



Youth in Action Uganda Tracer Study

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Youth in Action (YiA) is a six-year program implemented by Save the Children in partnership with the Mastercard Foundation. The goal of YiA is to improve the socioeconomic status of around 40,000 out-of-school young people (12-18 years), both girls and boys, in rural Burkina Faso, Egypt, Ethiopia, Malawi, and Uganda. The Theory of Change is to achieve this by enhancing youths' foundational skills and social assets, facilitating their action in livelihoods opportunities, and building key partnerships to remove barriers to youth's participation in their economies and communities. In Uganda, YiA started in September 2012. The program is implemented by Save the Children in collaboration with three local partners—FURA, RIDE-Africa, and BAWILHA—in four districts—Kabarole, Kasese, Bundibugyo, and Ntoroko (32 sub-counties in all).

Study Design

The Tracer Study is a retrospective study. A sample of youth who graduated from the YiA program at least nine months before data collection were asked a set of questions that required them to reflect back on their socioeconomic and livelihood status before starting YiA and at the present moment. These data are used to answer two research questions:

- **RQ1:** What changes in socioeconomic and livelihood outcomes do youth retrospectively report several months after finishing their engagement with YiA?
- **RQ2:** To what extent are these changes explained by demographic characteristics, the amount of time that has passed since completing YiA, and chosen YiA pathway?

Sample

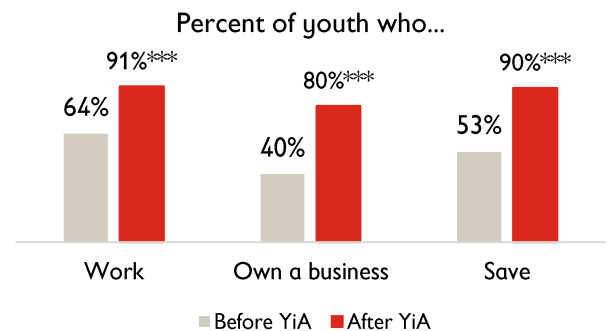
The tracer study sample consists of 494 youth (244 female, 250 male), ranging in age from 16 to 26 years old, with an average age of 19. On average youth in this sample completed YiA 22 months prior to data collection.

Analytic Strategy

To answer RQ1, we compare youths' responses to questions about education, work, family support, mentor support, autonomy and entrepreneurial skills before and after YiA, and test for differences in reported outcomes between male and female youth. To answer RQ2, we fit a series of multiple regression models to estimate the relation between sociodemographic characteristics, program factors and reported changes in socioeconomic and livelihoods outcomes

Findings

RQ1: A significantly greater percent of youth reported working, owning a business, and saving after YiA. Our findings suggest they are earning more, too. On average, youth reported a gain of 5,413 UXG (1.44 USD) in daily income after YiA. In terms of the enabling environment, youth reported increases in the types of emotional support (but not material support) received from their family and greater support from mentors. They also reported greater autonomy in economic decision-making and increased entrepreneurial skills.



* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

RQ2: Household wealth and being a parent were significant predictors of youths' self-reported gains. Youth with greater household wealth at baseline experienced lesser gains in material support from family and entrepreneurship skills, yet slightly greater gains in daily income. Youth who had children before YiA reported lower gains in autonomy in economic decision making.

Limitations

This study relies on retrospectively reported information on youth's experiences of their socioeconomic and livelihood status at the two different time points, and because we have no comparison group, we have no way of knowing what youths' outcomes would have been in the absence of YiA.

Messages

1. Youth reported significant gains in socioeconomic and livelihoods outcomes several months after graduating YiA
2. Gains were similar for male and female youth. The most important predictors of gains are: household wealth and being a parent.

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Overview of the Tracer Study

What is the Youth in Action Project?

Youth in Action (YiA) is a six-year program implemented by Save the Children in partnership with the Mastercard Foundation. The goal of YiA is to improve the socioeconomic status of around 40,000 out-of-school young people (12-18 years), both girls and boys, in rural Burkina Faso, Egypt, Ethiopia, Malawi, and Uganda. The Theory of Change is to achieve this by enhancing youths' foundational skills and social assets, facilitating their action in livelihoods opportunities, and building key partnerships to remove barriers to youth's participation in their economies and communities.

YiA supports youth to identify and explore livelihood opportunities through a combination of nonformal education and practice-oriented learning experiences. For many youth, these livelihood opportunities are grounded in agricultural value chains or agri-business. While there is a wide array of programs focusing on education for out of school youth or on youth employment, very few incorporate employability, social assets, literacy, numeracy, financial literacy, and real-life experience. YiA integrates all of the above into a participatory learning cycle, designed to increase livelihoods opportunities through the acquisition of a broad spectrum of foundational and work-readiness skills.

Youth in Action in Uganda

In Uganda, YiA started in September 2012. The program is implemented by Save the Children in collaboration with three local partners—FURA, RIDE-Africa, and BAWILHA—in four districts—Kabarole, Kasese, Bundibugyo, and Ntoroko (32 sub-counties in all). The target in Uganda is 11,050 youth and the program is implemented in three local languages: Rutooro, Lhukonzo and Lubwisi. In Uganda, youth who participate in the program go through a three phase process: selection, learning, and action:

As part of the selection process, the project conducts community sensitization and mobilization in target communities. Youth voluntarily sign up for the project after which a selection event is held; the aim of the event is to identify youth who are eligible for the project. There are four selection criteria that determine which youth can participate in the program:

1. Age: Between the ages of 12-18 years
2. School status: Out of school for at least five months
3. Program language: Has some spoken knowledge of one of the three program languages
4. SES: Comes from a family that is not in the top 10% or bottom 10% of the wealth index

Non-sensitive information from selection events is given to community advisory groups who help select youth for the program and create groups of youth with mixed literacy levels.

Once youth are selected into YiA, there are two main phases of the program: learning phase and action phase. The learning phase takes 4-5 months; youth meet for 3 hours/day, 3 days/week. Youth are also exposed to livelihood opportunities in their communities through field trips and visits by guest speakers and YiA graduates. Towards the end of the learning phase, youth develop a pathway plan which they present to a local learning center committee for evaluation and further guidance. A youth can select one of five pathways in Uganda:

1. Vocational training: Attend a government vocational training center
2. Apprenticeship training: Intern with a local artisan or expert
3. Entrepreneurship: Start a small business by themselves or with peers
4. Employment: Find decent employment in the community
5. School: Return to formal education



After approval of the pathway plan, youth start the second stage of the program: the action phase. During the action phase, youth move out of the learning centers and are supported and mentored by facilitators, members of the community advisory groups, and a community member who is in their livelihood field. Approximately 70% of youth in Uganda choose the entrepreneurship pathway. In this pathway, youth are supported with ~100 USD each. Youth can either choose to start an individual business or to work with peers in small groups of 5-10 youth. To disburse the money, youth are connected with a Village Savings and Loan Association (VSLA). Youth in the action phase and program graduates meet at least once every quarter in peer-to-peer meetings to share experiences and learning. Occasionally, local leaders are invited to the peer-to-peer meetings to speak about government programs for youth and connections to the private sector. YiA partners with the private sector help train youth in specific livelihood areas.

Purpose of this Study

The data collected from beneficiaries and stakeholders in previous YiA studies have focused on the outcomes during youth's participation with the program, or right after they have finished the program. While we have some anecdotal information about the trajectories of youths' lives after they leave YiA, we do not have structured data on their livelihood development. This Tracer Study aims to understand the added value of YiA in the lives of youth several months after they have left the program. In other words, this study helps us uncover the changes that have occurred in the lives of YiA beneficiaries after they have graduated from the program.

