



**Save the Children**



## **Youth in Action Burkina Faso Tracer Study**

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Jane Leer and Nikhit D'Sa, December 2017

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, 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 Burkina Faso the program aims to reach 4,500 rural youth in the Boucle du Mouhoun, Cascades, and Hauts-Bassins regions.

## 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 the YiA pathway chosen?

## Sample

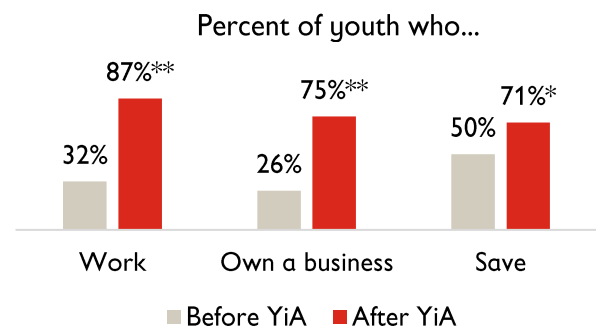
The tracer study sample consists of 204 youth (81 female, 123 male), ranging in age from 15 to 22 years old, with an average age of 19. On average youth in this sample completed YiA 26 months prior to data collection.

## 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 between male and female youth. To answer RQ2, we fit a series of multiple regression models to estimate the relation between sociodemographic characteristics, months since completing YiA, 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. In terms of the enabling environment, youth reported increases in the types of material and emotional support received from their family and greater support from mentors. They also reported greater autonomy in socioeconomic and livelihood decisions and increased entrepreneurial skills. Overall, outcomes are similar for male and female youth.



**RQ2:** Youth who participated in the Entrepreneurship pathway experienced greater gains in autonomy in economic decision-making relative to those who participated in the Apprenticeship pathway. Youth who had children prior to YiA experienced slightly smaller gains in household assets and material support from families.

## 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. Thus, rather than the impact of YiA, our findings represent the role of YiA in youth socioeconomic and livelihood development from the perspective of YiA youth themselves.

## Messages

1. Youth report significant gains in socioeconomic and livelihoods outcome several months after graduating YiA.
2. Holding age, sex, education and household assets constant, youth in the Entrepreneurship pathway experienced slightly greater gains than youth who chose the Apprenticeship pathway.
3. Youth who had children prior to YiA experienced slightly lower gains in household assets and materials support from families than those who did not have children.

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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, Burkina Faso, Ethiopia, Malawi, and Uganda. Reflected in the YiA Theory of Change, the program aims 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 Burkina Faso

The project in Burkina Faso aims to reach 4,500 youth in some of the most vulnerable and rural communities in the Boucle du Mouhoun, Cascades, and Hauts-Bassins regions of the country. The project targets youth between the ages of 14-18.

Like the other YiA countries, Burkina Faso follows a three-phase model of the program that rolls out over seven consecutive months. The first phase—selection—deals with the recruitment of rural youth to a program cohort. Community advisory groups help the program recruit and select youth for the program, coordinating the mobilization events and screening process. The second phase—learning—consists of a four-month curriculum focused on foundational literacy, numeracy, financial literacy, and transferable skills.

The last phase—action—lasts for three months. In this phase youth apply the skills from the learning phase to a pathway option that allows for active and mentored learning. In Burkina Faso, youth focus on either a self-employment/entrepreneurship activity or take up an apprenticeship with a local expert. Youth are supported with USD 94 each.

### 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. The 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 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 guidance<sup>1</sup> on designing a tracer study, we asked youth a similar set of questions that require youth to reflect back on their socioeconomic and livelihood status both before starting YiA and at present.

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 themselves.*

### 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 and the number of months that have passed since they completed YiA activities. 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 the YiA pathway?

### Measures

The Tracer Study focuses on outcome areas that are aligned with the YiA Theory of Change and the Learning Framework. The table below provides a mapping of the main outcome areas and describes how the Tracer Study outcomes link to the YiA Learning Framework<sup>2</sup>.

