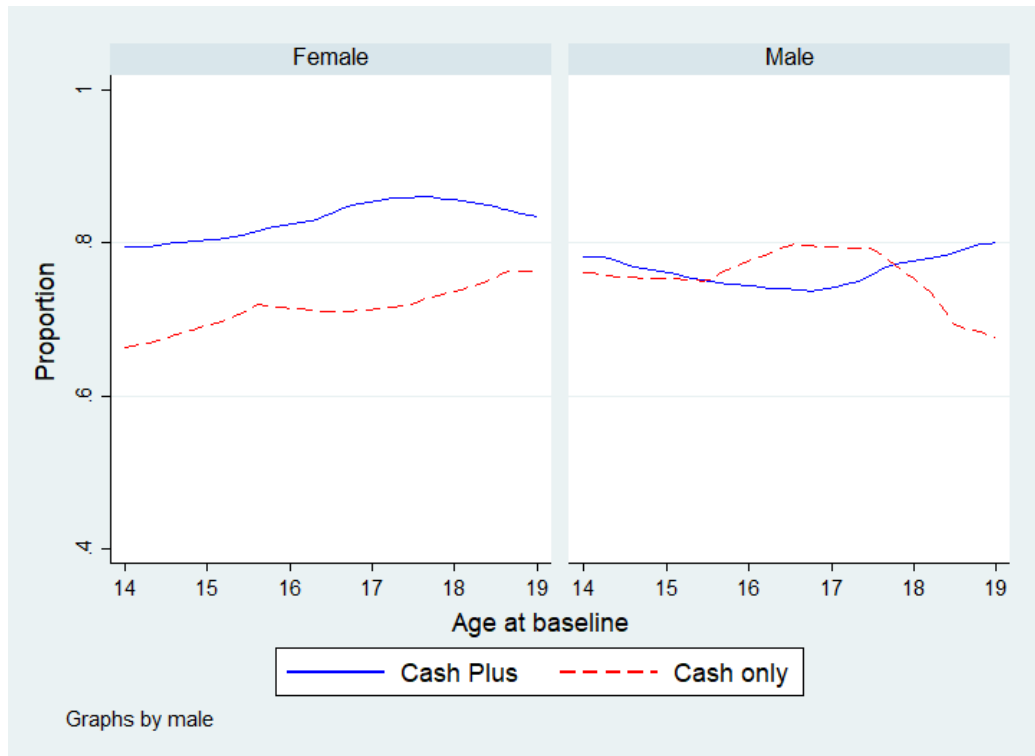
On other indicators, such as knowledge about whether HIV can be transmitted by mosquitoes or food, there were high levels of accurate knowledge at baseline (over 90 per cent) and thus little room for improvement as a result of the intervention. Indeed, there were no impacts on these indicators, nor on knowledge that regular condom use reduces HIV risk. On these indicators, there was little change: 71.2 per cent knew this at baseline (pooled) versus 70.3 per cent and 72.2 per cent among the control and treatment groups, respectively, at midline *(see Table 12.8).* The knowledge that regular condom use reduces the risk of HIV was more widespread among females than males: 75.9 per cent and 78.2 per cent among the control and treatment groups, respectively, among females and 65.3 per cent and 67.6 per cent, respectively, among males *(see Appendix E, Table E.16)*, but there were no impacts on this outcome as a result of the intervention.

Table 12.8. Cash plus impacts on HIV knowledge (single difference)

Indicator	ITT impact (1)	ATT impact (2)	Midline cash only Mean (3)	Midline cash plus Mean (4)
Knows that sex with one uninfected monogamous partner can reduce the risk of HIV	0.058*	0.148*	0.732	0.789
	(0.02)	(0.06)		
N	2,104	2,104	1,081	1,023
Thinks or is unsure whether mosquitoes transfer HIV	−0.003	−0.006	0.094	0.093
	(0.01)	(0.04)		
N	2,104	2,104	1,081	1,023
Knows regular condom use reduces HIV risk	0.024	0.061	0.703	0.722
	(0.02)	(0.06)		
N	2,104	2,104	1,081	1,023
Thinks or is unsure whether HIV is transferred through food	−0.007	−0.018	0.056	0.051
	(0.01)	(0.03)		
N	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age at baseline; and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

12.8 Perceived HIV risk and testing

A majority of the participants affirmed at midline that they believed they faced no risk of contracting HIV. The shares were 64.6 per cent and 64.7 per cent among the control and treatment groups, respectively *(see Table 12.9)*. This is lower than the pooled mean at baseline (83.9 per cent) across both groups. This indicates that the self-assessed risk had risen. Thus, at baseline, only 13.2 per cent of the participants believed they faced a low risk of contracting HIV, but, at midline, the shares were 27.9 per cent and 29.0 per cent among the control and treatment groups, respectively. The shares reporting high self-perceived risk at midline were 7.4 per cent and 6.2 per cent among the control and treatment groups, respectively. By gender, 50.9 per cent and 51.5 per cent of females in the control and treatment groups, respectively, at midline reported that they faced no risk of contracting HIV *(see Appendix E, Table E.17)*. Among males, the corresponding shares were higher, 77.1 per cent and 74.9 per cent of the control and treatment groups, respectively. However, females were more likely than males to report a low risk. The respective shares among the control and treatment groups were 40.0 per cent and 41.9 per cent among females versus 17.0 percent and 19.2 per cent among males. Despite the rising risk perception over time, there were no programme impacts on HIV risk perceptions.

Table 12.9. Cash plus impacts on HIV risk indicators (ANCOVA)

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Perceived HIV risk: moderate/high	−0.011	−0.029	0.029	0.074	0.062
	(0.01)	(0.03)			
N	2,013	2,013	2,013	1,035	978
Perceived HIV risk: low	0.022	0.057	0.132	0.279	0.290
	(0.02)	(0.06)			
N	2,013	2,013	2,013	1,035	978
Perceived HIV risk: none	−0.011	−0.029	0.839	0.646	0.647
	(0.02)	(0.06)			
N	2,013	2,013	2,013	1,035	978
Tested for HIV: lifetime	0.030	0.077	0.433	0.498	0.530
	(0.03)	(0.07)			
N	2,093	2,093	2,093	1,074	1,019
Tested for HIV: previous 12 months	0.036	0.093	0.288	0.354	0.387
	(0.03)	(0.06)			
N	2,104	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline; and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Approximately half – 49.8 per cent and 53.0 per cent of the control and treatment groups, respectively – reported at midline that they had been tested for HIV in their lifetimes, up from 43.3 per cent at baseline *(see Table 12.9)*.[79] During the previous 12 months, 35.4 per cent and 38.7 per cent of the control and treatment groups, respectively, had been tested for HIV. Females were more likely than males to have been tested: 44.5 per cent and 49.0 per cent of the control and treatment groups, respectively, in the previous 12 months among females versus 27.3 per cent and 30.8 per cent of the control and treatment groups, respectively, among males *(see Appendix E, Table E.17)*. No programme impacts were found on testing rates. HIV indicators were balanced at baseline among the panel sample. However, there is some indication of selective attrition with respect to the baseline means on receiving HIV test results.

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79 Adolescents were not asked to report the outcomes of the tests or to otherwise reveal their HIV status.

13. HIV-SRH SERVICE ACCESS

Main findings

Services are becoming more adolescent friendly.

The share of youth who do not know where to obtain contraceptives such as condoms is smaller as a result of the programme.

The programme did not lead to an increase in visits at health care facilities or to a rise in the perceived quality of services, although perceived quality is high among both the treatment and control groups.

Among adolescents who have visited health facilities, the likelihood of visiting health facilities because of pregnancy is lower among youth who participated in the training relative to youth who did not participate.

This section examines whether the cash plus intervention led to an increase in the number of adolescent visits to SRH services, defined as services related to contraception, pregnancy and STI testing or treatment. The analysis also addresses whether the intervention affected the experiences of adolescents seeking HIV and SRH services, as well as their knowledge of places where they may obtain contraceptives or be tested for HIV and other STIs. The training curriculum included a visit to a health care facility, information on the prevention and treatment of HIV and other STIs, and information on family planning and contraception. However, referrals of adolescents to health services through mentoring, as well as other health seeking promotion activities, was only undertaken after the midline data collection exercise. Thus, the data analysed in this report do not capture the effects of this mentorship and supply-side health promotion, and one should not expect to find many impacts on health seeking in the assessments.

The literature on the impacts of social protection interventions on the uptake of health care services has focused mainly on the impacts of conditional or unconditional cash transfers on children and their caregivers, usually the recipients of the transfers. Lagarde, Haines and Palmer (2009) summarize these studies and point out that conditional and unconditional cash transfers have improved health-seeking behaviours and the uptake of health care services.[80] Some studies also examine the effects of monetary incentives on HIV testing, as well as on the desire to learn the results after testing. For instance, an experiment in Malawi finds that small monetary incentives have a big impact on the share of participants who decide to learn the results of their HIV tests.[81]

The literature is more scarce with regard to adolescents, given that social protection interventions rarely target only adolescents or generally do not give the cash directly to adolescents.[82] However, in poorly resourced settings, adolescents have limited access to adolescent-friendly SRH services.[83] It is therefore expected that adolescents will benefit from interventions that relax financial constraints, facilitate access to SRH services, or improve the quality and provision of adolescent-friendly services.

80 Lagarde, Mylene, Andy Haines, and Natasha Palmer (2009) 'The Impact of Conditional Cash Transfers on Health Outcomes and Use of Health Services in Low and Middle Income Countries', *Cochrane Database of Systematic Reviews,* vol. 4, no. CD008137 (October 7), Cochrane Collaboration, London.

81 Thornton, Rebecca L. (2008) 'The Demand for, and Impact of, Learning HIV Status', *American Economic Review*, vol. 98, no. 5, pp. 1829–1863.

82 Khoza, Makhosazane Nomhle, et al. (2018) 'Cash Transfer Interventions for Sexual Health: Meanings and experiences of adolescent males and females in inner-city Johannesburg', *BMC Public Health*, vol. 18, no. 1, p. 120.

83 Odo, Amelia Ngozi, et al. (2018) 'Sexual and Reproductive Health Services (SRHS) for Adolescents in Enugu State, Nigeria: A mixed methods approach', *BMC Health Services Research*, vol. 18, no. 1, p. 92.

13.1 Access to services

The types of facilities adolescents visit include dispensaries, clinics, health care centres, hospitals, doctors and government facilities. Cash plus intervention did not lead to an increase in the share of adolescents who had ever visited health care facilities or who had visited such facilities during the previous 12 months *(see Table 13.1; Figures 13.1 and 13.2)*. Among those adolescents who had visited health care facilities in the previous 12 months, the programme exerted no effect on the kind of health care facilities they visited.

Table 13.1. Cash plus impacts on SRH visits

Indicator	ITT impact (1)	ATT impact (2)	Midline cash only Mean (3)	Midline cash plus Mean (4)
Visited health facility for SRH services, lifetime	0.014 (0.02)	0.036 (0.05)	0.187	0.193
N	2,104	2,104	1,081	1,023
Visited health facility for SRH services, previous 12 months	0.011 (0.02)	0.029 (0.05)	0.174	0.177
N	2,104	2,104	1,081	1,023
Last SRH visit at dispensary, previous 12 months	0.038 (0.07)	0.083 (0.15)	0.426	0.470
N	369	369	188	181
Last SRH visit at clinic, health care centre, hospital, doctor, previous 12 months	−0.044 (0.07)	−0.096 (0.15)	0.574	0.525
N	369	369	188	181
Last SRH visit at government facility, previous 12 months	0.009 (0.03)	0.019 (0.06)	0.947	0.956
N	369	369	188	181