Given these aims, the Tracer Study tracked down youth who have graduated from the program more than nine months before data collection and conducted a 1:1 survey with them. The Tracer Study focuses on outcome areas that are aligned with the YiA Theory of Change and the Learning Framework. The outcomes from this Tracer Study will feed into individual learning question narratives and help us understand participants' experiences of the effect of YiA on their ultimate socioeconomic outcomes.

Study Design

The tracer study is a retrospective study. The survey asked youth to think back to their life before YiA and provide responses based on this recall. Following the International Labor Organization's guidance¹ on designing a tracer study, we asked youth a similar set of questions that require youth to reflect on their socioeconomic and livelihood status before starting YiA, and at the present time.

The Tracer Study is not focused on establishing causal links between attending YiA and changes in youth socioeconomic and livelihood outcomes. In other words, there is a limited amount that we can say about YiA *causing* changes in youth outcomes; rather we explore the *effect* of YiA on youth livelihood development *from the perspective of YiA youth*.

Research Questions

Our primary research question is:

1. What changes in socioeconomic and livelihood outcomes do youth retrospectively report several months after finishing their engagement with YiA?

We are also interested in how youths' experiences differ according to their demographic characteristics (including whether or not the youth had children at the start of YiA), the number of

¹ ILO (2011). Child labour impact assessment toolkit: Tracer study manual. Geneva, Switzerland: International Labour Organization.

months that have passed since they completed YiA activities, and the YiA pathway they choose. Thus, our second research question is:

2. To what extent are the changes in socioeconomic and livelihood outcomes that youth report explained by demographic characteristics, the amount of time that has passed since completing YiA, and YiA pathway?

Measures

The table below provides a mapping of the main outcome areas and how the data links to the YiA Learning Framework.²

Table 1. Measures used in the Tracer Study

Outcome	Description/Items	Mapping to Indicator or Learning Question
Socioeconomic status	Poverty questions adapted from the DHS wealth index	Goal: % of youth enrolled in the program who record an improvement in socioeconomic status at endline over baseline
Income	Amount of income and productive assets Use of Income	
Work status	Hours worked Type of work	What improvements in self-employment capabilities do we observe in youth engaged with the YiA program model?
Savings	Amount saved Frequency of savings Access to financial services	
Entrepreneurial skills	Youth experiences of their entrepreneurship competencies	
Mentorship	Type of business mentor Nature of business mentorship	How successful have peer-to-peer and business mentorship been in providing youth with opportunities to grow their businesses?
Family support for work	Amount of financial support Presence of physical and emotional support for workforce development	How has the YiA program affected parental support (e.g.: financial contribution) of livelihood development in youth?

Tracer Study data were collected by trained enumerators via one-on-one, in-person interviews with youth respondents.

² The Tracer Study survey is available upon request, please contact Nikhit D'Sa at ndsa@savechildren.org

Sample

Because this study is focused on youths' experiences of the effect of YiA after (a) youth have graduated from YiA, and (b) youth have spent some time away from the project, the population this study seeks to extrapolate to are *all youth who graduated from YiA nine months ago, or more*. This means that youth from any cohort that completed the learning phase, action phase, and post-action monitoring more than nine months ago were eligible to participate in the study.

Given the total direct beneficiary population in Uganda, a 5% margin of error, 95% confidence interval, and a 50% response distribution, the Tracer Study sample size was designed to be 400 youth in Uganda.

The Uganda country team used a stratified random sampling approach. After creating a list of all project graduates who had completed the full program cycle more than nine months ago, the team stratified the list by gender (a 50:50 ratio of males to females), cohort (the recruited sample should be spread equally across all cohorts) and districts (the sample should be proportional to the main districts participating in YiA). The team then used a random number generator to recruit ~800 youth for the Where are they Now List (WNL)³. After creating the WNL the team tracked down the first 400 youth from the list and collected the tracer study data from them.

Because of over-sampling, the team was able to collect data from 494 youth (244 female, 250 male), ranging in age from 16 to 26 years old, with an average age of 19. There were 137 youth from Bundibugyo, 297 from Kasese, and 60 from Ntoroko.

Table 2 describes the distribution of youth in the Tracer Study sample according to YiA pathway chosen and time (in months) since graduating YiA⁴.

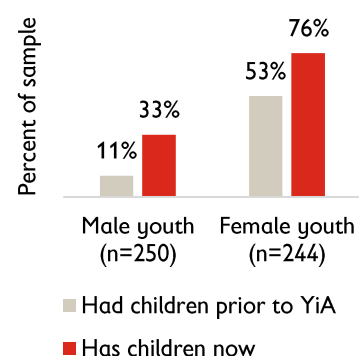
Table 2. YiA Pathway and Months since Completion

	YiA Cohort	
	Percent of Female Youth	Percent of Male Youth
11 months	12%	13%
13 months	4%	4%
14 months	0%	0%
16 months	28%	20%
20 months	15%	18%
23 months	15%	17%
31 months	8%	11%

³ ILO (2011). Child labour impact assessment toolkit: Tracer study manual. Geneva, Switzerland: International Labour Organization.

⁴ Time since graduating YiA was calculated by subtracting the month of Tracer Study data collection from the official end month for the cohort that the youth attended

What percentage of youth in this sample are parents?



Many youth had children in the time that has passed since they began participating in YiA. The percent of youth with children increased for both male and female youth, but overall more female youth have children. The percent of youth who are married also increased, from 20% to 50% for female youth, and 10% to 40% for male youth.

In the following sections we will explore how being a parent influenced youths' experiences in YiA.

32 months	9%	8%
43 months	9%	9%
Total	100%	100%
N	243	250
YiA Pathway Chosen		
	Percent of Female Youth	Percent of Male Youth
Employment	0%	1%
Entrepreneurship	81%	47%
Vocational training	13%	35%
Apprenticeship	4%	13%
Back to school	2%	4%
Total	100%	100%
N	243	250

Findings

RQ1: What changes in socioeconomic and livelihood outcomes do youth retrospectively report several months after finishing their engagement with YiA?

To answer Research Question 1, for each outcome we work through three steps:

1. Conduct descriptive statistics comparing youths' self-reported outcomes before and after YiA.
2. Fit a one-sample t-test (for continuous outcomes) or a one-sample z-test (for binary outcomes) to assess whether the difference in self-reported outcomes before and after YiA is statistically significant.
3. Understand whether or not there is a significant difference between male and female youths' reported outcomes. We report differences that are meaningful (i.e., statistically and practically significant).
 - a. For binary outcomes, we conduct two sample z-tests comparing the difference in outcomes between male and female youth prior to YiA, and two-sample z-tests comparing the difference in outcomes between male and female youth after YiA.
 - b. For continuous outcomes, we fit a univariate regression model, with youth's self-reported change in socioeconomic and livelihood outcomes modeled as a function of sex. This tells us whether or not there is a statistically significant association between sex (being a female, or being a male) and the reported change in outcomes.

Education

Table 3 presents the distribution of the sample according to education level before and after YiA. About half of the sample had attended some primary school before attending YiA, with 1 in 5 youth having completed primary school. We find a statistically significant, but small, difference in the number of years of education completed before YiA and after YiA (6.3 and 6.5 years, respectively). In practical terms, this difference represents an increase of about 4-6 months of education.