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

**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 socio-economic status at endline over baseline
Income	Amount of income and productive assets Use of Income	

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

<sup>2</sup> The full survey is available upon request, please contact Nikhit D'Sa at [ndsa@savechildren.org](mailto:ndsa@savechildren.org).

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?

## Sample

Because this study is focused on the 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 Burkina Faso, a 5 percent margin of error, 95 percent confidence interval, and a 50 percent response distribution, the Tracer Study sample size was designed to be 200 youth in Burkina Faso.

The Burkina Faso country team used a stratified random sampling approach. After creating a list of all project graduates who had completed the project 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 400 youth for the Where are they Now List (WNL). After creating the WNL the team tracked down the first 200 youth from the list and collected the tracer study data from them.

Because of over-sampling and issues in mobilizing youth or data collection, the team was able to collect data from **204 youth (81 female, 123 male), ranging in age from 15 to 22 years old, with an average age of 19**. The fact that the final sample is 60% male and 40% female means that our findings are more



representative of how male youth experienced YiA, and there may be important differences in how female versus male youth experienced YiA that we are not able to capture.

Table 2 describes the distribution of youth in the Tracer Study sample according to YiA pathway chosen and cohort (time in months since graduating YiA).<sup>3</sup> The majority of youth participating in YiA in Burkina Faso chose the Entrepreneurship pathway (69%).

Table 3 presents the distribution of the sample according to education level. All 204 youth surveyed in the Tracer Study reported the same years of education before and after YiA, which makes sense considering YiA in Burkina Faso did not include a Back to School Pathway option. About half of the sample has no education, and none have completed secondary school. The average years of education is 2.1 (2.5 for female youth and 2.0 for male youth, although this difference is not statistically significant).

**Table 2. Months Since Completing YiA and YiA Pathway Chosen**

<b>YiA Cohort</b>		
	Percent of Female Youth	Percent of Male Youth
23 months	22%	17%
25 months	48%	54%
30 months	30%	29%
Total	100%	100%
N	81	123
<b>YiA Pathway Chosen</b>		
	Percent of Female Youth	Percent of Male Youth
Entrepreneurship	72%	67%
Apprenticeship	28%	33%
Total	100%	100%
N	81	123

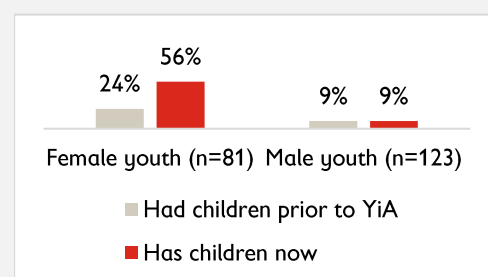
**Table 3. Years of education**

	<b>Female Youth</b>	<b>Male Youth</b>
No education	56%	55%
Some primary	18%	29%
Primary complete	13%	11%
Some secondary	14%	6%
Years of education completed	2.5	2.0
N	81	123

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

### What percent of youth in this sample are parents?

The percent of female youth who reported having children now (after YiA) is significantly greater than the percent who reported having children prior to YiA. Among male youth, there was no increase in the percent who have children before YiA and now, and after YiA male youth are significantly less likely to have children than female youth ( $p < 0.01$ ).



The percent who reported being married also increased, from 26% to 56% for female youth, and from 4% to 16% for male youth.

<sup>3</sup>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.



## 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.

#### 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.

**32% of youth said they were working before YiA, and 87% said they are currently working.** In addition, **26% reported owning a business prior to YiA, compared to 75% who reported owning a business now.** Both of these differences are statistically significant at  $p < 0.01$ .