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Figure 13.1. Share of youth who visited health facilities, baseline and midline, by age
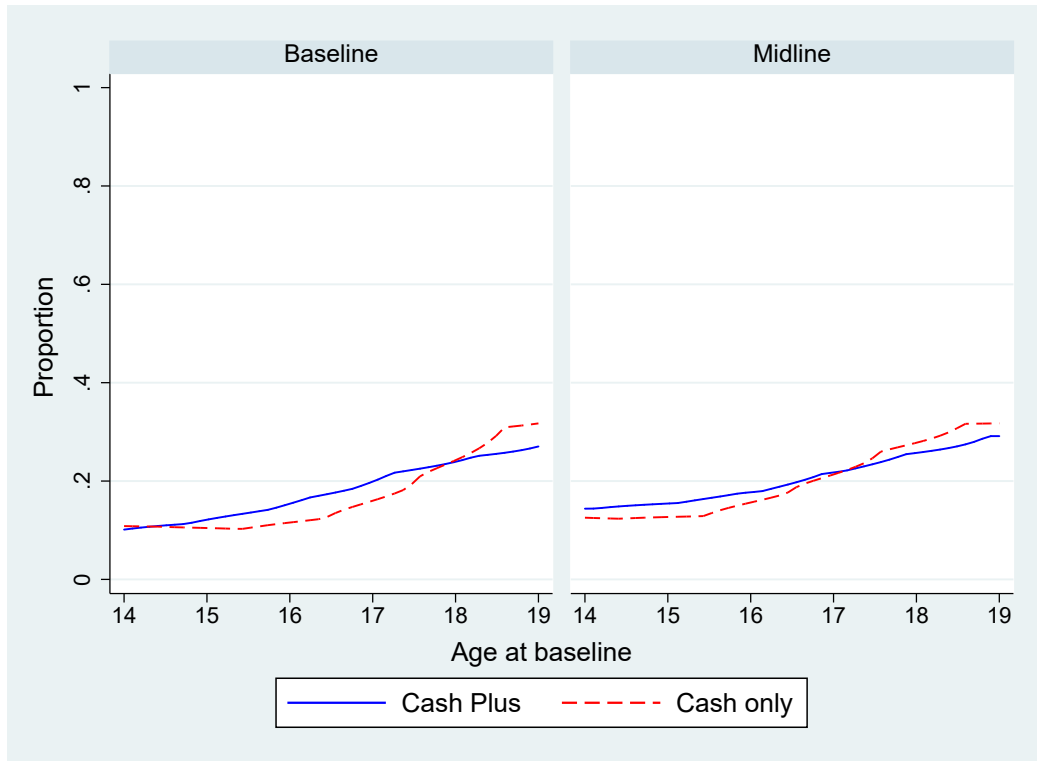
Figure 13.2. Share of youth who visited health facilities, past 12 months, baseline and midline, by age
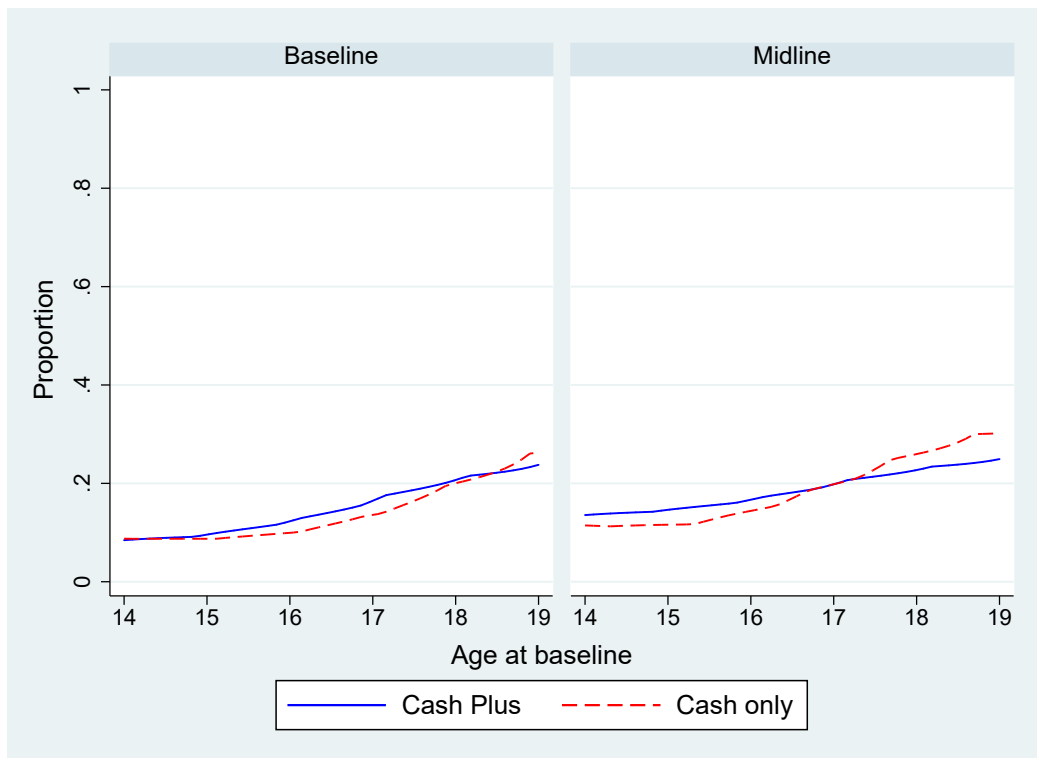
Table 13.2 examines the reasons for SRH visits among programme participants who visited health care facilities for SRH services during the previous 12 months (n = 369). The intervention led to a decline in the share of adolescents visiting health care facilities because of pregnancy, maternity or gynæcological examinations. This is the result of both a decrease in the number of visits among participants and an increase in the number of visits among the control group *(see Figure 13.3)*. Moreover, the intervention led to an increase in the share of females visiting a health facility for contraception reasons (*see Appendix E, Table E.19*).

Table 13.2. Cash plus impacts on the reasons for visits to health care facilities

Reason for most recent SRH visit	ITT impact (1)	ATT impact (2)	Midline cash only Mean (3)	Midline cash plus Mean (4)
Contraception, condoms	0.087 (0.05)	0.188 (0.11)	0.335	0.420
STI testing or treatment	−0.018 (0.05)	−0.038 (0.10)	0.245	0.243
Pregnancy, maternity, gynæcological exam	−0.106* (0.05)	−0.231* (0.11)	0.378	0.254
N	369	369	188	181

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Figure 13.3. Share of youth who visited health facilities for pregnancy, maternity or gynæcological examinations, baseline and midline, by age
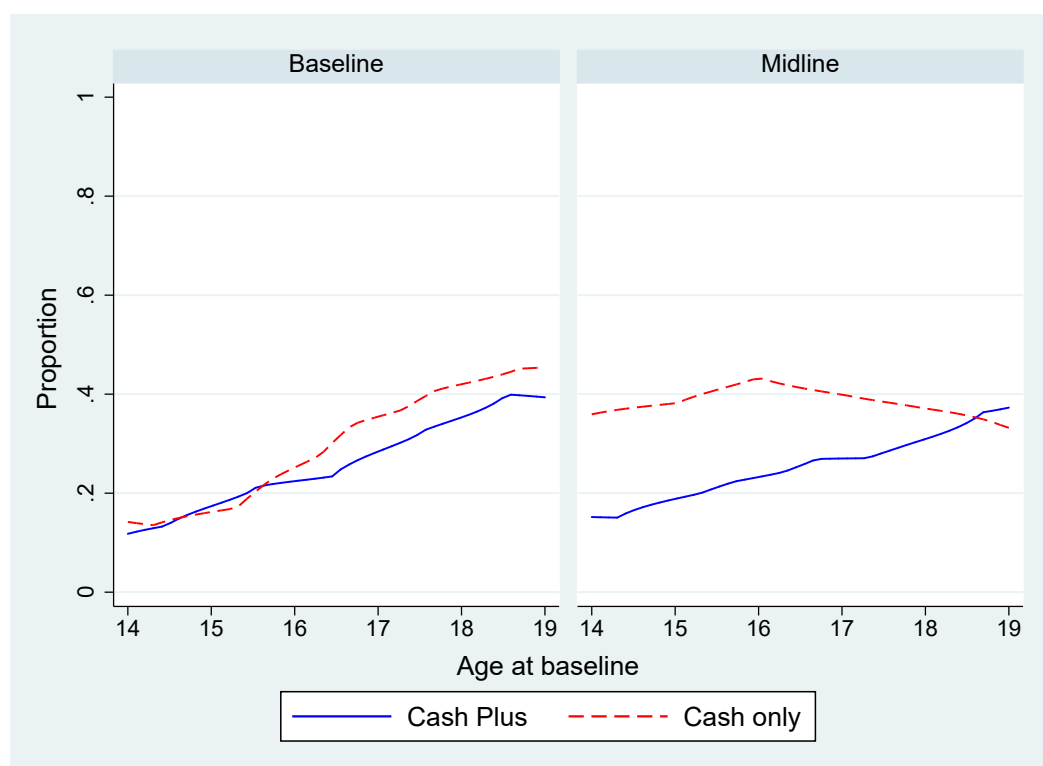
Some adolescents may have a preference across facilities because of the quality of the services offered. The qualitative interviews hint that, if youth suspect they may have an STI, they prefer hospitals to smaller facilities.

For STIs, [youth in the district] go to Makandana Hospital because it is a big hospital, and it is well equipped.
– Boy, age 18, Rungwe, Mbeya Region

There is a dispensary in case you have an emergency at night; it is right there. If you have a more serious ailment, you can go to a bigger hospital, such as Mafinga and JKT [National Service] camp.
– Girl, age 16, Mufindi, Iringa Region

The analysis by gender finds a positive and significant programme impact among females who visit health care facilities for contraception or condoms *(see Appendix E, Table E.19)*. The analysis suggests that the positive effects are driven by the female subsample.

13.2 The perceived quality of available services

Adolescents were asked about the topics discussed with them by health facility staff during the most recent visits of the adolescents, regardless of the reasons for the visit. They were also asked about their perceptions of the quality of the services they received. Overall, the services appear to be becoming more friendly. Across the entire sample, 82 per cent of youth reported at midline that they felt comfortable asking SRH staff questions, up from 78 per cent at baseline; 91 per cent said at midline that SRH services were sufficiently confidential, compared with 80 per cent at baseline *(see Table 13.3)*. The programme did not lead to a greater likelihood that facility staff would discuss contraception, STI testing or treatment, or pregnancy. In terms of the perceived quality of the services provided, the programme also appeared to have no impact.

Table 13.3. Cash plus impacts on topics discussed and the perceived quality of services

Indicator	ITT impact (1)	ATT impact (2)	Midline cash only Mean (3)	Midline cash plus Mean (4)
At last SRH visit, staff discussed contraception	0.015 (0.06)	0.032 (0.12)	0.505	0.486
N	369	369	188	181
At last SRH visit, staff discussed STI testing, treatment	0.022 (0.06)	0.047 (0.14)	0.569	0.591
N	369	369	188	181
At last SRH visit, staff discussed pregnancy	0.003 (0.05)	0.006 (0.12)	0.473	0.475
N	369	369	188	181
Adolescent felt comfortable asking SRH staff questions	−0.030 (0.04)	−0.066 (0.09)	0.830	0.796
N	369	369	188	181
Staff answered SRH questions adequately	−0.011 (0.02)	−0.022 (0.04)	0.981	0.972
N	300	300	156	144
At last SRH visit, staff was friendly	−0.025	−0.054	0.989	0.967
	(0.02)	(0.04)		
N	369	369	188	181
SRH services were adequately confidential	−0.031 (0.03)	−0.068 (0.07)	0.931	0.895
N	369	369	188	181

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

13.3 Knowledge on access to contraceptives and HIV-STI testing

The analysis assessed the knowledge of adolescents about the places where they could obtain contraceptives or undergo testing for HIV or other STIs. Adolescents who participated in the intervention were 4.5 percentage points (ITT effects) and 11.5 percentage points (ATT effects) less likely to report that they did not know where to obtain contraceptives *(see Table 13.4)*. The same applies specifically to condoms, given that the intervention reduced the share of treated youth who do not know where to obtain condoms. The impacts were driven by the female sample (*see Appendix E, Table E.21*), who were 6 and 6.7 percentage points less likely to report they did not know where to get contraception or condoms, respectively, as a result of the intervention. Adolescents in intervention villages were no more likely to know that they can obtain contraception at a clinic, for instance, compared with adolescents in control villages. However, this knowledge is still relatively more well distributed across both study arms; more than 80 per cent of adolescents in both control communities and treated communities knew they could obtain contraception at clinics. Meanwhile, the intervention had no effect on knowledge about where to go to be tested for HIV and other STIs. The reason for the lack of impacts is likely because the level of awareness is already high; almost 95 per cent of youth know that they may access testing at clinics.

Table 13.4. Cash plus impacts on knowledge about access to contraceptives, condoms and testing

Indicator	ITT impact (1)	ATT impact (2)	Midline cash only Mean (3)	Midline cash plus Mean (4)
Contraception at clinic	0.039	0.100	0.827	0.867
	(0.02)	(0.06)		
Contraception at kiosk/shop	0.012	0.031	0.070	0.087
	(0.01)	(0.04)		
Contraception at pharmacy	0.053	0.135	0.272	0.320
	(0.03)	(0.09)		
Contraception at free dispenser	0.031	0.079	0.098	0.132
	(0.02)	(0.06)		
Contraception do not know	−0.045**	−0.115**	0.132	0.086
	(0.02)	(0.04)		
Condom at clinic	0.042	0.108	0.550	0.598
	(0.03)	(0.09)		
Condom at kiosk/shop	0.039	0.099	0.450	0.493
	(0.03)	(0.07)		
Condom at pharmacy	0.004	0.010	0.497	0.500
	(0.04)	(0.10)		
Condom at free dispenser	0.025	0.065	0.088	0.117
	(0.02)	(0.06)		
Condom do not know	−0.035*	−0.090*	0.125	0.087
	(0.02)	(0.04)		
Test at clinic	−0.007	−0.017	0.951	0.945
	(0.01)	(0.03)		
Test at kiosk/shop	0.015	0.039	0.018	0.034
	(0.01)	(0.02)		
Test at pharmacy	0.010	0.024	0.064	0.075
	(0.02)	(0.04)		
Test at free dispenser	0.022	0.056	0.103	0.127
	(0.02)	(0.06)		
Test do not know	0.002	0.005	0.030	0.031
	(0.01)	(0.02)		
N	2,104	2,104	1,081	1,023

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

In the qualitative interviews, participants explained why youth might not go for HIV testing.

The challenge might be like going to the dispensary and finding there are too many people and there is only one doctor. We cannot tell the doctor to stop taking care of the sick and pay attention to us who are healthy and are there to check our health.
– Boy, age 18, Mufindi, Iringa Region

There are challenges; sometimes, they [youth] might find long queues at the hospital and be forced to postpone [their visit] because of the large numbers of patients. Like now, there are many people going to get AIDS drugs.
– Boy, age 17, Mufindi, Iringa Region

14. VIOLENCE

> **Main findings**
>
> By midline, the intervention had exerted no impact on adolescents' experience of emotional, physical or sexual violence or of seeking help.