Table 3. Education level and years of education before and after YiA

	Before YiA	After YiA
No education	0.4%	0.4%
Some primary	56.4%	54.9%
Primary complete	21.3%	20.3%
Some junior secondary	19.1%	17.9%
Junior secondary complete	2.8%	4.6%
Tertiary	0.0%	2.0%
Years of education completed	6.3	6.5***
N	493	459⁵

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

Male youth report greater gains in years of education than female youth, by about 6 months ($p < 0.05$). See Table 19 in Appendix A for detailed education data by sex.

Work

Work was defined as any activity that youth did for themselves, their family, or for someone else for which they received some kind of payment. This payment may have been money, or some other type of payment like food or things. Youth reported a marked increase in economic activity after participating in YiA. **64% of youth said they were working before YiA, and 94% said they were currently working.** In addition, **40% reported owning a business prior to YiA, compared to 80% who reported owning a business now.** Both of these differences are statistically significant at $p < 0.001$.

Among the sample of youth who worked before and after YiA, we find no major differences in the kind of work arrangement youth were engaged in before and after YiA (e.g., one kind of work, seasonal work, or different kinds of work at the same time). However, **there is some indication that after participating in YiA youth were engaged in more kinds of work**, as illustrated in Figure 1 below.

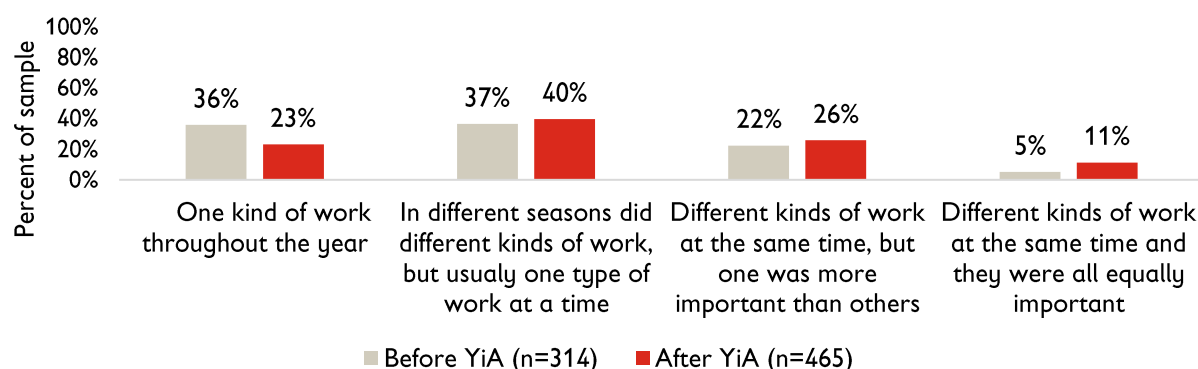
Figure 1. Number of different kinds of work youth are engaged in

Table 4 present the types of work (i.e., sector) that youth were engaged in before and after YiA. **Female youth were more likely than male youth to own a business, trade agriculture and work in sales both before and after YiA. Male youth were more likely than female youth to work in construction and transport.**

⁵ 1 respondent did not respond to the question about education before YiA, and 35 respondents did not answer or did not know their education status after YiA.

Most youth reported being engaged in between two and three different kinds of work prior to YiA. This number went up slightly after YiA, with the average number of kinds of work closer to three, consistent with findings above that youth may be more often involved in different kinds of work after YiA (Figure 1).

Table 4. Types of work youth are engaged in before and after YiA, by sex

	Before YiA			After YiA		
	Female youth	Male Youth	p-value	Female Youth	Male Youth	p-value
Youth owned a business ⁶	76%	50%	***	93%	77%	***
Agriculture	82%	83%		74%	68%	
Trading agriculture	56%	32%	***	68%	48%	***
Animal rearing	28%	34%		51%	41%	*
Animal trading	11%	12%		15%	19%	
Automotive	1%	3%		1%	6%	**
Construction	2%	27%	***	0%	24%	***
Cosmetology	4%	11%	*	5%	8%	
Domestic	22%	19%		23%	19%	
Electric	1%	1%		0%	47%	**
Garments	2%	1%		6%	2%	*
Mining	1%	1%		0%	1%	
Sales	29%	23%	***	30%	17%	***
Transport	0%	8%	***	0%	9%	***
Other	11%	19%	*	12%	13%	
Number of kinds of work	2.5	2.6		2.8	2.8	
N	153	161		230	235	

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

Income

On average youth reported an increase in daily earnings after YiA, although 24% reported earning less after YiA. Average self-reported income before YiA was 6,028 UXG (adjusted for inflation to be comparable to UXGX 2017 currency values) and 10,946 UXG after. This corresponds to roughly 1.67 USD before and 3.04 USD after, an average gain of 1.45 USD per day ($p < 0.001$). There are no differences in average self-reported income between female and male youth.

There are several limitations to keep in mind when interpreting the income data. First, our estimates of gains in daily income are only representative of the youth who worked both before and after YiA (about 60% of the sample). Second, the inflation adjustments for income prior to YiA are not precise—primarily because we are relying on youth recall, but also because the adjustments are based on the average annual inflation rate, which does not account for monthly/weekly fluctuations.⁷

⁶ Table 5 includes only youth who worked before and after YiA. The percent who owned a business before and after YiA, of youth who worked, is greater than the percent of the full sample of youth who owned a business before and after YiA reported above.

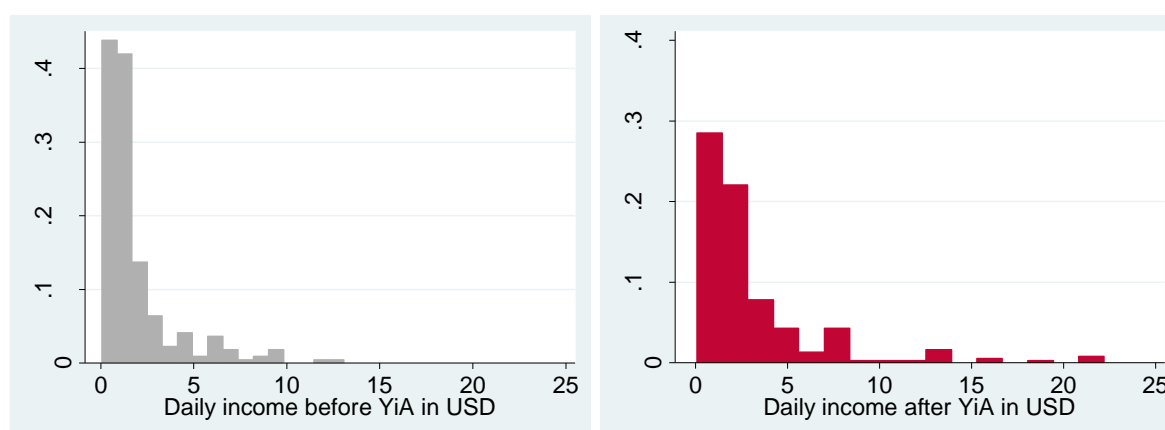
⁷ Of the 314 youth who reported working before YiA, 297 were paid in money, 24 were paid in kind (daily income = 0), and 6 outliers were removed. Of the 465 youth who reported working after YiA, 452 reported their income, and 5 outliers were removed. Income prior to YiA was converted to 2017 UGX using the formula $P_n = P(1+i)^n$; where P_n = inflation adjusted income, P = reported income prior to YiA, i = annual

Table 5. Youth's self-reported daily income

	Daily income before YiA		Daily income after YiA		Gain in daily income***	
	UXG	USD	UXG	USD	UXG	USD
Mean	6,165.41	1.81	10,946.58	3.04	5,203.38	1.44
Standard deviation	7351.	2.06	13,103.82	3.64	12,493.93	3.47
N	308	291	447	447	285	285

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. Gain in daily income is calculated only for the sample of youth who worked before and after YiA and reported daily income at both time points ($n=269$).