**There is no difference between male youth and female youth in the percent who worked or owned a business before or after YiA.**

Among the sample of youth who worked both before and after YiA, there are no important changes in the number of kinds of work youth were engaged in. Overall, before and after YiA, roughly 30% were engaged with one kind of work and 70% were engaged in seasonal or multiple kinds of work.

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

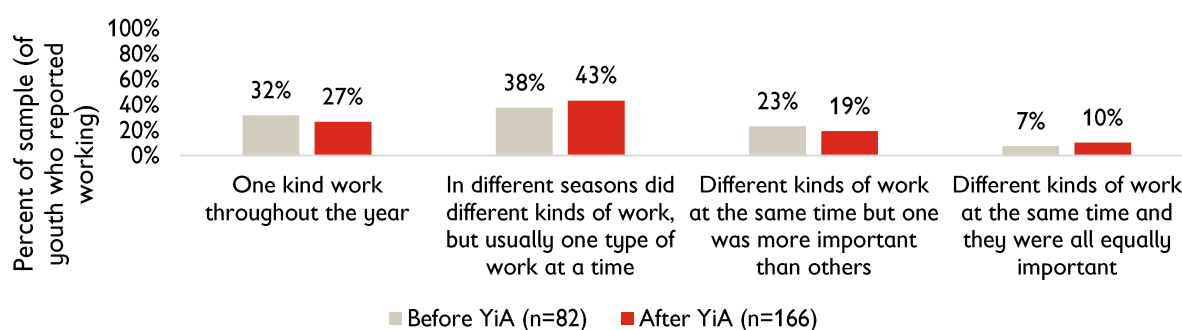


Table 4 present the types of work (i.e., sector) that youth were engaged in before and after YiA. Female youth were more likely than male youth to work in trading phytosanitary products (phytopharmaceuticals or pesticides) and after YiA female youth are more likely to work in domestic support and catering than male youth. Male youth were more likely than female youth to work in agriculture, both before and after YiA. **Both female and male youth reported being engaged in more kinds of work after YiA** (1.9 kinds of work before, to 2.4 kinds after;  $p < 0.001$ ).

**Table 4. Types of work youth 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 own a business <sup>4</sup>	66%	64%		90%	88%	
Agriculture	59%	80%	*	61%	79%	*
Trading agriculture	24%	20%		22%	22%	
Animal rearing	10%	29%		64%	67%	
Animal trading	7%	16%		28%	28%	
Automotive	0%	4%		0%	5%	
Construction	0%	4%		0%	1%	
Cosmetology	3%	2%		6%	3%	
Domestic	7%	2%		22%	6%	***
Electric	3%	0%		1%	1%	
Garments	0%	2%		3%	6%	
Mining	0%	9%		0%	7%	*
Sales	21%	13%		28%	9%	***
Transport	0%	2%		0%	2%	
Trade in phytosanitary products	24%	0%	***	9%	1%	**
Catering	10%	5%		19%	5%	**
Other	0%	0%		0%	0%	
Number of kinds of work	1.9	1.9		2.7	2.4	
N	29	55		67	105	

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

### Income and household assets

Average self-reported income before YiA was 274 CFA (adjusted for inflation to be comparable to 2017 CFA currency values) and 474 CFA after ( $p < 0.001$ )<sup>5</sup>. This corresponds to roughly 0.50 USD before YiA and 0.87 USD after.

<sup>4</sup> Percent who own a business in Table 4 corresponds to the percent of youth who are reported working before and after YiA who own a business, not the total percent of youth who own a business. Owning a business is not considered in the total number of types of work.

<sup>5</sup> Income prior to YiA was converted to 2017 CFA using the formula  $P_n = P(1+i)^n$ ; where  $P_n$  = inflation adjusted income,  $P$  = reported income prior to YiA,  $i$  = annual inflation rate (2013-2017, estimated at 0.17%), and  $n$  = amount of years that have passed since youth completed YiA (calculated by dividing the number of months out of YiA by 12).