Violence during childhood adversely affects the health and well-being of adolescents and has negative economic impacts in adulthood, particularly among women. The perpetrators of the various forms of violence on children and adolescents may be intimate partners, such as spouses and boyfriends or girlfriends, family members, authority figures, peers or strangers. It has been estimated that, worldwide, one woman in three experiences intimate partner violence during her lifetime.[84] This has injurious effects on women's health and well-being, as well as the health and survival of their children.[85] Intimate partner violence begins early, often in adolescence.[86] Prevention efforts should thus be prioritized during this period of life, when individuals start forming romantic relationships. A national study on violence against children in the United Republic of Tanzania, conducted in 2009, showed that three females in 10 and one male in seven had experienced sexual violence before age 18 and that three quarters of males and females under age 18 had experienced the physical violence of adults or intimate partners.[87] Among those who experienced sexual violence as children, few told anyone about the abuse or sought help following the events. Moreover, only 59.4 per cent of females and about one male in three who did seek services received them. The study also revealed that the sexual debut of 30 per cent of females and 20 per cent of males was forced, and half of married females ages 15–24 had partners who were 10 or more years older, which increases the risk of intimate partner violence and HIV.

14.1 Experiences of emotional, physical and sexual violence

To assess adolescent experiences of violence, the analysis relied on validated survey results from the Demographic and Health Surveys and the Violence against Children Survey in the United Republic of Tanzania. A split sample approach was used to manage modules on the victimization of violence. Thus, the sample analysed in this section is half the size of the overall sample. The experience of physical violence was assessed through questions seeking to learn whether respondents had done any of the following during the previous 12 months: (a) slapped or pushed anyone, (b) hit anyone with a fist, (c) kicked or beat anyone, (d) tried to choke or burn anyone, or (e) threatened or attacked anyone with a knife, gun or any other weapon.

Sexual violence during the previous 12 months and at any time during the life cycle was assessed by asking youth whether anyone had ever (a) touched them in a sexual way without their permission, (b) physically forced them to have sexual intercourse or (c) forced them to perform other sexual acts that they did not wish to perform. The respondents were also asked whether their sexual debut was forced, pressured or the result of being tricked. Those adolescents reporting forced, pressured or tricked first sex were also classified as having experienced sexual violence.

84 Devries, Karen M., et al. (2013) 'The Global Prevalence of Intimate Partner Violence against Women', *Science*, vol. 340, no. 6140, pp. 1527–1528.

85 Ackerson, Leland Keith, and S. V. Subramanian (2008) 'Domestic Violence and Chronic Malnutrition among Women and Children in India', *American Journal of Epidemiology*, vol. 167, no. 10, 1188–1196; Åsling-Monemi, Kajsa, et al. (2003) 'Violence against Women Increases the Risk of Infant and Child Mortality: A case-referent study in Nicaragua', *Bulletin of the World Health Organization*, vol. 81, no. 1, pp. 10–16.

86 Peterman, Amber, Jennifer Rebecca Bleck, and Tia M. Palermo (2015) 'Age and Intimate Partner Violence: An analysis of global trends among women experiencing victimization in 30 developing countries', *Journal of Adolescent Health*, vol. 57, no. 6, pp. 624–630.

87 United Nations Children's Fund, U.S. Centers for Disease Control and Prevention, and Muhimbili University of Health and Allied Sciences (2011) 'Violence against Children in Tanzania: Findings from a national survey, 2009', Multi Sector Task Force on Violence against Children, UNICEF Tanzania, Dar es Salaam, United Republic of Tanzania.

At midline, relative to males, females had experienced higher rates of emotional (31.7 per cent versus 25.5 per cent), physical (17.7 per cent versus 15.4 per cent) and sexual violence (6.8 per cent versus 1.9 per cent). This contrasts with the baseline with respect to physical violence only; at baseline, males reported higher rates of violence than females. By midline, the intervention had had no impact on rates of violence *(see Tables 14.1 and 14.2)*. This is not unexpected; however, at midline, the adolescents had only participated in approximately 10–12 weeks of training, and attitudes may change more quickly than experiences or behaviours. Taken together with the findings on changes in gender-equitable attitudes among males (the greatest impact was in the violence-related domain), there is potential for the intervention to reduce the experience of violence and the perpetration of violence in the future, including by endline.

Table 14.1. Cash plus impacts on experiences of physical or emotional violence, previous 12 months (ANCOVA)

Indicator	ITT impact (1)	ATT impact (2)	Baseline Mean (3)	Midline cash only Mean (4)	Midline cash plus Mean (5)
Experienced emotional abuse	−0.034	−0.079	0.345	0.285	0.237
	(0.03)	(0.08)			
Experienced physical violence	−0.015	−0.036	0.268	0.165	0.143
	(0.02)	(0.06)			
N	984	984	984	508	476

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table 14.2. Cash plus impacts on experiences of sexual violence, previous 12 months (single difference)

Indicator	ITT impact (1)	ATT impact (2)	Midline cash only Mean (3)	Midline cash plus Mean (4)
Experienced sexual violence	−0.003	−0.007	0.043	0.038
	(0.01)	(0.03)		
Experienced emotional/physical/sexual violence	−0.051	−0.121	0.359	0.301
	(0.04)	(0.09)		
N	988	988	510	478

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

The qualitative discussions highlighted several incidents involving reports of forced sex.

I haven't heard of any cases recently, but, last year, a girl was raped by seven men. It was shocking. The village chairman decided to follow up on the incident but failed because the girl said she was never

raped. When the chairman first heard about the incident, he called a meeting to discuss the issue, but, when the girl was asked, she denied the incident ever happened.
– Girl, age 18, Rungwe, Mbeya Region

Thus, the alleged victim denied having been raped when the village chairman asked her about the incident. The village chairman generally has responsibility for security in the community. There could have been several possible reasons the girl denied the incident – including shame and the stigma of rape – even though other villagers, such as the respondent who gave the example, were already aware of the details.

14.2 Seeking help and reporting violence

Those participants who said they had experienced emotional, physical or sexual violence were asked whether they had ever tried to seek help or tell anyone about the violence. Help seeking behaviour was then classified into two types. The first type was labelled formal. It included seeking the help of police, doctors or health workers, priests or other religious leaders, counsellors, non-governmental organizations or women's organizations, or local leaders. The second type was labelled informal, which included seeking the help of friends, family, the family of the spouse or partner, and neighbours. An indicator of impacts on help seeking was calculated based on dialogue among adolescents reporting any emotional, physical or sexual violence because the sample sizes were too small to estimate impacts separately according to different categories of violence.

At midline, the analysis found that, among participants who had experienced any form of violence, 37 per cent of the control group and 41 per cent of the treatment group had sought help *(see Table 14.3)*. Similar to evidence largely drawn from samples of females ages 15–49, adolescents are more likely to seek help informally (33–37 per cent) rather than formally (3–4 per cent).[88] There were no programme impacts on the incidence of help seeking or on the type of help seeking.

Table 14.3. Impacts on seeking help in cases of violence (single difference)

Indicator	ITT impact (1)	ATT impact (2)	Midline cash only Mean (3)	Midline cash plus Mean (4)
Sought help because of emotional, physical or sexual violence	0.049	0.107	0.366	0.407
	(0.05)	(0.11)		
Formal source of help	−0.011	−0.023	0.044	0.034
	(0.02)	(0.05)		
Informal source of help	0.047	0.104	0.333	0.372
	(0.05)	(0.11)		
N	328	328	183	145

Note: Linear models were estimated on the panel of youth interviewed both at baseline and midline. Regressions control for gender, age and outcome value at baseline, and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

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88 Palermo, Tia M., Jennifer Rebecca Bleck, and Amber Peterman (2014) 'Tip of the Iceberg: Reporting and gender-based violence in developing countries', *American Journal of Epidemiology*, vol. 179, no. 5, pp. 602–612.

The qualitative interviews, meanwhile, suggest that the training has assisted youth in learning how to seek help should they experience rape.

Another thing is rape; we are taught that, if you are raped, you have to tell someone who can take you to hospital.
– Girl, age 14, Mufindi, Iringa Region

15. CONCLUSION

This report documents impacts of the cash plus model on youth well-being and safe, healthy and productive transitions to adulthood being implemented within the Government of the United Republic of Tanzania's PSSN Programme. Social protection has been widely recognized as an important form of investment in adolescents and youth. It increases their human capital and ensures a healthier, more productive future. This has major implications for economic growth.

The baseline report of this study showed that, despite living in households benefiting from the PSSN social protection programme, adolescents still face myriad challenges to a safe and productive transition to adulthood. Thus, the cash plus pilot initiative studied here aims to boost the impacts of the cash transfers and support supplied through the PSSN programme by providing additional training, education and links to promote better livelihoods and SRH and HIV prevention and treatment among adolescents.

The accompanying impact evaluation is based on a longitudinal, mixed method, including a cluster randomized control trial. A strength of the study is the assessment of both demand-side (youth) and supply-side (community services, health facilities) factors related to adolescent well-being and transitions to adulthood. The baseline report shows that the implementation of randomization is highly successful. The baseline equivalence of treatment (PSSN plus) and control (PSSN only) groups is confirmed over a large number of indicators across domains as diverse as education, livelihoods, HIV knowledge and testing, contraceptive use, HIV-SRH access, violence and mental health.

This midline report examines data collected from 2,104 youth who were also interviewed at baseline after the intensive 12–14 weeks of face-to-face training to determine what impacts the intervention had on youth attitudes, knowledge and experiences. Attrition rates were within normal ranges expected for this population. In interpreting the midline findings, one should keep in mind the relatively short exposure to the intervention. During this period of approximately three months, knowledge and attitudes may be expected to change, but behavioural changes will likely take more time. Thus, many changes in economic activity, violence, relationship dynamics, marriage, pregnancy and other behaviours may not become manifest until later. We will further examine changes in outcomes, based on a follow-up survey among the youth in 2019, one year after the midline survey.

There were positive impacts of the intervention by midline, including changes in knowledge about some aspects of HIV prevention and contraceptive use. Youth were more likely to participate in one type of economic activity (livestock-rearing) as a result of the programme. There were no changes in mental health, nor in educational and occupational aspirations. While there were no changes in the experience of violence, there were changes in gender-equitable attitudes, including attitudes towards violence. This is a positive first step in the effort to increase gender equity and reduce violence and the acceptance of violence.

The summary of the results aims to integrate quantitative and qualitative data analyses. Deeper analysis of the topics will be pursued using the 2019 data. The innovations in the application of a range of economic and health-related indicators of well-being examined in this study will contribute to understanding how plus components within national cash transfer programmes may contribute to safe transitions to adulthood among youth in the United Republic of Tanzania, sub-Saharan Africa, and worldwide.

APPENDIX A. STUDY MAP

Map A.1. The Cash Plus Programme study areas
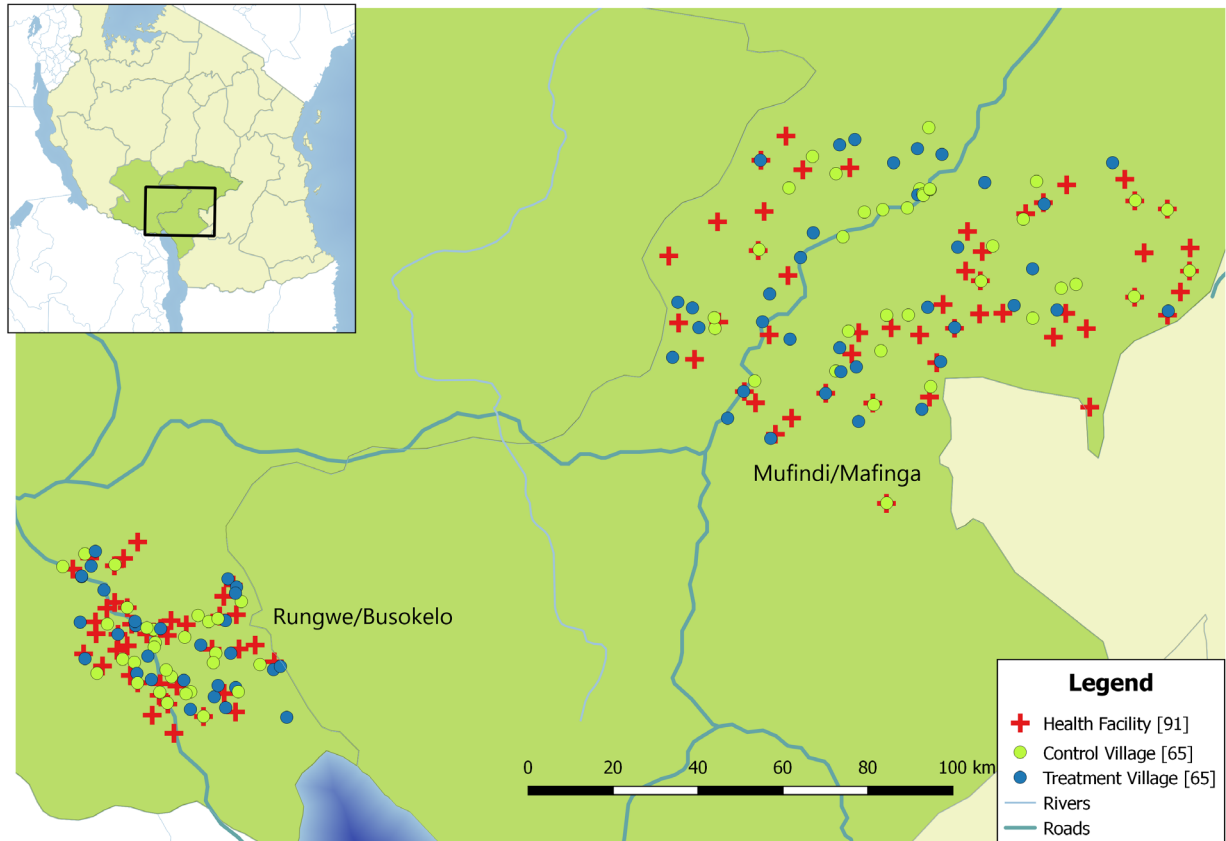
APPENDIX B. CURRICULUM OVERVIEW, BY WEEK