Figure 2. Distribution of reported daily income before and after YiA



Both histograms include only the sample of youth who worked before and after YiA and reported daily income at both time points ($n=290$).

Considering these limitations, we include another proxy of changes in wealth: household assets. Specifically, we asked youth about whether or not their home had a series of 13 household possessions, as well as access to land, tools, and animals. In order to assess changes in household wealth we created an index equal to the number of household possessions youth had before and after YiA (or 16 total household assets, see table 6). In this sample, **on average youth had about 2 of 13 household items before YiA, and 2-3 after** ($p < 0.001$). There is no difference in reported household assets between male and female youth.

These data may provide a more reliable estimate of changes in youths' economic status, given that unlike the income data, this analysis draws from the full sample of 494 youth, and our estimates do not rely on inflation adjustments. However, the number of household possessions youth have before and after YiA is influenced by all members of the youth's household, not just the youth who participated in YiA. To this end, changes in household wealth are likely related to factors external to YiA.

Table 6. Household assets before and after YiA

	Before YiA	After YiA
Family owns or has access to...		
Land	96%	98%
Animals	71%	84%

inflation rate (2013-2017, estimated at 4.7%), and n = amount of years that have passed since youth completed YiA (calculated by dividing the number of months out of YiA by 12).

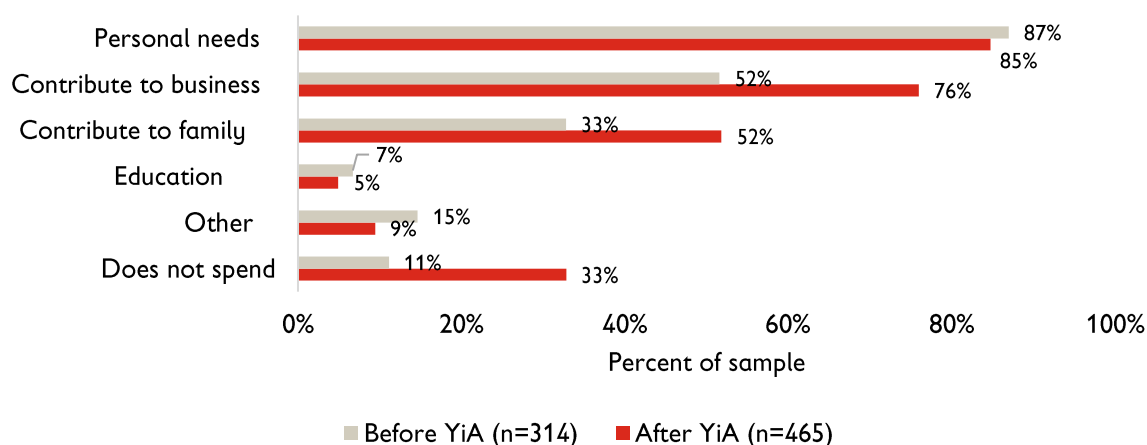
Tools or machines for business	41%	48%
Household has...		
Electricity	7%	30%
Water from faucet	6%	18%
Tin roof	74%	78%
Indoor toilet	3%	5%
Separate kitchen in house	33%	10%
Television	2%	6%
Satellite or cable TV	1%	3%
Land telephone	2%	2%
Mobile phone	66%	89%
Refrigerator	2%	2%
Bicycle	28%	34%
Motorcycle	7%	15%
Car, van or truck	1%	1%
Total of 16 possessions***	4.3	5.2
N	494	494

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

Spending and saving

When asked how they spend the money they earn, **a greater percentage of youth reported spending money on contributing to a business and contributing to family after YiA than before YiA**, as shown in Figure 3. 11% say they did not spend the money they earned prior to YiA, compared to 33% who said they did not spend after YiA⁸.

Figure 3. Youth spending practices



Female youth were more likely to report spending money on their business both before and after YiA, as shown in Table 7. This is likely related to the finding that female youth were more likely to own a business than male youth (Table 4). **Female youth were also more likely to report spending money on education after YiA**, while **a greater percentage of male youth reported spending on “other.”**

⁸ We only assess the statistical significance of the main outcomes of interest, not every single item in the survey, in order to avoid spurious correlation.

Table 7. Youth spending practices, by sex

	Before YiA			After YiA		
	Female Youth	Male Youth	p-value	Female Youth	Male Youth	p-value
Personal needs	90%	85%		87%	83%	
Education	6%	8%		7%	3%	*
Contribute to family	33%	33%		53%	51%	
Contribute to business	60%	44%	**	81%	71%	**
Other	12%	17%		6%	12%	*
Does not spend	12%	10%		35%	31%	
N	153	161		230	235	

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

90% of youth reported saving currently, compared to 53% who said they saved prior to YiA ($p < 0.001$). In terms of amount saved, the average amount increased from 49,112 inflation-adjusted UXG (13.63 USD) to 125,138 UXG (33.57 USD). There is no difference in amount saved between male and female youth.

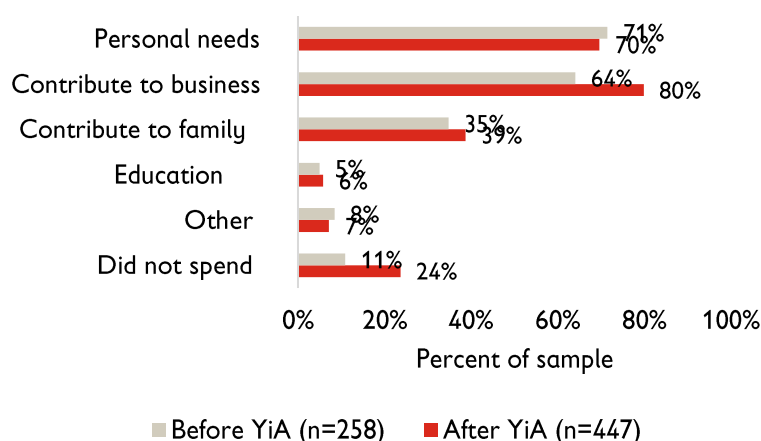
Table 8. Youth savings practices⁹

	Savings before YiA		Savings after YiA		Gain in savings***	
	UXG	USD	UXG	USD	UXG	USD
Mean	49112.43	13.63	176346.20	48.96	125138.40	33.57
Standard deviation	85739.49	23.80	183672.70	50.99	171895.60	48.16
N	451	451	468	468	430	429

~ $p < 0.10$. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

Youth spend the money they save primarily to contribute to business, family and personal needs. A greater percent of youth reported spending their savings on contributing to their business after YiA (80%) than before YiA (64%). More youth said they did not spend their savings after YiA than before (24% versus 11%, respectively).

Figure 4. How youth spend saved money



⁹ The savings amount for youth who said they did not save is coded as 0. Before YiA, 36 of the youth who said they did save did not report a savings amount, and 7 youth did not report whether they saved or not. This explains the sample size for this value (N=494 total youth in the sample – 36 who saved but did not report the amount saved – 7 who did not report whether they saved or not = 451). After YiA, 26 of the youth who said they did save did not report a savings amount (N=494 – 26 = 458).

Female youth were more likely than male youth to save with Village Savings and Loan Associations (VSLA) both before and after participating in YiA. On the other hand, after YiA a greater percent of male youth reported using mobile phone credit to save, as shown in Table 9.