**Table 5. Youth's self-reported daily income, full sample**

	Daily income before YiA		Daily income after YiA	
	CFA	USD	CFA	USD
Mean	274.02	0.50	474.46	0.87
Standard deviation	482.90	0.88	1037.32	1.90
N	73	73	152	152

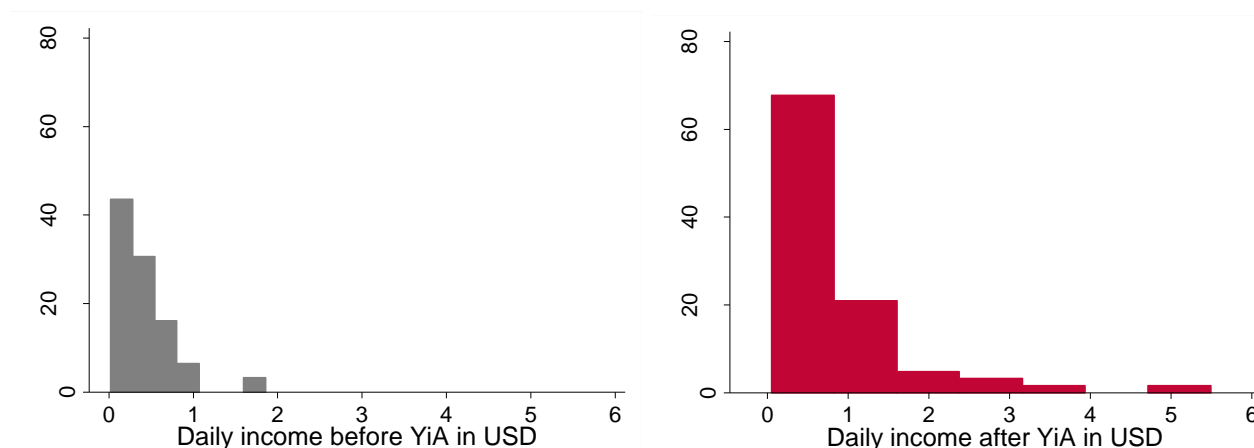
In order to calculate self-reported gains in income, we restrict our sample to include only those youth who worked both before and after YiA (n=62). For these youth, **the average gain in daily income is 219 CFA (0.40 USD)**, statistically significant at  $p < 0.01$ .

**Table 6. Youth's self-reported daily income, youth who worked before and after YiA**

	Daily income before YiA		Daily income after YiA		Gain in daily income***	
	CFA	USD	CFA	USD	CFA	USD
Mean	217.45	0.40	436.47	0.80	219.01	0.40
Standard deviation	184.67	0.34	501.62	0.92	486.49	0.89
N	62	62	62	62	62	62

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

**Figure 2. Distribution of youth according to self-reported daily income before and after YiA**



N=62 youth who reported income before and after YiA.

**There is no difference in reported daily income between male youth and female youth before or after YiA.**

It should be noted that the income data are limited in terms of precision and the extent to which they are representative of the population of youth who participated in YiA. This is because we rely on youth recall, without attempting to verify self-reported income. Likewise, the inflation adjustments are based on the average annual inflation rate, which means we cannot account for monthly/weekly fluctuations. Finally, we only have data on gains in income for about 30% of the sample, since only about 30% worked before and after YiA.

Considering these limitations, we also asked youth about household assets, including access to land, tools, and animals as well as the types of household possessions they had before and after YiA. 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 13 total items, see table 7). **On average youth had 8-9 of 16 household items before YiA, and 9 to 10 after ( $p < 0.001$ ). There is no difference in reported household wealth between male and female youth.**

These data may provide a more reliable estimate of changes in youths' economic wellbeing, given that unlike the income data, this analysis draws from the full sample of 204 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 him or herself. To this end, changes in household wealth are likely related to factors external to YiA.