Table B.1. Cash plus intensive phase training: integrated curriculum and training overview

a. Opening week

Session	Subject matter and components
Session 1: Opening (joint TASAF and SRH)	Opening Explanation of programme, objectives, administration Personal introductions and expectations Group ground rules Energizers and team-building games Pretest
Session 2: Our community (joint livelihoods and SRH)	Drawing the village map Opportunities and obstacles related to SRH: how boys and girls are affected differently, gender roles and stereotypes, relationships with family and community, and family and community expectations for adolescents Opportunities and obstacles to development in livelihoods: economic advancement, education and career social capital, networking
Session 3: Personal awareness and transformation	Concepts of transformation: butterfly and eagle stories Stages of transformation, stages of human transformation
Day 2, session 1a: Our Health (SRH)	Introduction and importance of health and SRH Threats to health Effects of puberty, physical and emotional changes Understanding the menstrual cycle
Day 2, session 1b: Introduction to livelihood skills	Business ideas development and simple business plans
Session 2: Planning of weekly sessions and activities	Develop 10-week programme

b. 10-week training sessions

Session	Livelihood skills	Reproductive health
Homework	Identify opportunities and obstacles to livelihood activities among adolescents in my environment	Opportunities and obstacles related to SRH: how boys and girls are affected differently, gender roles and stereotypes, relationships with family and community, and family and community expectations for adolescents
Week 1	*Transformation* A concept of transformation Five stages of human transformation	*Coping with puberty* Menstruation Wet dreams Coping with community expectations at and after puberty
Homework	Fill out the self-management chart	Discuss with your parents how girls and boys were treated when they were young and why
Week 2	*Dream* Living well with the surrounding community Five types of personalities in the community	*Relationships* What makes a good friend: boyfriends, girlfriends Love, sex and consent; risk perception with regard to SRH Decision-making Assertiveness, negotiating skills and body language
Homework	Write about your dream	Describe two examples of difficult decisions that adolescents and young people have to make in their communities (separate from the decisions practiced in the session) and use the 3C model to consider what the adolescent should do in that situation[a]
Week 3	*Business concepts* Developing business ideas, self-evaluation Success factors in personal economic development	*HIV and AIDS* Prevention and protection What do I know about HIV: the HIV wall, Q and A Condoms are forever
Homework	Fill out the self-assessment form	Discuss with peers how they can make their community safer from HIV
Week 4	*Generate your business idea* Types of people in the community, learning from role models in the community	*Sexual risk-taking and protection* Risk-taking Major sexual risks; why they are risks
Homework	Visit and interview your selected role model	Visit local leaders and develop a joint plan to improve the protections of adolescents in the community
Week 5	*SWOT analysis* Ranking and prioritization	*Violence and gender-based violence* What is it How to address it
Homework	Analyse your business idea using SWOT analysis	Visit the health centre and other places to find out where you can go in case of gender-based violence
Week 6	*Developing a simple business plan* Fill out the simple business plan forms	*Consequences of risk-taking: pregnancy* What to do if you or your partner is pregnant Protecting the baby: ex ante and postnatal care Abortion, the law, unsafe abortion
Homework	*Role of the family and community in helping adolescents* Advance economically Excel in studies and professional development	Discuss with your mothers how they coped with pregnancy and childbirth

Week 7	*Record-keeping* Understanding simple business record-keeping	*Family planning* Most common methods used; the advantages and disadvantages: accessing family planning services in and around the community Why condoms: double protection
Homework	Prepare record templates	Ask participants to go to a health facility to obtain up-to-date information on pregnancy and family planning; say that they will give feedback in the next session
Week 8	*Saving for business* Establishing small savings and loan groups	*Sexually transmitted infections (STIs)* Consequences of risk-taking: STIs The most common STIs, symptoms and treatment; relationship between STIs and HIV Stigma, fear and morality
Homework	Forming savings and Income-generating groups	Visit health facility to learn about STI and HIV treatment
Week 9	*Responsibilities of an entrepreneur* Legal aspects of business, insurance and licenses	*Living with HIV* Testing for HIV and disclosure Living with HIV: antiretroviral therapy, nutrition, avoiding reinfection, having children and proxy-means test, cash transfer AIDS and opportunistic infections, especially tuberculosis
Homework	Visit entrepreneurs and licensing authorities	Participants request permission from community leaders to put up their posters in different places around the community
Week 10	*Long-term life and business plans* Setting carrier goals and long-term business plans; identify links and referral pathways	*Alcohol and drug abuse* Prevalence of alcohol and drugs among adolescents; why? The impact of alcohol and drugs Resisting peer and partner pressure

a. The three Cs of decision-making are as follows: (1) clarify the problem or the decision to be made; (2) consider the possible alternatives and the consequences of choosing each alternative; collect any additional information needed; and (3) choose the best alternative and take the necessary action.

c. Closing week

Day 1	
Healthy living (SRH and livelihoods)	■ Revisit personal strengths ■ Ground rules for a healthy future, including sexual responsibility ■ Coping with adverse life events ■ Identify and celebrate growth
Goals and vision	■ Focus group discussion: the journey ■ Articulate vision for the future ■ Reflect on goals ■ Set new six-month goal
Revisions	■ Articulate what we have learned ■ Review presentations to share with the community during the day 2 celebration: visuals, posters, poems, songs, dance, timetable and so on ■ Post test
Day 2	
Send-off ceremony in the presence of families and local leaders (TASAF)	■ Participant learning presentations ■ Keynote speaker, community or government leader ■ Participant testimonial ■ Parent testimonial ■ Ceremony: certificates

APPENDIX C. ACTIVITY TRACKING

Table C.1. Activity tracking, SRH

Topic, activity	% of implementing villages
Week 1	
Length of the menstrual cycle	95
Explain nature of the menstrual cycle	95
Identify the most fertile days of the cycle and surrounding days on which a girl can get pregnant	90
Discuss how to avoid getting pregnant	95
Participants share their dream	88.3
Explain concept of wet dreams and why they occur	91.7
Discuss masturbation and explain that it is safe	88.3
Explain that boys' and girls' positions in society also change when they reach puberty	98.3
Discuss changes that affect boys only, girls only, or both	95
Mini drama about the influence of gender roles and our lives and how to overcome them	80
Weekly assignment	80
Week 2	
Brainstorm on what makes a good friend	91.7
Discuss what qualities boys/girls want in a girlfriend/boyfriend and what the opposite sex thinks they want	90
Distinguish between love and sex in a relationship	88.3
Explain the concept of consent with regard to sex	86.7
Explain how body language can be used to show assertiveness	81.7
Paulina case study	80
Role play demonstrating negotiation and assertiveness	70
Group activity: 3 Cs to decision-making[a]	71.7
Explain weekly assignment	76.7
Week 3	
Group activity: HIV wall	91.2
Group activity: 'sinking ship' game	66.7
Group competition and discussion: HIV knowledge	96.5
Explain the concept of discordant couple	89.5
Group activity: card game and group discussion	75.4
Explain weekly assignment	70.2
Week 4	
Participants share experiences with risk-taking and present a mini drama for discussion	89.8
Brainstorm on risky sexual behaviours and the effect they have on participants	96.6
Case studies using 3Cs decision-making model: John and Mariamu[a]	81.4
Discuss how gender norm expectations can be challenged	83.1
Distinguish between 'wants' and 'needs'	91.5
Role play about negotiating condom use	89.8
Demonstrate how to use a condom	81.4

Explain weekly assignment	83.1
Week 5	
Identify different forms of violence and their extent in their community	100
Define violence against women	100
Participants show mini drama demonstrating different forms of violence	96.6
Discuss violence in relationships	98.3
Explain what a person can do if they experience violence	96.6
Week 6	
Report back on weekly assignment: places to go when experiencing violence	98.3
Discuss consequences of sexual risk-taking	91.7
Discuss what steps to take if a girl becomes pregnant	96.7
Discuss methods of abortion and unsafe abortion	93.3
Mini drama that demonstrates the pregnant girl overcoming challenges	81.7
Present weekly assignment	76.7
Week 7	
Groups discuss and present questions on contraception	93.1
Explain different methods of contraception and advantages/ disadvantages	98.3
Group activity: rank methods of contraception according to preference	96.6
Identify the two methods that protect against pregnancy and HIV	94.8
Explain weekly assignment	84.5
Week 8	
Participants give feedback on what they learned during the visit to the health centre	78.0
Identify different sexually transmitted infections (STIs) and their symptoms	94.4
Discuss what to do when having symptoms of STIs	100
Read STI story and discuss	89.8
Explain why treatment should be sought for an STI	96.6
Participants vote on statements about STIs	86.4
Explain the link between HIV and STIs	89.8
Week 9	
Show and discuss mini drama about HIV testing	96.6
Show and discuss mini drama about HIV status disclosure	94.9
Explain the meaning of prevention of mother to child HIV transmission	96.6
Explain the meaning of opportunistic infections	98.3
Explain that HIV is now a manageable condition	93.2
Group activity: poster discussion on stigma and living positively with HIV	89.8
Week 10	
Group discussion: things participants enjoy and are dangerous for their health	100
Group discussion: dangers of alcohol and drugs, and risks for SRH	100
Explain causes of alcohol and drug use	100
Explain peer pressure and how to resist or say no	88.1
Role plays: peer pressure and using alcohol/drugs	96.6

a. The three Cs of decision-making are as follows: (1) clarify the problem or the decision to be made; (2) consider the possible alternatives and the consequences of choosing each alternative; collect any additional information needed; and (3) choose the best alternative and take the necessary action.

Table C.2: Activity tracking, livelihoods

Topic, activity	% of implementing villages
Week 1	
Discuss the concept of transformation	98.3
Discuss different types of transformation	100
Societal and biological changes explained through pictures	91.7
The seven principles of an Eagle	98.3
Group activity: Joe and Salim case study	86.7
5 stages of human transformation	96.7
Participant interaction: explaining interaction	86.7
Questions for personal reflection	76.7
Explain concept of a dream (aspirations)	95
Discuss steps required to achieve your dream	95
Participants explain their dreams	93. 3
Participants write his/her dream	91.7
Discuss types of groups of people	90
Week 2	
What is a dream/vision	100
How to write your dream	93.3
Discuss steps required to achieve your dream	93.3
Discuss 5 types of personality in the community	80
Living well with surrounding community	96.7
Conflict resolution	86.7
Week 3	
Understanding business concepts	98.3
Developing business ideas	98.3
Success factors in personal economic development	89.5
Filling self-evaluation forms	84.2
How to identify a good business idea	96.5
Bibi Ncube's experience	91.2
Group activity: filling self-evaluation forms	73.7
Week 4	
How to generate your business ideas	96.6
How to conduct a market research	98.3
Learning from Bibi Mandaza	89.8
Learning from role models in the community	88.1
Group activity: visiting and conducting interview with your selected role model	84.8
Week 5	
How to conduct a SWOT analysis of a business idea	98.3
Ranking and prioritization	96.6
How to generate profit from a business	100
Week 6	
What is a simple business plan	100

Steps to follow in developing a simple business plan	96.7
Each participant should develop a simple business plan	93.3
Filling simple business plan forms	91.7
Role of the family and community in helping adolescents to advance economically, excel in studies, and professional development	83.3
Week 7	
Record-keeping	100
Identify important records to keep	98.3
Prepare record templates	94.8
Week 8	
Saving for business	94.9
Define saving	93.1
Discover benefits of saving	98.3
Identify saving challenges	94.9
Explore saving methods	98.3
Explore investment: define investment	93.2
Making a savings goal	88.1
Week 9	
Responsibilities of an entrepreneur	96.6
Legal aspects of business, insurance and licenses	94.9
Group activities: visit entrepreneur and licensing authorities	84.8
Week 10	
Long term life/ business plans	93.2
Setting carrier goals and long-term business plans	89.8
Identify linkage and referral pathways in their community	76.3

APPENDIX D. ATTRITION

Table D.1. Differential attrition

Indicator	Interviewed at baseline
Attrited at midline	−0.012
	(0.02)
N	2,458
Average in the control group	0.15

Note: The regression includes PAAs x size fixed effects. Standard errors (shown in parentheses) are clustered at the community level.