Table 9. Where youth save, by sex

	Before YiA			After YiA		
	Female Youth	Male Youth	p-value	Female Youth	Male Youth	p-value
Bank	2%	1%		3%	3%	
Microfinance bank	2%	4%		0%	2%	
Savings and credit cooperative	35%	22%	*	37%	28%	*
Village savings and loans	62%	41%	***	72%	57%	**
Mobile phone credit	11%	13%		17%	30%	***
N	130	128		223	224	

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

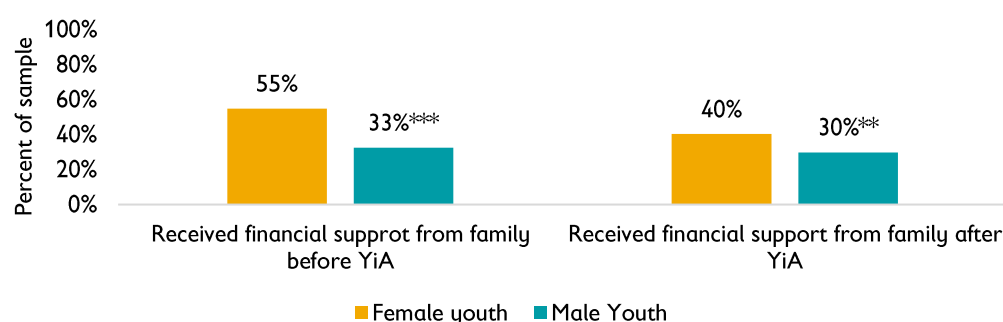
There were no observed differences in how male youth and female youth spent the money they saved or the amount saved.

Support from family

Support from family is conceptualized in three ways: financial support, material support, and emotional support. **Only youth who reported working were asked about these three types of support from family members.**

In terms of **financial support**, 43% of youth report receiving money from their family prior to YiA, compared to 35% after, but this difference is not statistically significant. Both before and after, **a greater percent of female youth than male youth report receiving financial support from their family**, as shown in Figure 5.

Figure 5. Financial support from family, by sex



* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

Given the limited number of youth (76) who provided information on the amount of support received from their family before and after YiA, we do not have a sufficient sample size to test the

How do spending and savings practices differ between youth with and without children?

After YiA, youth who had children were more likely to spend their earnings on *contributing to family* (60% of youth with children versus 41% without), and they were more likely to spend their savings on *personal needs* (77% versus 60%). In terms of saving practices, 42% of youth who had children saved their money in savings and credit cooperative, compared to only 20% of youth without children.

whether the difference in financial contributions from family before and after YiA is statistically significant.¹⁰

Table 10. Amount of financial support from families

	Amount Family Gave Before YiA		Amount Family Gave After YiA	
	UXG	USD	UXG	USD
Mean	66,660.15	18.51	79,269.94	22.01
Standard deviation	70,446.09	19.56	85,444.09	23.72
N	136	136	163	163

Material support includes land, space within the house, tools and/or raw materials, and animals. We summed the responses to these items to form an index of the material support from families, defined as the number of types of material support from family (of 4). Rather than testing the statistical significance individually for each type of support, we used this index to test the significance of the difference in reported material support before and after YiA. This is in line with our interest in assessing the total change in support, and also important so as to avoid spurious correlations. **There is no difference in the number of types of material support from families before and after YiA.**

Table 11. Material support from families

	Before YiA	After YiA
Family gave land	61%	65%
Family gave space in the house	73%	73%
Family gave tools	58%	50%
Family gave animals	32%	29%
Number of types of material support from family before YiA (of 4)	2.2	2.2
N	314	494

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

Emotional support includes helping youth learn the skills needed for work, supporting youth's ideas for work, giving youth sufficient time to complete work, and helping to manage and run the youth's business.

Table 12. Emotional support from family

	Before YiA	After YiA
Family helped youth learn skills	61%	77%
Family supported youth's ideas	90%	94%
Family gave youth time	89%	96%
Family helped manage business	76%	88%
Number of types of emotional support from fam before YiA (of 4)***	2.0	3.3
N	314	494

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

¹⁰ Youth were asked, "How much [money] did your family give you before YiA?" and "how much does your family give you now?" We interpret this as the total contribution from family before and after YiA, rather than recurring contributions. This is how youth qualitatively described the type of financial support they received from their family in focus group discussions – a one-time contribution to start a business, for example, rather than periodic payments.

As in material support, we created an index of emotional support, defined as the number of types of emotional support received (of 4). Rather than testing the statistical significance individually for each type of support, we used this index to test the significance of the difference overall support before and after YiA. We find that **youth reported more types of emotional support from their family after YiA.**

There is no difference in number of types of material or emotional support from family between male youth and female youth.

Support from mentors

Youth were also asked about support from a mentor (who was not an immediate family member). **Youth were much more likely to have a mentor after participating in YiA. 62% of the youth said that they had a mentor before YiA, compared to 92% who said they had a mentor now ($p < 0.001$).** There is no difference between male and female youth in terms of the percent who reported having a mentor, although female youth were more likely to have a female mentor, and male youth were more likely to have a male mentor.

It is worth mentioning, however, that before YiA, of the female youth who had a mentor ($n=155$) 68% said that their mentor was female. After YiA, of the female youth who have a mentor ($n=219$), 44% said that their mentor was female. **Thus, although both male and female youth seem to have gained mentors equally through their engagement with YiA, the mentors themselves are most often men.** In terms of who the mentors are, there was a slight shift towards friends as mentors (from 20% to 29%) and community members as mentors (from 8% to 11%), but **in most cases the youth's mentor was a relative** (71% before and 58% after).

Youth were also asked about the types of support they received from mentors. Similar to the questions about family support, we created an index of mentor support, defined by the number of types of support from mentors (of 5). Again, rather than testing the statistical significance individually for each type of mentor support, we used this index to test the significance of the difference in reported mentor support before and after YiA. **On average youth reported about one more type of support that they received from mentors. This is a small but statistically significant gain. There is no difference in reported support from mentors between female and male youth.**

Table 13. Support from mentor

	Before YiA	After YiA
Mentor shares information	47%	77%
Mentor provides emotional support	48%	85%
Mentor builds confidence	50%	86%
Mentor teaches skills	47%	85%
Youth can go to mentor for advice	52%	89%
Number of types of mentor support (of 5)***	3.8	4.6
N	309	447

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

Autonomy in economic decision-making

We operationalized youth autonomy in economic decision making as the extent to which youth have a say in key decisions about how they earn money and what they do with their money.

Specifically, youth were asked: “Who decides (1) the kind of work you do? (2) How to spend the money you earn? (3) Where you save your money? And (4) How to spend the money you save?” Youth could respond “I decide” or “someone else decides.” Like the indices of support from family

and mentors, we created an index of youth autonomy, ranging from zero (no say in economic decisions) to four (youth make all of the decisions).¹¹ We used this index to test the significance of the overall change in autonomy before and after YiA, rather than testing each decision individually.