Table D.2. Baseline balance of household structure indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) − Col(4) (7)	P-value (8)	Col(2) − Col(5) (9)	P-value (10)
Household size	4.26	4.74	0.07	4.70	4.78	0.42	−0.44	0.01	−0.04	0.75
Dependency ratio	1.14	1.14	0.92	1.07	1.13	0.30	0.07	0.42	0.01	0.83
At least one biological parent of youth is in the household	0.62	0.66	0.69	0.66	0.65	0.93	−0.04	0.25	0.00	0.71
At least one grandparent of youth in the household (absent parents)	0.34	0.30	0.69	0.30	0.30	0.80	0.04	0.24	−0.00	0.67
Parents and grandparents of youth are absent (youth live with other relatives)	0.04	0.05	0.95	0.04	0.04	0.64	0.00	0.93	0.00	0.93
Household includes an orphaned youth	0.15	0.11	0.44	0.14	0.15	0.50	0.01	0.77	−0.04	0.39
Head, woman	0.66	0.61	0.49	0.68	0.65	0.20	−0.02	0.79	−0.04	0.62
Head, age	59.34	60.71	0.46	58.50	58.76	0.96	0.84	0.37	1.95	0.15
Adult highest grade of education: none	0.25	0.21	0.35	0.22	0.24	0.56	0.03	0.33	−0.03	0.63
Adult highest grade of education: some primary	0.13	0.18	0.26	0.11	0.12	0.48	0.02	0.52	0.06	0.09
Adult highest grade of education: primary	0.36	0.41	0.26	0.43	0.42	0.75	−0.07	0.12	−0.00	0.85
Adult highest grade of education: some secondary	0.26	0.20	0.20	0.25	0.23	0.54	0.02	0.80	−0.03	0.35
N	118	111		871	846					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.3. Baseline balance of household dwelling indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Number of rooms	3.93	4.05	0.89	3.93	3.70	0.08	0.00	0.62	0.35	0.35
Improved outer walls (mud/burnt bricks, cement)	0.62	0.63	0.76	0.67	0.68	0.99	−0.05	0.40	−0.05	0.56
Improved roof (iron/plastic sheets, wood)	0.82	0.77	0.44	0.82	0.78	0.34	0.00	0.81	−0.02	0.91
Improved floor (concrete/flagstone/cement, tile, wood)	0.19	0.11	0.13	0.21	0.13	0.02	−0.01	0.77	−0.03	0.30
Water treatment	0.44	0.30	0.02	0.35	0.27	0.03	0.10	0.18	0.02	0.52
Improved toilet	0.03	0.00	0.03	0.03	0.01	0.05	−0.00	0.79	−0.01	0.00
Household main source of fuel/energy for cooking: firewood	0.97	0.99	0.25	0.99	0.99	0.93	−0.01	0.26	0.00	0.95
Dwelling has electricity	0.19	0.14	0.22	0.18	0.14	0.14	0.00	0.75	−0.01	0.33
Dwelling's main lighting source: torch (battery powered/rechargeable/solar)	0.50	0.60	0.19	0.47	0.55	0.06	0.03	0.61	0.05	0.58
Dwelling's main lighting source: lanterns/candles/paraffin	0.28	0.23	0.59	0.33	0.30	0.31	−0.05	0.46	−0.06	0.73
Dwelling's main lighting source: solar panel	0.11	0.09	0.59	0.12	0.09	0.14	−0.01	0.43	0.00	0.67
Dwelling's main lighting source: electricity via national grid	0.06	0.02	0.13	0.05	0.03	0.31	0.01	0.57	−0.01	0.27
Dwelling's main lighting source: fire lit sticks, grass, or pit	0.05	0.05	0.91	0.03	0.03	0.73	0.02	0.38	0.02	0.46
Walking distance to the nearest primary school (n. of minutes)	30.72	33.50	0.50	32.85	32.66	1.00	−2.13	0.44	0.84	0.80
Walking distance to the nearest secondary school (n. of minutes)	72.96	87.45	0.09	79.21	79.93	0.80	−6.25	0.20	7.52	0.44
Walking distance to the nearest vocational school (n. of minutes)	82.17	106.96	0.17	83.46	100.96	0.16	−1.29	0.79	6.00	0.97
N	118	111		871	846					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.4. Baseline balance of household economic indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Owned/cultivated any land (last rainy season)	0.96	0.97	0.48	0.97	0.98	0.20	–0.01	0.64	–0.01	0.45
Planted any crop (last rainy season)	0.98	0.98	0.82	0.98	0.99	0.59	–0.00	0.75	–0.01	0.52
Owned any livestock (last 12 months)	0.87	0.90	0.55	0.92	0.92	0.97	–0.05	0.24	–0.02	0.66
Chicken	0.86	0.89	0.71	0.90	0.92	0.08	–0.03	0.35	–0.03	0.23
Pig	0.45	0.34	0.18	0.41	0.36	0.26	0.04	0.48	–0.02	0.58
Cattle	0.22	0.15	0.29	0.20	0.20	0.88	0.02	0.15	–0.05	0.98
Goat/sheep	0.07	0.19	0.01	0.14	0.11	0.29	–0.07	0.04	0.08	0.04
Guinea pig	0.13	0.19	0.21	0.13	0.12	0.72	–0.00	0.49	0.07	0.28
Rabbit	0.01	0.02	0.48	0.04	0.03	0.38	–0.03	0.04	–0.01	0.56
Duck	0.01	0.01	1.00	0.02	0.01	0.31	–0.01	0.26	–0.00	0.58
Other	0.15	0.21	0.24	0.16	0.14	0.46	–0.01	0.33	0.07	0.38
Total number of livestock	5.94	6.98	0.22	6.79	7.59	0.05	–0.85	0.08	–0.61	0.06
Operated any non-farm income-generating enterprise	0.22	0.21	0.83	0.24	0.23	0.83	–0.02	0.65	–0.02	0.47
N	118	111		871	846					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.5. Baseline balance of household wealth indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Mortar/pestle	0.65	0.66	0.84	0.66	0.66	0.98	−0.01	0.76	−0.01	0.58
Bed	0.86	0.77	0.04	0.84	0.79	0.19	0.03	0.64	−0.03	0.32
Table	0.69	0.75	0.38	0.81	0.74	0.04	−0.12	0.00	0.00	0.73
Chair	0.90	0.86	0.32	0.94	0.92	0.10	−0.05	0.06	−0.06	0.10
Radio (wireless)	0.31	0.18	0.03	0.27	0.24	0.38	0.04	0.43	−0.06	0.08
Bicycle	0.10	0.16	0.26	0.17	0.17	0.55	−0.06	0.01	−0.01	0.26
Lantern (kerosene)	0.26	0.19	0.35	0.29	0.26	0.35	−0.03	0.85	−0.07	0.53
Solar panel	0.09	0.08	0.68	0.12	0.09	0.13	−0.03	0.13	−0.01	0.39
Lamp (battery)	0.46	0.49	0.68	0.43	0.49	0.12	0.03	0.51	0.00	0.93
Mosquito net	0.80	0.77	0.77	0.79	0.79	0.89	0.01	0.76	−0.02	0.90
Regular mobile phone	0.61	0.58	0.57	0.62	0.55	0.07	−0.01	0.87	0.03	0.64
Smartphone	0.00	0.02	0.08	0.02	0.01	0.41	−0.02	0.00	0.00	0.67
Wealth Index	0.07	−0.15	0.14	0.11	−0.11	0.02	−0.04	0.36	−0.04	0.25
Lowest tertile	0.33	0.40	0.28	0.27	0.39	0.02	0.06	0.14	0.01	0.39
Middle tertile	0.31	0.36	0.41	0.34	0.33	0.74	−0.02	0.67	0.03	0.44
Highest tertile	0.36	0.24	0.06	0.39	0.29	0.02	−0.03	0.22	−0.04	0.08
N	118	111		871	846					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.6. Baseline balance of household savings and loan indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Any monetary savings	0.21	0.25	0.49	0.26	0.25	0.96	−0.05	0.21	0.00	0.78
How much does your household have in savings (TZS)	60,956.52	66,500.00	0.77	48,300.45	57,798.09	0.29	12,656.07	0.56	8,701.91	0.84
Applied for a loan, last 12 months	0.07	0.12	0.20	0.11	0.12	0.62	−0.04	0.13	−0.00	0.84
Obtained the loan	0.88	0.92	0.61	0.96	0.99	0.20	−0.08	0.44	−0.07	0.44
If needed, could obtain a loan of TZS 100,000 within the next month	0.17	0.22	0.42	0.25	0.24	0.66	−0.09	0.02	−0.01	0.40
N	118	111		871	846					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.7. Baseline balance of household safety net indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
PSSN livelihood grant	0.01	0.02	0.57	0.03	0.04	0.60	–0.02	0.08	–0.02	0.63
Cash transfers other than PSSN	0.00	0.00		0.01	0.00	0.24	–0.01	0.00	–0.00	0.04
Other transfers from households or individuals	0.08	0.03	0.10	0.07	0.07	0.68	0.01	0.67	–0.04	0.12
PSSN cash transfer, including payment for public works (TZS)	249,888.89	254,645.45	0.70	263,243.73	261,949.93	0.88	–13,354.84	0.05	–7,304.47	0.06
PSSN livelihood grant (TZS)	138,000.00	84,000.00		105,961.54	82,893.55	0.04	32,038.46	0.00	1,106.45	0.05
Other transfers (TZS)	41,700.00	66,666.67	0.03	76,730.16	65,640.35	0.51	–35,030.16	0.03	1,026.32	0.87
N	118	111		871	846					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.8. Baseline balance of household shock indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Affected by any shock, previous 12 months	0.79	0.75	0.61	0.79	0.79	1.00	–0.00	0.99	–0.04	0.48
Unusually high prices for food	0.26	0.27	0.94	0.30	0.24	0.03	–0.05	0.38	0.02	0.90
Serious illness or accident, household member(s)	0.22	0.20	0.84	0.20	0.22	0.38	0.01	0.71	–0.02	0.76
Drought, irregular rain	0.23	0.23	0.99	0.18	0.21	0.15	0.05	0.22	0.01	0.94
Unusually high level of livestock disease	0.09	0.10	0.62	0.10	0.11	0.56	–0.01	0.70	–0.01	0.90
Unusually high level of crop pests or disease	0.09	0.06	0.35	0.07	0.06	0.52	0.02	0.55	0.00	0.86
Death of other household member(s)	0.03	0.05	0.62	0.03	0.03	0.86	0.00	0.93	0.02	0.58
Death of income earner(s)	0.04	0.01	0.21	0.03	0.03	0.83	0.02	0.40	–0.02	0.36
Floods, landslides	0.00	0.02	0.13	0.01	0.02	0.61	–0.01	0.01	0.00	0.48
Unusually high costs of agricultural inputs	0.03	0.01	0.33	0.02	0.01	0.16	0.01	0.54	0.00	0.98
Unusually low prices for agricultural output	0.00	0.01	0.28	0.02	0.01	0.76	–0.02	0.00	–0.00	0.94
Theft of money, valuables, assets, agricultural output	0.01	0.00	0.27	0.01	0.01	0.30	0.00	0.77	–0.01	0.00
Birth in the household	0.00	0.00		0.01	0.01	0.59	–0.01	0.04	–0.01	0.05
Breakup of household	0.01	0.00	0.28	0.01	0.00	0.31	0.00	0.85	–0.00	0.12
Conflict, violence	0.00	0.01	0.32	0.01	0.00	0.36	–0.01	0.03	0.01	0.50
N	118	111		871	846					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.9. Baseline balance of youth demographics, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Female	0.52	0.52	0.85	0.47	0.44	0.14	0.05	0.17	0.08	0.08
Age	16.36	16.43	0.72	16.08	16.04	0.58	0.28	0.07	0.39	0.02
Child, adopted child	0.48	0.54	0.30	0.54	0.55	0.61	−0.06	0.01	−0.01	0.52
Grandchild	0.44	0.40	0.55	0.40	0.38	0.29	0.03	0.11	0.02	0.25
Other	0.07	0.04	0.28	0.05	0.07	0.21	0.02	0.46	−0.02	0.20
Head of household or wife, husband	0.01	0.02	0.54	0.01	0.01	0.69	0.00	0.65	0.01	0.40
N	191	163		1,081	1,023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.10. Baseline balance of youth health, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Can walk for 5 km easily	0.93	0.96	0.29	0.93	0.95	0.15	−0.00	1.00	0.01	0.64
Can sweep the dwelling floor easily	0.97	0.99	0.21	0.98	0.98	0.83	−0.01	0.34	0.01	0.42
Self-rated health status: very good	0.38	0.47	0.19	0.35	0.38	0.35	0.03	0.75	0.09	0.16
Self-rated health status: good	0.53	0.48	0.43	0.57	0.56	0.68	−0.03	0.57	−0.08	0.22
Self-rated health status: neutral	0.08	0.04	0.14	0.06	0.06	0.47	0.01	0.36	−0.01	0.49
Self-rated health status: bad or very bad	0.01	0.01	0.85	0.02	0.01	0.08	−0.01	0.47	0.00	0.55
N	191	163		1,081	1,023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.11. Baseline balance of youth purchases indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Owns a cell phone	0.31	0.25	0.22	0.21	0.18	0.06	0.10	0.01	0.07	0.07
Regular mobile phone	0.92	0.93	0.80	0.92	0.89	0.27	−0.01	0.88	0.04	0.58
Smartphone	0.08	0.07	0.80	0.08	0.11	0.27	0.01	0.88	−0.04	0.58
Purchased past 4 weeks: clothing or shoes	0.28	0.29	0.84	0.28	0.28	0.82	−0.00	1.00	0.00	0.84
Purchased past 4 weeks: communication time (airtime, data, phone, charging)	0.24	0.22	0.60	0.18	0.16	0.19	0.06	0.06	0.06	0.15
Purchased past 4 weeks: personal goods, hygiene items	0.39	0.42	0.69	0.38	0.33	0.06	0.01	0.86	0.09	0.01
Purchased past 4 weeks: transportation (boda boda, bus, bike repair)	0.11	0.12	0.74	0.12	0.11	0.78	−0.01	0.89	0.01	0.58
Purchased past 4 weeks: entertainment (sports, shows, going out for food)	0.06	0.06	0.92	0.07	0.06	0.68	−0.01	0.58	0.00	0.91
Purchased past 4 weeks: any of the above items	0.53	0.50	0.54	0.50	0.48	0.37	0.03	0.49	0.03	0.38
Total amount spent past 4 weeks on the above items (TZS)	14,497.06	15,617.01	0.76	15,167.71	15,509.86	0.76	−670.65	0.73	107.16	0.97
N	191	163		1,081	1,023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.12. Baseline balance of youth risk aversion and patience, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Game 1: TZS 2,500 if head, TZS 2,500 if tail	0.19	0.09	0.01	0.21	0.18	0.13	−0.01	0.51	−0.08	0.00
Game 2: TZS 2,000 if head, TZS 4,000 if tail	0.20	0.21	0.76	0.17	0.20	0.20	0.02	0.56	0.01	0.88
Game 3: TZS 1,500 if head, TZS 5,500 if tail	0.21	0.25	0.53	0.22	0.20	0.20	−0.01	0.81	0.05	0.24
Game 4: TZS 1,000 if head, TZS 7,000 if tail	0.11	0.17	0.07	0.16	0.17	0.41	−0.05	0.07	−0.00	0.79
Game 5: TZS 0 if head, TZS 10,000 if tail	0.28	0.28	0.89	0.23	0.25	0.44	0.05	0.08	0.02	0.37
Patience index	3.73	3.86	0.67	3.96	4.03	0.65	−0.24	0.72	−0.17	0.72
Patience index = 1 (always choose money soon)	0.38	0.32	0.36	0.33	0.30	0.38	0.05	0.79	0.03	0.99
Patience index = 2 (switches at TZS 3,000)	0.07	0.04	0.28	0.03	0.03	0.98	0.03	0.07	0.01	0.69
Patience index = 3 (switches at TZS 2,500)	0.03	0.04	0.69	0.04	0.04	0.80	−0.01	0.77	−0.00	0.95
Patience index = 4 (switches at TZS 2,000)	0.08	0.13	0.26	0.11	0.13	0.23	−0.02	0.54	0.00	0.74
Patience index = 5 (switches at TZS 1,500)	0.08	0.14	0.14	0.13	0.14	0.62	−0.05	0.19	−0.01	0.90
Patience index = 6 (switches at TZS 1,300)	0.12	0.18	0.15	0.15	0.17	0.26	−0.03	0.40	0.01	0.84
Patience index = 7 (switches at TZS 1,100)	0.24	0.15	0.12	0.21	0.19	0.31	0.03	0.34	−0.03	0.57
N	191	163		1,081	1,023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.13. Baseline balance of youth education, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Currently attending school	0.49	0.39	0.11	0.57	0.56	0.72	–0.08	0.11	–0.17	0.00
Attends primary school	0.21	0.19	0.53	0.22	0.24	0.56	–0.01	0.81	–0.05	0.08
Attends secondary school	0.27	0.20	0.17	0.34	0.32	0.40	–0.07	0.10	–0.12	0.00
Highest grade completed: none	0.04	0.02	0.49	0.02	0.03	0.60	0.01	0.33	–0.00	0.70
Highest grade completed: some primary	0.31	0.33	0.57	0.31	0.35	0.13	0.00	0.89	–0.02	0.60
Highest grade completed: primary or higher	0.65	0.64	0.82	0.67	0.62	0.12	–0.01	0.62	0.02	0.51
N	191	163		1,081	1,023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.14. Baseline balance of youth participation in economic activities, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Any economic activity	0.74	0.80	0.17	0.78	0.78	0.87	−0.04	0.36	0.02	0.48
Farm work for the household, excluding livestock	0.64	0.70	0.25	0.65	0.66	0.59	−0.01	0.95	0.04	0.27
Livestock herding for the household	0.38	0.35	0.59	0.44	0.44	0.81	−0.06	0.27	−0.09	0.07
Fishing for the household	0.01	0.02	0.11	0.01	0.01	0.85	−0.01	0.20	0.01	0.28
Household business	0.06	0.04	0.54	0.05	0.04	0.41	0.00	0.80	−0.00	0.97
Primary business owner, decision maker	0.02	0.02	0.86	0.02	0.02	0.38	−0.00	0.96	0.00	0.90
Paid work outside the household	0.15	0.20	0.25	0.17	0.14	0.22	−0.02	0.44	0.06	0.02
TASAF Public Works Programme	0.01	0.04	0.04	0.01	0.04	0.02	−0.01	0.01	−0.00	0.84
Looking for a job in the past 7 days	0.07	0.06	0.80	0.06	0.05	0.22	0.01	0.91	0.01	0.48
N	191	163		1,081	1,023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.15. Baseline balance of youth hours and earnings in economic activities, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Hours in any economic activity	15.12	16.15	0.58	13.38	13.33	0.97	1.73	0.16	2.82	0.02
Hours in farm work for the household, excluding livestock	9.29	10.81	0.31	7.68	7.74	0.93	1.61	0.13	3.07	0.00
Hours in livestock herding for the household	2.86	2.98	0.80	3.04	2.91	0.68	−0.18	0.79	0.06	0.56
Hours in fishing for the household	0.03	0.36	0.24	0.05	0.04	0.78	−0.02	0.59	0.32	0.27
Hours in household business	1.07	0.25	0.07	0.70	0.68	1.00	0.37	0.43	−0.44	0.04
Business sales past 4 weeks (TZS, 1,000s)	1.22	0.83	0.72	1.24	2.17	0.37	−0.02	0.99	−1.34	0.24
Business profit, loss past 4 weeks (TZS, 1,000s)	0.98	0.21	0.34	0.28	0.29	1.00	0.70	0.38	−0.08	0.66
Hours in paid work outside the household	1.86	1.64	0.69	1.87	1.76	0.82	−0.01	0.96	−0.12	0.73
Daily amount for last payment in paid job (TZS, 1,000s)	1.17	1.63	0.43	1.99	1.34	0.11	−0.82	0.06	0.29	0.43
Hours in TASAF Public Works Programme	0.01	0.12	0.03	0.05	0.19	0.01	−0.04	0.00	−0.07	0.28
N	191	163		1,081	1,023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.16. Baseline balance of youth participation in household chores, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Any chores	0.91	0.88	0.36	0.90	0.88	0.16	0.00	0.90	0.00	0.91
Collecting water	0.68	0.65	0.56	0.65	0.66	0.84	0.02	0.70	−0.01	0.63
Collecting firewood	0.30	0.33	0.77	0.34	0.39	0.09	−0.04	0.25	−0.06	0.08
Collecting nuts	0.05	0.09	0.09	0.10	0.12	0.42	−0.06	0.01	−0.03	0.47
Taking care of children, cooking or cleaning	0.80	0.72	0.09	0.73	0.70	0.11	0.07	0.02	0.03	0.56
Taking care of the elderly or the sick	0.24	0.19	0.27	0.23	0.23	0.80	0.02	0.66	−0.04	0.27
N	191	163		1,081	1,023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.17. Baseline balance of youth hours worked in household chores, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Hours in any chore	3.08	2.85	0.44	3.03	3.10	0.64	0.05	0.81	−0.26	0.30
Hours in collecting water	0.73	0.63	0.15	0.76	0.71	0.37	−0.03	0.64	−0.09	0.12
Hours in collecting firewood	0.45	0.45	0.99	0.49	0.54	0.31	−0.05	0.39	−0.08	0.18
Hours in collecting nuts	0.06	0.11	0.13	0.13	0.16	0.25	−0.07	0.01	−0.06	0.15
Hours in taking care of children, cooking or cleaning	1.49	1.32	0.30	1.31	1.26	0.44	0.18	0.04	0.06	0.54
Hours in taking care of the elderly or the sick	0.36	0.34	0.89	0.34	0.43	0.07	0.02	0.72	−0.09	0.34
N	191	163		1,081	1,023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.18. Baseline balance of mental health indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Reports depressive symptoms (CES-D ≥ 10)	0.29	0.30	0.83	0.28	0.30	0.60	0.01	0.90	0.01	0.88
ELDI (0–39)	3.64	3.60	0.96	3.60	3.31	0.27	0.05	0.58	0.29	0.22
N	191	163		1081	1023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.19. Baseline balance of youth educational and job aspirations, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Educational aspirations										
Ideal level of education: none	0.02	0.01	0.57	0.02	0.03	0.26	–0.00	0.73	–0.02	0.12
Ideal level of education: some primary	0.03	0.03	0.97	0.03	0.04	0.21	–0.00	0.95	–0.01	0.31
Ideal level of education: some secondary	0.33	0.32	0.79	0.29	0.28	0.89	0.04	0.39	0.03	0.47
Ideal level of education: some tertiary	0.60	0.58	0.86	0.64	0.63	0.57	–0.05	0.40	–0.04	0.40
Ideal level of education: vocational	0.02	0.06	0.11	0.01	0.01	0.60	0.01	0.69	0.04	0.02
Occupational aspirations										
Ideal occupation: teacher	0.33	0.43	0.07	0.41	0.41	0.97	–0.08	0.01	0.02	0.77
Ideal occupation: doctor, health care professional	0.26	0.25	0.83	0.23	0.24	0.56	0.03	0.25	0.01	0.57
Ideal occupation: government, parastatal	0.03	0.01	0.20	0.05	0.05	0.90	–0.02	0.08	–0.04	0.01
Ideal occupation: business owner	0.06	0.06	0.92	0.05	0.03	0.01	0.01	0.56	0.03	0.11
Ideal occupation: other	0.32	0.26	0.19	0.26	0.27	0.60	0.07	0.10	–0.01	0.59
N	191	163		1081	1023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.20. Baseline balance of youth attitudes, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Quality of life ladder: 1 (worst) to 10 (best)	3.45	3.71	0.48	3.75	3.81	0.75	–0.30	0.17	–0.11	0.77
Locus of control index	3.16	3.23	0.15	3.20	3.20	0.88	–0.04	0.29	0.04	0.30
Individuals are primarily responsible for their own success or failure in life	0.61	0.65	0.39	0.64	0.63	0.69	–0.03	0.33	0.02	0.76
Self-esteem index	3.96	3.85	0.13	3.92	3.96	0.36	0.04	0.79	–0.11	0.02
Social support index	4.01	4.03	0.72	3.98	4.01	0.31	0.03	0.74	0.02	0.90
N	191	163		1,081	1,023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.21. Baseline balance of indicators of attitudes on gender, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
GEM scale (0–24)	13.66	11.63	0.01	12.62	12.32	0.48	1.04	0.06	–0.69	0.08
Violence subscale (0–6)	3.99	3.55	0.05	3.73	3.67	0.63	0.26	0.06	–0.12	0.34
Reproductive health subscale (0–5)	2.68	2.45	0.21	2.78	2.74	0.68	–0.10	0.37	–0.30	0.02
Sexual relationships subscale (0–8)	4.67	4.20	0.09	4.34	4.27	0.68	0.33	0.08	–0.07	0.60
Household chores subscale (0–5)	1.78	1.49	0.13	1.76	1.67	0.44	0.02	0.88	–0.18	0.05
N	191	163		1,081	1,023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.22. Baseline balance of partner and relationship indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Ever had spouse or cohabiting partner	0.02	0.02	0.85	0.02	0.00	0.02	0.01	0.64	0.01	0.20
Single, never married	0.98	0.98	0.85	0.98	1.00	0.02	−0.01	0.64	−0.01	0.20
Has a girlfriend or boyfriend	0.16	0.25	0.03	0.18	0.15	0.04	−0.02	0.57	0.10	0.00
N	191	163		1081	1023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.23. Baseline balance of first sex indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Ever had sex	0.19	0.25	0.30	0.17	0.16	0.41	0.02	0.44	0.09	0.03
Age at first sexual intercourse	15.70	15.80	0.57	15.94	15.87	0.76	−0.24	0.35	−0.07	0.64
Sexually debuted: first sex forced, pressured or the result of a trick	0.16	0.10	0.37	0.17	0.15	0.52	−0.01	0.67	−0.05	0.40
N	191	163		1081	1023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.24. Baseline balance of indicators of recent sex, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Number of sexual partners in previous 12 months	0.19	0.26	0.32	0.21	0.17	0.23	−0.01	0.78	0.08	0.12
Among sexually debuted: concurrent sexual partners in previous 12 months	0.02	0.01	0.79	0.01	0.01	0.58	0.01	0.41	0.00	0.71
Most recent sex: used condom	0.50	0.47	0.61	0.50	0.61	0.09	0.00	0.83	−0.14	0.08
Most recent sex: partner older by five years or more	0.02	0.04	0.38	0.03	0.02	0.13	−0.01	0.39	0.02	0.26
Most recent sex: partner older by 10 years or more older	0.00	0.01	0.15	0.00	0.00	0.78	−0.00	0.20	0.01	0.22
N	191	163		1081	1023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.25. Baseline balance of contraceptive knowledge and use, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Has knowledge about contraceptives	0.81	0.83	0.65	0.78	0.74	0.11	0.03	0.39	0.09	0.01
Has knowledge about modern contraceptives	0.77	0.79	0.67	0.74	0.70	0.13	0.03	0.42	0.09	0.01
Currently using contraception: among sexually debuted	0.51	0.55	0.75	0.53	0.58	0.32	−0.01	0.88	−0.03	0.84
Currently using modern contraception: among sexually debuted	0.49	0.55	0.93	0.51	0.57	0.25	−0.02	0.92	−0.02	0.91
N	191	163		1081	1023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.26. Baseline balance of fertility indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Ever pregnant	0.11	0.13	0.69	0.12	0.11	0.77	−0.01	0.92	0.02	0.58
Currently pregnant	0.01	0.01	0.97	0.03	0.03	0.99	−0.02	0.11	−0.02	0.19
Males: ever got someone pregnant	0.00	0.01	0.32	0.01	0.00	0.17	−0.01	0.04	0.01	0.39
N	191	163		1081	1023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.27. Baseline balance of transactional sex indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Financial reasons motivate current or start of most recent relationship	0.04	0.04	0.99	0.03	0.03	0.99	0.01	0.43	0.01	0.47
Given money by current or most recent partner	0.06	0.06	0.78	0.07	0.07	0.95	–0.00	0.93	–0.01	0.67
Would leave relationship if partner did not provide financial support	0.02	0.01	0.35	0.01	0.01	0.67	0.00	0.64	–0.01	0.27
Provided money, favours or gifts for sex during the previous 12 months	0.00	0.00		0.02	0.01	0.08	–0.02	0.00	–0.01	0.01
N	37	40		184	159					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.28. Baseline balance of HIV risk indicators, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Perceived HIV risk: moderate/high	0.05	0.01	0.02	0.03	0.03	0.64	0.02	0.15	–0.01	0.11
Perceived HIV risk: low	0.10	0.12	0.60	0.13	0.13	0.77	–0.03	0.30	–0.01	0.96
Perceived HIV risk: none	0.84	0.87	0.57	0.83	0.85	0.67	0.01	0.87	0.03	0.66
Tested for HIV: lifetime	0.46	0.48	0.70	0.42	0.45	0.45	0.04	0.58	0.04	0.47
Tested for HIV: previous 12 months	0.28	0.36	0.14	0.28	0.29	0.72	0.00	0.87	0.07	0.07
N	191	163		1081	1023					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