Youth reported having a say in one or two decisions prior to YiA, and three afterwards ($p < 0.001$). This increase is explained in part by the finding that more youth are working and saving after having participated in YiA, and thus have more economic and livelihoods decisions to be making. **We do not observe any differences in autonomy between male youth and female youth.**

Table 14. Autonomy in economic decision-making

Youth decides:	Before YiA	After YiA
...the kind of work s/he should do	37%	73%
...how to spend money	38%	74%
...where to save	32%	73%
...how to spend saved money	34%	78%
Number of decisions made by youth (of 4)***	1.4	3.0
N	494	494

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

Entrepreneurial skills

To assess self-reported entrepreneurial skills, youth were asked if they knew how to do a series of eight activities (see table 14). In general youth had a positive perspective of the skills they gained through participation in YiA. **When thinking about their skills prior to YiA, less than half said they knew how to create a business plan, identify customers, plan for seasons, make price decisions, identify where to get the funds to start a business, or develop and track budgets.** Conversely, **after YiA, for each skill we asked about, more than 90% feel competent in every skill.**

We created an index of entrepreneurial skills before and after YiA, equal to the number of skills youth reported knowing how to do (of 8). As in the questions about support from family and mentors, and autonomy, we tested the significance of reported changes in skills using the index, rather than testing each skill individually. The average number of entrepreneurial skills youth reported being able to do prior to YiA was three, compared to seven or eight after YiA ($p < 0.001$). We did not observe any difference in reported skills between male and female youth.

Table 15. Self-reported entrepreneurial skills

Percent who respond “agree or strongly agree” when asked if they know how to...	Before YiA	After YiA
Create a business plan	37%	97%
Identify customers and competitors for a business	36%	94%
Plan a business for different seasons	43%	93%
Decide the best price at which to sell an item	45%	96%
Identify places to get money to start or grow a business	38%	93%
Budget money for your business and personal life	34%	94%

¹¹ Youth who said they did not work or did not save were not asked the corresponding questions about who decides the kind of work they do, how to spend, or where to save and how to spend saved money. We include these youth in the index, with scores of 0 for these questions, based on the assumption that youth who do not work and do not save have little say in decisions about how to spend money or save.

Identify how much money you need to start a business	34%	95%
Track how much money you were spending and on what	34%	92%
Number of entrepreneurial skills (of 8)***	3.0	7.5
N	494	494

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

RQ2: To what extent are the changes in socioeconomic and livelihood outcomes that youth reported explained by demographic characteristics, the amount of time that has passed since completing YiA, and their chosen YiA pathway?

To answer Research Question 2, we fit a series of multiple regression models to estimate the relation between sociodemographic characteristics, program factors, and reported changes in socioeconomic and livelihoods outcomes. Table 16 describes the outcomes, and Appendix C presents the fitted estimates.

Table 16. Socioeconomic and livelihoods outcomes used to explore RQ2

Outcome	Description	Mean	Standard Deviation	Minimum	Maximum	N
Change in daily income	Difference in self-reported daily income before and after YiA, in 2017 UXG	5,203	12,494	-39,156	74,106	285
Change in household assets	The difference in self-reported household assets before and after YiA, of 13	0.64	1.62	-4	9	494
Change in savings amount	The difference in self-reported savings before and after YiA, in 2017 UXG	125,138.60	171,895.60	-305,000.00	900000	430
Change in material support from family	Difference in number of types of material support received from family before and after YiA, of 4	0.1	1.1	304	-3	4
Change in emotional support from family	Difference in number of types of emotional support received from family before and after YiA, of 4	0.48	1.1	-4	4	304
Change in mentor support	Difference in number of types of support received from mentors before and after YiA, of 5	0.8	1.6	-4	5	301
Change in autonomy in economic decision-making	Difference in number of decisions about work and how to spend and save money that youth make before and after YiA, of 4	1.6	1.7	-4	4	494

Change in entrepreneurial skills	Difference in number of entrepreneurial skills youth say they have before and after YiA, of 8	4.5	3	-8	8	494
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First, we estimated the association between youths' sociodemographic characteristics and the changes they reported by modelling these changes as a linear function of *age in years*, *sex*, *years of education prior to YiA*, and *household assets prior to YiA*¹².

The most consistent predictor of changes in outcomes was household wealth (assets)¹³. **The greater the youth's reported household wealth at baseline, the smaller the gain in material support from family, self-reported entrepreneurial skills, and to a lesser extent, types of support from mentor.** This finding suggest that YiA was most successful for youth from more disadvantaged households, at least in terms of perceived changes in material support from family and entrepreneurial skills one to four years after completing the program. On the other hand, there is a marginally significant positive association between household assets and changes in self-reported daily income. **Thus, while youth from more disadvantaged households gained more in terms of support from family and skills, their daily income did not increase as much as it did for youth from (relatively) less vulnerable households.**

Next, we estimate the association between the amount of time in months that has passed since youth completed YiA and the changes they report, controlling for the above sociodemographic characteristics (age, sex, education and household wealth). We find no relation between months since completing YiA and reported changes in outcomes. In other words, the **amount of time that youth have been out of YiA does not seem to affect how they report socioeconomic and livelihoods outcomes before and after participating in YiA.** In this sample the amount of time since completing YiA ranges from 11 to 43 months. Thus, it is possible that as time goes on there may be a relation between time since completing YiA and reported changes in outcomes that we cannot observe in the present study.

Third, we estimated the association between the YiA pathway youth chose and their reported outcomes, controlling for sociodemographic characteristics. For this analysis we considered only Entrepreneurship, Vocational, and Apprenticeship pathways, given how few youth in this sample chose the Back to School and Employment pathways (15 and 3, respectively). **Compared to the Entrepreneurship pathway, youth who selected the Vocational or Apprenticeship pathways reported slightly higher gains in entrepreneurial skills.** This association was small in magnitude, representing about one additional skill gained. **Youth who participated in the Apprenticeship pathway report also lesser gains in daily income (by about 4,425 UXG, approximately 1.20 USD), while youth in the Vocational pathway reported lesser gains in savings, by about 4,127 UXG, 1.15 USD).**

Finally, we explored how youths' reported changes vary depending on whether or not they had children before they started YiA. **Controlling for sociodemographic characteristics, youth who had children before YiA reported lower gains in autonomy in economic decision-**

¹² Household assets is the standardized sum of the total number of household items that youth reported having prior to YiA (of 13 items total).

¹³ Years of education prior to YiA is associated with gains in household assets and material support from family, although the small magnitude of this relation makes this finding practically insignificant (effect size of 0.04 and 0.08 standard deviations, respectively).

making. In practical terms, youth with children before YiA reported a gain of one additional economic or livelihoods decision, while youth who did not have children prior to YiA reported gains of about two additional decisions, on average.

Limitations of this Study

This study relies on youth's experience of their socioeconomic and livelihood status at two different time points: before they participated in YiA and currently (nine or more months after completing YiA). In this sense, **we rely on retrospectively reported information on youth's experiences** of their socioeconomic and livelihood status at the two different time points. We did not attempt to validate any of the youth's responses through other data sources.

This poses a number of limitations. First, it can be hard to remember the specifics of things like mentor interactions, family support, or daily income from months or years prior. This limits the precision of our findings. Second, youth may have an incentive to report larger gains than they actually experienced in order to signal their interest in participating in future types of livelihood programs. On the other hand, this incentive could work in the opposite direction, youth may be inclined to report smaller gains to signal that they are in need of continued support from programs like YiA.

We also did not have a comparison or control group in this Tracer Study. The data we collected for this study come from youth who have participated in YiA, so we have no way of knowing what youths' outcomes would have been in the absence of YiA. We cannot know for sure that the gains youth reported are due to their participation in YiA. **Youth are generally expected to develop more skills and assets or income as they mature, regardless of intervention, so this limitation is critical to acknowledge.**

Because of these three reasons—retrospective study, perception-based responses, and no comparison/control group—there is a limited amount that we can say about YiA *causing* changes in youth outcomes. Rather, **our findings represent the role of YiA in youth socioeconomic and livelihood development from the perspective of YiA youth themselves.**

Youth's reported changes in daily income is particularly subject to imprecise measurement. We have data on income prior to YiA from less than half the sample, so our ability to detect a relation between gains in income and sociodemographic characteristics, months since completing YiA, YiA pathway chosen, and whether or not youth have children is limited. Likewise, we do not have detailed information about the specific week/month that youth had in mind when they responded, so we cannot adjust for fluctuations in currency or in youths' wages. We are assuming that they reported on their average daily income in the weeks/months immediately prior to YiA.

Discussion

Several months after completing YiA, we find marked improvements in socioeconomic and livelihoods outcomes. A greater percent of youth reported working, owning a business, and saving, and on average, youth reported a gain of 5,215 UXG (1.45 USD) in daily income. Youth reported increases in the types of emotional support received from their family, although on average they did not experience gains in material support from families. They were more likely to have a mentor after YiA, and received more types of support from mentors. Youth also reported greater autonomy in economic decision-making, and large gains in self-reported entrepreneurial skills. In general male and female youth reported similar outcomes, with a few exceptions. For example,

male youth made greater gains in terms of years of education than female youth, by about 6 months.

The most consistent predictors of self-reported changes in outcomes are household wealth and whether or not youth had children prior to YiA. Youth with greater household wealth at baseline experienced lesser gains in material support from their family and entrepreneurship skills, although there is weak evidence that they experienced greater gains in daily income. We do not have supporting evidence to explain this finding. However, it is possible that youth from wealthier households had more opportunities outside of YiA and so were not as engaged with the mentorship and entrepreneurship training as their peers from poorer households. This could also explain why these youth experienced slightly greater gains in daily income.

Youth who had children before YiA reported lower gains in autonomy in socioeconomic and livelihoods decisions. Once again, we have limited additional data with which to explain this finding.

The findings of this tracer study do not imply causality; we do not claim that YiA *caused* all these positive outcomes in youth. Given developmental and employment trajectories of youth in rural Uganda, we would expect that more youth would be working and earning higher amounts as they got older. However, comparison to national studies demonstrate that YiA youth may be doing better as compared to their peers when it comes to their socioeconomic status. The Uganda Bureau of Statistics provides detailed information on the demographic and socio-economic status of adolescents and youth in the country. Based on their data¹⁴ the average young person (15-30 years) in a rural area of the country earns approximately UGX 157,000/month (adjusted for inflation). The average YiA youth of 19 years reported earning approximately UGX 218,900/month. This means that the average YiA youth was earning approximately USD 17 more per month than his/her counterpart from a rural area of Uganda. Additionally, the same Bureau of Labor Statistics study notes that the unemployment rate among rural Ugandan youth is close to 13%. Among the YiA youth we surveyed, only 6% were not working at the time of the tracer survey.

These comparison, though coarse and non-precise, lead us to believe that the YiA project had a measureable positive effect on the lives of youth, especially from the perspective of the youth themselves. Youth reported that they were doing better on nearly all of the work readiness and socioeconomic indicators 11-43 months after completing the project. And, when compared to national youth trajectories, YiA youth reported being better off than their rural Ugandan peers in terms of employment and earnings.

¹⁴ Uganda Bureau of Statistics (2016). *Labour market transition of young people in Uganda: highlights of the School-to-Work Transition Survey 2015*. Uganda Bureau of Statistics: Kampala, Uganda.

Appendix A: Sociodemographic information of the sample

Table 17. Basic sociodemographic information, by sex

	Male youth	Female youth
Age in years (average)	19.5	19.6
Percent married before YiA***	11%	22%
Percent with children before YiA***	12%	52%
Percent married before YiA*	38%	47%
Percent with children after YiA***	33%	75%

~ $p < 0.10$. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

Table 18. Distribution of youth according to district

	Number of youth	Percent of total sample
Bundibugyo	137	27.73
Kasese	297	60.12
Ntoroko	60	12.15
Total	494	100

Table 19. Education completed before and after YiA, by sex

	Female Youth (n=244)		Male Youth (n=250)	
	Before YiA	After YiA	Before YiA	After YiA
No education	0%	0%	1%	0%
Some primary	54%	54%	58%	56%
Primary complete	23%	22%	20%	19%
Some junior secondary	20%	19%	18%	17%
Junior secondary complete	2%	4%	3%	5%
Tertiary	0%	1%	0%	3%
Years of education	6.4	6.5	6.2	6.6

Appendix B: Internal consistency reliabilities of composite indicators of socioeconomic and livelihoods outcomes

Table 20. Scale reliability coefficient (Alpha) for socioeconomic and livelihood outcome indices

	Before YiA	After YiA
Material support from family	0.59	0.61
Emotional support from family	0.56	0.57
Support from mentor	0.80	0.70
Autonomy in economic and livelihoods decisions	0.74	0.74
Entrepreneurial skills	0.92	0.86

Appendix C: Fitted estimates of equity analysis predicting self-reported change in socioeconomic and livelihoods outcomes

Fitted estimates in tables 21 through 25 are modelled as linear regression functions, with robust standard errors.

Table 21. Fitted estimates of the association between sociodemographic characteristics and reported changes in socioeconomic and livelihood outcomes

	Daily income (UXG)		Household assets		Savings amount (UXG)		Material support from family		Emotional support from family		Mentor support		Autonomy in economic decisions		Entrepreneurial skills	
	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD
Age in years	193.21 (470.28)	0.02	-0.05 (0.04)	-0.03	4996.99 (4664.58)	0.03	-0.04 (0.03)	-0.02	0.06~ (0.03)	0.05	0.05 (0.05)	0.03	-0.10* (0.04)	-0.06	0.05 (0.07)	0.02
Sex (male)	606.42 (1476.70)	0.05	-0.11 (0.15)	-0.07	-8970.07 (16940.42)	-0.05	-0.09 (0.14)	-0.06	0.05 (0.13)	0.05	0.11 (0.18)	0.07	-0.10 (0.16)	-0.06	-0.19 (0.27)	-0.06
Years of education	285.43 (334.97)	0.02	0.05~ (0.03)	0.03	3612.81 (4488.35)	0.02	0.11*** (0.03)	0.07	-0.05 (0.03)	-0.05	-0.01 (0.05)	-0.01	0.03 (0.04)	0.02	-0.01 (0.07)	-0.00
Household assets	1448.46~ (833.05)	0.12			15385.52~ (8471.00)	0.09	-0.60*** (0.09)	-0.37	-0.16* (0.07)	-0.14	-0.24* (0.11)	-0.15	-0.13 (0.08)	-0.07	-0.77*** (0.14)	-0.26
Constant	-873.49 (8798.05)	-0.07	1.51* (0.76)	0.93	8984.13 (86582.78)	0.05	0.99 (0.71)	0.61	-0.40 (0.56)	-0.35	-0.04 (0.92)	-0.02	3.28*** (0.79)	1.91	3.71** (1.38)	1.23
R ²	0.0201		0.00739		0.0175		0.133		0.0382		0.0246		0.0167		0.0645	
N	280		481		420		481		299		297		481		481	

~p<0.10. * p <0 .05. ** p <0 .01. *** p <0 .001.