Table D.29. Baseline balance of experiences of physical or emotional violence, previous 12 months, by panel and attritor status

Indicator	Attrited			Panel			Difference		Difference	
	Cash only (1)	Cash plus (2)	P-value (3)	Cash only (4)	Cash plus (5)	P-value (6)	Col(1) – Col(4) (7)	P-value (8)	Col(2) – Col(5) (9)	P-value (10)
Experienced emotional abuse	0.37	0.49	0.12	0.39	0.30	0.01	−0.02	0.84	0.19	0.00
Experienced physical violence	0.21	0.24	0.53	0.30	0.24	0.07	−0.09	0.07	0.00	0.90
N	102	75		509	479					

Note: Mean values represent unadjusted statistics. The p-values in column 3 are from the coefficient on treatment from a regression predicting each characteristic listed in the table among the group of attritors, while column 6 is the same among the panel sample. All regressions control for PAA x size fixed effects. Standard errors are clustered at the community level. N may differ by indicator.

APPENDIX E. CASH PLUS IMPACTS, BY GENDER

Table E.1. Cash plus impacts on education, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Dropped out of school[a]	−0.031	—	0.189	0.174	0.024	—	0.190	0.204
	(0.03)				(0.03)			
Currently attends school	0.003	0.616	0.529	0.519	−0.026	0.516	0.452	0.431
	(0.02)				(0.02)			
Attends primary school	0.001	0.235	0.092	0.076	0.017	0.230	0.088	0.133
	(0.02)				(0.01)			
Attends secondary school	−0.010	0.381	0.437	0.443	−0.035	0.286	0.364	0.298
	(0.03)				(0.02)			
Highest grade completed: none	0.008	0.024	0.024	0.045	−0.007	0.028	0.040	0.031
	(0.01)				(0.01)			
Highest grade completed: some primary	−0.009	0.282	0.147	0.124	0.035	0.366	0.201	0.289
	(0.02)				(0.02)			
Highest grade completed: primary or higher	−0.008	0.694	0.829	0.831	−0.022	0.606	0.758	0.680
	(0.03)				(0.02)			
N	955	955	510	445	1,149	1,149	571	578

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Regressions for dropout only control for age at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
a. Dropout rates are only available at midline for youth who were attending school at baseline (N female = 588; N male = 593).
*p < .05 **p < .01

Table E.2. Cash plus impacts on participation in economic activities, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Any economic activity	0.069*	0.687	0.755	0.825	0.016	0.856	0.856	0.869
	(0.03)				(0.02)			
Household farm work	0.082	0.577	0.580	0.663	0.019	0.717	0.729	0.746
	(0.04)				(0.03)			
Household livestock herding	0.103**	0.343	0.449	0.546	0.069*	0.519	0.552	0.623
	(0.03)				(0.03)			
Fishing for the household	−0.002	0.006	0.004	0.002	0.003	0.019	0.060	0.062
	(0.00)				(0.01)			
Household business	−0.043*	0.048	0.071	0.027	−0.002	0.051	0.046	0.042
	(0.02)				(0.02)			
Primary owner and decision maker	−0.015	0.018	0.024	0.009	−0.001	0.021	0.021	0.019
	(0.01)				(0.01)			
Paid work outside the household	0.012	0.079	0.112	0.124	0.005	0.216	0.163	0.156
	(0.02)				(0.03)			
TASAF Public Works Programme	0.048	0.018	0.061	0.106	0.026	0.032	0.086	0.114
	(0.03)				(0.02)			
Looking for a job in the past 7 days	−0.013	0.044	0.067	0.056	0.049*	0.063	0.079	0.126
	(0.01)				(0.02)			
N	955	955	510	445	1,149	1,149	571	578

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.3. Cash plus impacts on hours in economic activity and earnings, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Hours in any economic activities	0.700	9.471	12.780	13.544	1.187	16.587	19.548	20.187
	(1.40)				(1.37)			
Hours in farm work for the household	1.359	6.726	7.292	8.604	0.074	8.532	10.384	10.221
	(0.87)				(0.92)			
Hours in livestock herding for the household	0.353	1.291	2.527	2.888	1.160	4.381	4.655	5.742
	(0.36)				(0.62)			
Hours in fishing for the household	−0.035	0.016	0.039	0.004	0.069	0.065	0.254	0.320
	(0.03)				(0.08)			
Hours in household business	−0.728	0.541	1.143	0.483	0.035	0.813	0.981	0.979
	(0.41)				(0.46)			
Business sales past 4 weeks (TZS, 1,000s)	−1.565*	1.382	1.731	0.191	−0.887	1.945	2.750	1.824
	(0.73)				(1.44)			
Business profit or loss past 4 weeks (TZS, 1,000s)	−0.263	0.314	0.304	0.029	−0.169	0.265	0.822	0.580
	(0.14)				(0.56)			
Hours in paid work outside the household	−0.341	0.804	1.498	1.144	−0.257	2.655	2.604	2.190
	(0.49)				(0.69)			
Daily amount received for last payment in paid job (TZS, 1,000s)	0.168	0.001	0.489	0.651	0.345	0.003	1.833	1.760
	(0.17)				(0.37)			
Hours in TASAF Public Works Programme	0.153	0.093	0.280	0.420	0.079	0.140	0.671	0.734
	(0.13)				(0.26)			
N	955	955	510	445	1,149	1,149	571	578

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.4. Cash plus impacts on participation in household chores, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Any chore	0.015	0.964	0.965	0.980	0.004	0.828	0.855	0.858
	(0.01)				(0.02)			
Collecting water	0.044	0.718	0.837	0.885	0.000	0.601	0.758	0.760
	(0.03)				(0.03)			
Collecting firewood	0.085*	0.392	0.384	0.479	0.063	0.337	0.412	0.479
	(0.04)				(0.04)			
Collecting nuts	0.015	0.138	0.053	0.067	0.050	0.086	0.124	0.173
	(0.02)				(0.03)			
Taking care of children, cooking or cleaning	0.028	0.889	0.859	0.888	0.001	0.571	0.363	0.365
	(0.02)				(0.04)			
Taking care of the elderly or the sick	0.049	0.276	0.202	0.263	−0.004	0.191	0.172	0.168
	(0.03)				(0.03)			
N	955	955	510	445	1,149	1,149	571	578

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.5. Cash plus impacts on hours worked in household chores, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Hours, any chores	0.167	3.833	3.725	3.954	0.176	2.429	2.570	2.750
	(0.20)				(0.18)			
Hours, collecting water	−0.011	0.790	0.971	0.968	0.003	0.694	0.936	0.936
	(0.07)				(0.06)			
Hours, collecting firewood	0.118	0.566	0.575	0.703	0.128*	0.471	0.578	0.716
	(0.07)				(0.06)			
Hours, collecting nuts	0.016	0.166	0.076	0.091	0.057	0.130	0.235	0.291
	(0.03)				(0.05)			
Hours, caring for children, cooking or cleaning	0.025	1.850	1.790	1.836	−0.023	0.818	0.549	0.530
	(0.11)				(0.06)			
Hours, taking care of the elderly or sick	0.025	0.460	0.312	0.357	0.007	0.315	0.272	0.277
	(0.05)				(0.05)			
N	955	955	510	445	1,149	1,149	571	578

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.6. Cash plus impacts on mental health indicators, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Reports depressive symptoms (CES-D ≥ 10)	−0.046	0.271	0.185	0.141	0.012	0.302	0.320	0.333
	(0.02)				(0.04)			
ELDI (0–39)	0.045	3.934	3.371	3.390	−0.297	3.059	3.283	2.910
	(0.30)				(0.35)			
N	955	955	509	446	1,149	1,149	572	577

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.7. Cash plus impacts on educational and job aspirations, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Educational aspirations								
Ideal level of education: none	−0.004	0.014	0.006	0.002	0.011	0.043	0.005	0.017
	(0.00)				(0.01)			
Ideal level of education: some primary	−0.004	0.026	0.012	0.007	0.001	0.048	0.023	0.028
	(0.01)				(0.01)			
Ideal level of education: some secondary	0.025	0.326	0.178	0.204	0.026	0.252	0.217	0.242
	(0.03)				(0.03)			
Ideal level of education: some tertiary	−0.031	0.626	0.786	0.751	−0.021	0.641	0.711	0.687
	(0.03)				(0.03)			
Ideal level of education: vocational	0.017	0.008	0.018	0.036	−0.016	0.016	0.044	0.026
	(0.01)				(0.01)			
Occupational aspirations								
Ideal occupation: teacher	0.027	0.444	0.394	0.416	0.016	0.384	0.331	0.348
	(0.03)				(0.03)			
Ideal occupation: doctor, health care professional	−0.011	0.320	0.298	0.297	−0.014	0.160	0.189	0.182
	(0.03)				(0.02)			
Ideal occupation: government, parastatal	−0.005	0.025	0.010	0.004	−0.002	0.077	0.019	0.017
	(0.00)				(0.01)			
Ideal occupation: business owner	−0.005	0.035	0.045	0.043	0.016	0.041	0.030	0.042
	(0.02)				(0.01)			
Ideal occupation: other	−0.007	0.176	0.253	0.240	−0.023	0.338	0.431	0.412
	(0.03)				(0.03)			
N	955	955	510	445	1,149	1,149	571	578

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.8. Cash plus impacts on attitudes, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Quality of life ladder: 1 (worst) to 10 (best)	0.107	3.424	4.814	4.917	−0.014	4.076	5.420	5.452
	(0.17)				(0.27)			
Locus of control index	0.003	3.173	3.316	3.316	0.019	3.217	3.252	3.268
	(0.03)				(0.03)			
Individuals are primarily responsible for their own success or failure in life	−0.064	0.613	0.635	0.571	0.020	0.657	0.671	0.690
	(0.04)				(0.03)			
Self-esteem index	0.045	3.874	3.792	3.849	−0.047	3.989	3.749	3.706
	(0.06)				(0.07)			
Entrepreneurial attitude index	0.001	0.730	0.731	0.011	0.724	0.734	−0.008	
	(0.01)				(0.01)		(0.01)	
Social support index	0.025	3.862	3.897	3.922	−0.091*	4.107	4.005	3.921
	(0.04)				(0.04)			
N	955	955	510	445	1,149	1,149	571	578

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Regressions for entrepreneurial attitudes only control for age and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.9. Cash plus impacts on gender attitude indicators, by gender

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
GEM scale (0–24)	−0.051	11.934	13.742	13.749	1.368*	12.879	15.416	16.846
	(0.44)				(0.53)			
N	546	546	291	255	733	733	375	358
Violence subscale (0–6)	−0.064	3.483	3.651	3.585	0.278*	3.847	4.000	4.271
	(0.13)				(0.12)			
N	845	845	447	398	1,062	1,062	534	528
Reproductive health subscale (0–5)	0.110	2.742	2.971	3.085	0.206	2.807	3.337	3.553
	(0.10)				(0.12)			
N	699	699	380	319	907	907	460	447
Sexual relationships subscale (0–8)	−0.145	4.191	5.120	4.977	0.347	4.378	5.607	5.977
	(0.17)				(0.18)			
N	643	643	341	302	862	862	433	429
Household chores subscale (0–5)	−0.006	1.447	1.597	1.580	0.489**	1.944	2.242	2.740
	(0.12)				(0.15)			
N	913	913	489	424	1,099	1,099	545	554

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.10. Impacts on partner and relationship indicators, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Ever had spouse or cohabiting partner	0.001	0.019	0.059	0.054	−0.002	0.003	0.012	0.009
	(0.02)				(0.01)			
Single, never married	−0.001	0.981	0.941	0.946	0.002	0.997	0.988	0.991
	(0.02)				(0.01)			
Has a girlfriend or boyfriend	−0.039	0.254	0.310	0.265	0.000	0.092	0.324	0.317
	(0.03)				(0.03)			
N	955	955	510	445	1,149	1,149	571	578

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.11. Cash plus impacts on first sex indicators, by gender (single difference)