Table 22. Fitted estimates of the association between months since completing YiA and reported changes in socioeconomic and livelihood outcomes, controlling for sociodemographic characteristics

	Daily income (UXG)		Household assets		Savings amount (UXG)		Material support form family		Emotional support from family		Mentor support		Autonomy in economic decisions		Entrepreneurial skills	
	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD
Age in years	221.13 (470.37)	0.02	-0.05 (0.04)	-0.03	4110.46 (4857.13)	0.02	0.08* (0.04)	0.07	0.06~ (0.03)	0.05	0.05 (0.05)	0.03	-0.09* (0.04)	-0.05	0.06 (0.07)	0.02
Sex (male)	619.66 (1483.37)	0.05	-0.12 (0.15)	-0.07	-9439.01 (16981.34)	-0.05	0.03 (0.13)	0.03	0.06 (0.13)	0.05	0.12 (0.18)	0.07	-0.10 (0.16)	-0.06	-0.20 (0.27)	-0.07
Years of education	284.62 (335.12)	0.02	0.06~ (0.03)	0.03	3914.63 (4551.78)	0.02	-0.02 (0.03)	-0.01	-0.05~ (0.03)	-0.05	-0.01 (0.05)	-0.01	0.03 (0.04)	0.02	-0.01 (0.07)	-0.00
Household assets	1447.36~ (833.30)	0.11			14985.61~ (8454.71)	0.09	-0.12* (0.06)	-0.11	-0.16* (0.07)	-0.14	-0.24* (0.11)	-0.15	-0.13 (0.08)	-0.07	-0.76*** (0.14)	-0.25
Months since completing YiA	-36.86 (98.65)	-0.00	0.01 (0.01)	0.00	958.93 (1008.88)	0.01	0.00 (0.01)	0.00	-0.00 (0.01)	-0.00	-0.01 (0.01)	-0.00	-0.00 (0.01)	-0.00	-0.00 (0.02)	-0.00
Constant	-605.59 (8942.77)	-0.05	1.43~ (0.76)	0.88	3449.70 (86691.07)	0.02	-1.39* (0.67)	-1.27	-0.36 (0.57)	-0.32	-0.01 (0.92)	-0.01	3.27*** (0.79)	1.91	3.65** (1.39)	1.21
R ²	0.0208		0.00899		0.0196		0.0323		0.0389		0.0259		0.0166		0.0641	
N	280		480		419		298		298		297		480		480	

~p<0.10. * p <0.05. ** p <0.01. *** p <0.001.

Table 23. Fitted estimates of the association between YiA pathway chosen and reported changes in socioeconomic and livelihood outcomes, controlling for sociodemographic characteristics

	Daily income (UXG)		Household assets		Savings amount (UXG)		Material support form family		Emotional support from family		Mentor support		Autonomy in economic decisions		Entrepreneurial skills	
	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD
Age in years	149.73 (469.41)	0.01	-0.04 (0.04)	-0.03	4795.99 (4691.93)	0.03	-2869.08 (4086.52)	-0.03	0.08* (0.04)	0.07	0.05 (0.05)	0.03	-0.10* (0.04)	-0.06	0.06 (0.07)	0.02
Sex (male)	1386.90 (1632.98)	0.11	-0.21 (0.17)	-0.13	-1009.33 (17753.90)	-0.01	415.10 (24790.00)	0.00	0.01 (0.13)	0.01	0.06 (0.19)	0.04	-0.17 (0.16)	-0.10	-0.45 (0.28)	-0.15
Years of education	286.09 (344.05)	0.02	0.05 (0.03)	0.03	3980.20 (4571.96)	0.02	8695.35~ (5167.70)	0.10	-0.02 (0.03)	-0.01	-0.00 (0.05)	-0.00	0.08~ (0.04)	0.04	0.02 (0.07)	0.01
Household assets	1176.71 (839.79)	0.09			14395.06~ (8548.78)	0.08	17993.23 (13545.44)	0.22	-0.12* (0.06)	-0.11	-0.22* (0.11)	-0.14	-0.13 (0.08)	-0.08	-0.73*** (0.14)	-0.25
Pathway: Vocational	-1093.49 (1949.49)	-0.09	0.35~ (0.19)	0.21	-40746.69* (18563.69)	-0.24	-36443.29 (30843.37)	-0.44	0.13 (0.17)	0.12	0.30 (0.26)	0.19	0.12 (0.20)	0.07	0.62~ (0.34)	0.21
Pathway: Apprenticeship	-4511.66*** (1166.86)	-0.36	-0.06 (0.30)	-0.04	-24565.56 (28542.42)	-0.14	-44039.89 (28883.61)	-0.53	-0.02 (0.28)	-0.02	0.48 (0.39)	0.30	0.27 (0.29)	0.16	0.96* (0.42)	0.33
Constant	277.11 (8686.11)	0.02	1.35~ (0.78)	0.82	20754.74 (87955.45)	0.12	-8514.38 (81387.00)	-0.10	-1.41* (0.68)	-1.28	-0.23 (0.92)	-0.14	3.21*** (0.79)	1.91	3.31* (1.39)	1.12
R ²	0.0297		0.0148		0.0321		0.133		0.0329		0.0351		0.0267		0.0802	
N	277		465		406		75		296		289		465		465	

~p<0.10. * p <0.05. ** p <0.01. *** p <0.001.

Table 24. Fitted estimates of the association between whether or not youth had children before participating in YiA and reported changes in socioeconomic and livelihood outcomes, controlling for sociodemographic characteristics

	Daily income (UXG)		Household assets		Savings amount (UXG)		Material support from family		Emotional support from family		Mentor support		Autonomy in economic decisions		Entrepreneurial skills	
	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD	Beta (S.E.)	Effect in SD
Age in years	246.86 (468.22)	0.02	-0.04 (0.04)	-0.02	4475.38 (5009.96)	0.03	0.07~ (0.04)	0.06	0.06~ (0.03)	0.05	0.05 (0.05)	0.03	-0.06 (0.04)	-0.04	0.07 (0.07)	0.02
Sex (male)	84.15 (2043.56)	0.01	-0.19 (0.18)	-0.12	-4621.07 (17250.82)	-0.03	0.07 (0.14)	0.06	0.05 (0.15)	0.05	0.05 (0.21)	0.03	-0.31~ (0.18)	-0.18	-0.36 (0.29)	-0.12
Years of education	254.70 (342.38)	0.02	0.05 (0.03)	0.03	3854.32 (4567.54)	0.02	-0.03 (0.03)	-0.02	-0.05~ (0.03)	-0.05	-0.02 (0.05)	-0.01	0.03 (0.04)	0.02	-0.02 (0.07)	-0.01
Household assets	1548.33~ (825.65)	0.12			14622.28~ (8674.82)	0.08	-0.13* (0.06)	-0.12	-0.16* (0.07)	-0.14	-0.23* (0.11)	-0.14	-0.10 (0.08)	-0.06	-0.74*** (0.14)	-0.25
Youth had children prior to YiA	-1048.14 (2167.21)	-0.08	-0.19 (0.19)	-0.12	9817.78 (21453.30)	0.06	0.13 (0.14)	0.12	0.01 (0.16)	0.01	-0.14 (0.23)	-0.09	-0.51* (0.20)	-0.30	-0.36 (0.32)	-0.12
Constant	-1065.24 (8659.55)	-0.08	1.42~ (0.76)	0.87	12131.58 (89539.52)	0.07	-1.12~ (0.66)	-1.03	-0.37 (0.56)	-0.32	-0.06 (0.95)	-0.04	2.91*** (0.79)	1.70	3.59* (1.39)	1.19
R ²	0.0206		0.00951		0.0182		0.0313		0.0382		0.0256		0.0302		0.0666	
N	279		480		419		298		298		296		480		480	

~p<0.10. * p <0.05. ** p <0.01. *** p <0.001.