Indicator	Females			Males		
	ITT impact (1)	Midline cash only mean (2)	Midline cash plus mean (3)	ITT impact (4)	Midline cash only mean (5)	Midline cash plus mean (6)
Ever had sex	−0.002	0.108	0.115	−0.007	0.129	0.115
	(0.02)			(0.02)		
N	758	400	358	1,003	497	506
Age at first sexual intercourse	0.134	15.814	16.400	−0.433	16.313	15.661
	(0.55)			(0.37)		
N	83	43	40	120	64	56
Sexually debuted: first sex forced, pressured or the result of a trick	−0.011	0.256	0.220	0.004	0.016	0.018
	(0.09)			(0.02)		
N	84	43	41	120	63	57

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses. Youth who reported sexual début at baseline were excluded from the analysis.
*p < .05 **p < .01

Table E.12. Cash plus impacts on contraceptive knowledge, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Has knowledge about contraceptives	0.048	0.725	0.833	0.885	−0.002	0.795	0.926	0.914
	(0.03)				(0.02)			
Has knowledge about modern contraceptives	0.060*	0.668	0.817	0.880	0.007	0.766	0.906	0.901
	(0.03)				(0.02)			
N	930	930	496	434	1,123	1,123	555	568

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.13. Cash plus impacts on contraceptive use, by gender (single difference)

Indicator	Females			Males		
	ITT impact (1)	Midline cash only mean (2)	Midline cash plus mean (3)	ITT impact (4)	Midline cash only mean (5)	Midline cash plus mean (6)
Last sex: used condom	−0.001	0.273	0.287	−0.017	0.586	0.568
	(0.06)			(0.07)		
N	229	128	101	180	99	81
Currently using contraception: among sexually debuted	0.006	0.518	0.523	0.073	0.523	0.591
	(0.07)			(0.08)		
N	248	139	109	195	107	88
Currently using modern contraception: among sexually debuted	0.011	0.496	0.505	0.073	0.523	0.591
	(0.07)			(0.08)		
N	248	139	109	195	107	88

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.14. Impacts on recent sex indicators, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Number of sexual partners in last 12 months	−0.032	0.714	1.101	1.064	0.079	0.492	1.645	1.693
	(0.07)				(0.17)			
N	248	248	139	109	195	195	107	88
Among ever had sex: has had concurrent sexual relationships in last 12 months	−0.008	0.012	0.007	0.000	0.065*	0.041	0.037	0.102
	(0.01)				(0.03)			
N	247	247	138	109	195	195	107	88
Last sex: partner 5 or more years older	−0.026	0.179	0.313	0.277	NA	0.000	0.000	0.000
	(0.05)				(0.00)			
N	229	229	128	101	180	180	99	81
Last sex: partner 10 or more years older	−0.009	0.022	0.039	0.030	NA	0.000	0.000	0.000
	(0.02)				(0.00)			
N	229	229	128	101	180	180	99	81

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses. Missing values at baseline were replaced with zero. *p < .05 **p < .01

Table E.15. Cash plus impacts on transactional sex indicators, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Financial reasons motivate current or start of most recent relationship	0.006	0.174	0.442	0.450	0.032	0.031	0.065	0.102
	(0.06)				(0.04)			
N	247	247	138	109	195	195	107	88
Given money by current or most recent partner	−0.098	0.367	0.658	0.569	−0.030	0.086	0.228	0.200
	(0.06)				(0.06)			
N	281	281	158	123	209	209	114	95
Would leave relationship if partner did not provide financial support	−0.016	0.065	0.063	0.050	−0.033	0.010	0.044	0.011
	(0.03)				(0.02)			
N	279	279	158	121	209	209	114	95
Provided money, favours or gifts for sex during the previous 12 months	−0.007	0.036	0.006	0.000	0.038	0.057	0.114	0.147
	(0.01)				(0.04)			
N	281	281	158	123	209	209	114	95

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses. Missing values at baseline were replaced with zero.
*p < .05 **p < .01

Table E.16. Cash plus impacts on HIV knowledge, by gender (single difference)

Indicator	Females			Males		
	ITT impact (1)	Midline cash only mean (2)	Midline cash plus mean (3)	ITT impact (4)	Midline cash only mean (5)	Midline cash plus mean (6)
Knows that sex with one uninfected monogamous partner can reduce risk of HIV	0.118**	0.702	0.820	0.007	0.758	0.765
	(0.03)			(0.03)		
Thinks or is unsure whether mosquitoes transfer HIV	0.006	0.080	0.088	−0.010	0.107	0.097
	(0.02)			(0.02)		
Knows regular condom use reduces HIV risk	0.024	0.759	0.782	0.025	0.653	0.676
	(0.03)			(0.03)		
Thinks or is unsure whether HIV is transmitted through food	−0.011	0.045	0.034	−0.003	0.067	0.064
	(0.01)			(0.02)		
N	955	510	445	1,149	571	578

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.17. Cash plus impacts on HIV risk indicators, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Perceived HIV risk: moderate/high	−0.024	0.040	0.091	0.066	0.001	0.020	0.059	0.060
	(0.02)				(0.02)			
N	918	918	493	425	1,095	1,095	542	553
Perceived HIV risk: low	0.018	0.092	0.400	0.419	0.024	0.166	0.170	0.192
	(0.05)				(0.03)			
N	918	918	493	425	1,095	1,095	542	553
Perceived HIV risk: none	0.006	0.868	0.509	0.515	−0.025	0.814	0.771	0.749
	(0.04)				(0.03)			
N	918	918	493	425	1,095	1,095	542	553
Tested for HIV: lifetime	0.050	0.442	0.570	0.629	0.011	0.426	0.434	0.454
	(0.03)				(0.04)			
N	949	949	507	442	1,144	1,144	567	577
Tested for HIV: 12 months	0.031	0.326	0.445	0.490	0.035	0.257	0.273	0.308
	(0.03)				(0.03)			
N	351	351	188	163	305	305	149	156

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.18. Cash plus impacts on SRH visits, by gender

Indicator	Females			Males		
	ITT impact (1)	Midline cash only mean (2)	Midline cash plus mean (3)	ITT impact (4)	Midline cash only mean (5)	Midline cash plus mean (6)
Visited health facility for SRH services, lifetime	0.025	0.282	0.312	0.000	0.102	0.100
	(0.04)			(0.02)		
N	955	510	445	1,149	571	578
Visited health facility for SRH services, previous 12 months	0.016	0.267	0.288	0.002	0.091	0.092
	(0.03)			(0.02)		
N	955	510	445	1,149	571	578
Last SRH visit at dispensary, previous 12 months	0.088	0.426	0.523	−0.095	0.423	0.340
	(0.08)			(0.10)		
N	264	136	128	105	52	53
Last SRH visit at clinic, health care center, hospital, doctor, previous 12 months	−0.097	0.574	0.469	0.095	0.577	0.660
	(0.08)			(0.10)		
N	264	136	128	105	52	53
Last SRH visit at government facility, previous 12 months	−0.016	0.971	0.953	0.076	0.885	0.962
	(0.03)			(0.06)		
N	264	136	128	105	52	53

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

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Table E.19. Cash plus impacts on the reasons for visits to health care facilities, by gender

Indicator	Females			Males		
	ITT impact (1)	Midline cash only mean (2)	Midline cash plus mean (3)	ITT impact (4)	Midline cash only mean (5)	Midline cash plus mean (6)
Contraception, condoms	0.138*	0.287	0.414	−0.018	0.462	0.434
	(0.07)			(0.09)		
STI testing or treatment	−0.002	0.199	0.219	−0.076	0.365	0.302
	(0.05)			(0.10)		
Pregnancy, maternity, gynæcological exam	−0.143*	0.507	0.352	−0.014	0.038	0.019
	(0.07)			(0.03)		
N	264	136	128	105	52	53

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.20. Cash plus impacts on topics discussed and perceived quality of services, by gender

Indicator	Females			Males		
	ITT impact (1)	Midline cash only mean (2)	Midline cash plus mean (3)	ITT impact (4)	Midline cash only mean (5)	Midline cash plus mean (6)
At last SRH visit, staff discussed contraception	−0.001	0.603	0.555	0.053	0.250	0.321
	(0.06)			(0.10)		
N	264	136	128	105	52	53
At last SRH visit, staff discussed STI testing or treatment	−0.001	0.596	0.594	0.065	0.500	0.585
	(0.07)			(0.11)		
N	264	136	128	105	52	53
At last SRH visit, staff discussed pregnancy	−0.007	0.603	0.609	0.022	0.135	0.151
	(0.07)			(0.07)		
N	264	136	128	105	52	53
At last SRH visit, staff did not discuss contraception, STIs, pregnancy	−0.017	0.044	0.031	−0.138	0.212	0.075
	(0.02)			(0.07)		
N	264	136	128	105	52	53
Adolescent felt comfortable asking SRH staff questions	−0.068	0.853	0.789	0.064	0.769	0.811
	(0.05)			(0.08)		
N	264	136	128	105	52	53
Staff answered SRH questions adequately	−0.024	0.983	0.960	0.022	0.975	1.000
	(0.02)			(0.02)		
N	217	116	101	83	40	43
At last SRH visit, staff was friendly	−0.027	1.000	0.977	−0.019	0.962	0.943
	(0.01)			(0.04)		
N	264	136	128	105	52	53
SRH services were adequately confidential	−0.042	0.956	0.914	0.004	0.865	0.849
	(0.04)			(0.06)		
N	264	136	128	105	52	53

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.21. Cash plus impacts on knowledge about contraceptives, condoms and testing access, by gender

Indicator	Females			Males		
	ITT impact (1)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Midline cash only mean (7)	Midline cash plus mean (8)
Contraception at clinic	0.053	0.806	0.861	0.025	0.846	0.872
	(0.03)			(0.03)		
Contraception at kiosk/shop	0.018	0.022	0.038	0.010	0.114	0.125
	(0.01)			(0.03)		
Contraception at pharmacy	0.073	0.308	0.378	0.034	0.240	0.275
	(0.05)			(0.04)		
Contraception at free dispenser	0.003	0.059	0.061	0.054	0.133	0.187
	(0.02)			(0.04)		
Contraception do not know	−0.060*	0.155	0.092	−0.031	0.112	0.081
	(0.02)			(0.02)		
Condom at clinic	0.077	0.463	0.542	0.013	0.629	0.642
	(0.05)			(0.04)		
Condom at kiosk/shop	0.062	0.371	0.431	0.022	0.520	0.540
	(0.04)			(0.04)		
Condom at pharmacy	0.047	0.447	0.490	−0.031	0.541	0.509
	(0.04)			(0.04)		
Condom at free dispenser	−0.008	0.035	0.027	0.052	0.135	0.187
	(0.01)			(0.04)		
Condom do not know	−0.067*	0.182	0.115	−0.008	0.074	0.066
	(0.03)			(0.02)		
Test at clinic	0.008	0.947	0.957	−0.020	0.954	0.936
	(0.02)			(0.01)		
Test at kiosk/shop	0.003	0.006	0.009	0.025	0.028	0.054
	(0.01)			(0.02)		
Test at pharmacy	−0.006	0.037	0.031	0.022	0.088	0.109
	(0.01)			(0.03)		
Test at free dispenser	0.019	0.049	0.067	0.023	0.151	0.173
	(0.02)			(0.04)		
Test do not know	−0.005	0.031	0.025	0.008	0.028	0.036
	(0.01)			(0.01)		
N	955	510	445	1,149	571	578

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.22. Impacts on experiences of physical or emotional violence, previous 12 months, by gender (ANCOVA)

Indicator	Females				Males			
	ITT impact (1)	Baseline mean (2)	Midline cash only mean (3)	Midline cash plus mean (4)	ITT impact (5)	Baseline mean (6)	Midline cash only mean (7)	Midline cash plus mean (8)
Experienced emotional abuse	0.018	0.369	0.317	0.314	−0.070	0.324	0.255	0.171
	(0.05)				(0.04)			
Experienced physical violence	−0.005	0.241	0.177	0.182	−0.033	0.293	0.154	0.109
	(0.04)				(0.03)			
N	469	469	249	220	515	515	259	256

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age, outcome value at baseline and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses.
*p < .05 **p < .01

Table E.23. Impacts on experiences of sexual violence, previous 12 months, by gender (single difference)

Indicator	Females			Males		
	ITT impact (1)	Midline cash only mean (2)	Midline cash plus mean (3)	ITT impact (4)	Midline cash only mean (5)	Midline cash plus mean (6)
Experienced sexual violence	0.009	0.068	0.068	−0.009	0.019	0.012
	(0.03)			(0.01)		
Experienced emotional/physical/sexual violence	−0.012	0.406	0.395	−0.082	0.313	0.221
	(0.06)			(0.05)		
N	471	251	220	517	259	258

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses. Youth who reported sexual début at baseline were excluded from the analysis.
*p < .05 **p < .01

Table E.24. Impacts on seeking help in cases of violence, by gender (single difference)

Indicator	Females			Males		
	ITT impact (1)	Midline cash only mean (2)	Midline cash plus mean (3)	ITT impact (4)	Midline cash only mean (5)	Midline cash plus mean (6)
Sought help for emotional, physical or sexual violence	−0.002	0.422	0.414	0.089	0.296	0.397
	(0.06)			(0.08)		
Formal source of help	−0.020	0.069	0.046	0.000	0.012	0.017
	(0.03)			(0.02)		
Informal source of help	−0.002	0.382	0.379	0.084	0.272	0.362
	(0.06)			(0.08)		
N	189	102	87	139	81	58

Note: Linear models were estimated on the separate subsamples of female and male youth interviewed both at baseline and midline. Regressions control for age and PAA x size fixed effects. Standard errors adjusted for clustering at the community level are reported in parentheses. Youth who reported sexual début at baseline were excluded from the analysis.
*p < .05 **p < .01