**Table 7. Household assets before and after YiA**

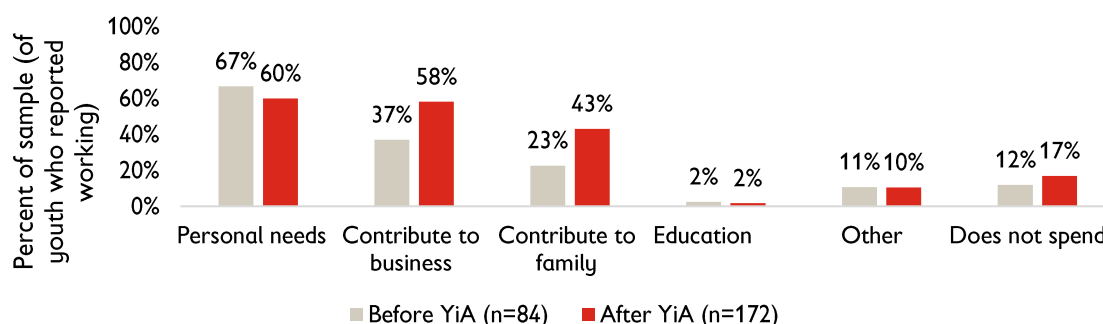
	Before YiA	After YiA
<u>Family owns or has access to...</u>		
Land	94%	97%
Animals	89%	97%
Tools or machines for business	93%	94%
<u>Household has...</u>		
Electricity	22%	32%
Water from faucet	3%	5%
Tin roof	90%	93%
Indoor toilet	39%	49%
Separate kitchen in house	80%	91%
Television	45%	60%
Satellite or cable TV	15%	22%
Land telephone	7%	6%
Mobile phone	89%	99%
Refrigerator	5%	5%
Bicycle	97%	99%
Motorcycle	76%	82%
Car, van or truck	4%	5%
Total of 16 possessions***	8.5	9.4***
N	204	204

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

### Spending and saving

Youth who reported working were asked how they spend the money they earn, and all youth were asked about their savings practices. In terms of spending practices, 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 4.

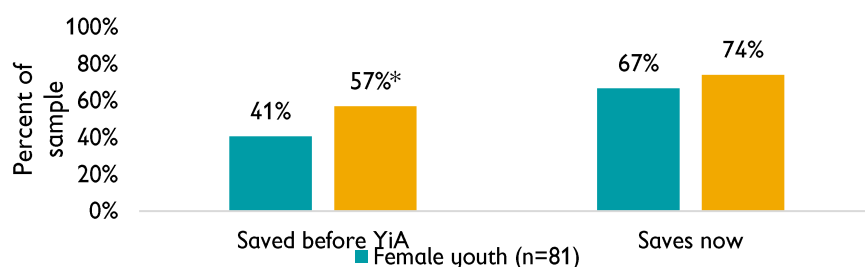
**Figure 3. Youth spending practices**



There are no differences in spending practices between male and female youth. This is likely explained at least in large part by the fact that only 29 female youth and 55 male youth reported working before YiA.

Savings practices increased significantly, both in terms of the percent of youth who reported saving and the amount saved. **71% reported saving after YiA, compared to 50% who said they saved before YiA** ( $p < 0.05$ ). **Compared to female youth, male youth were more likely to save before YiA, but after YiA this gap has largely closed and is no longer statistically significant**, as shown in Figure 4 below.

**Figure 4. Percent of youth who saved before and after YiA, by sex**



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

In terms of the amount saved, **the average savings increased from 2,943 inflation-adjusted CFA (5.40 USD) to 6,412.20 CFA (11.70 USD)** ( $p < 0.05$ ). There is no difference in the amount of saving between female and male youth.

**Table 8. Savings amount<sup>6</sup>**

	Savings before YiA		Savings after YiA		Gain in savings*	
	CFA	USD	CFA	USD	CFA	USD
Mean	1,370.54	2.51	6,412.23	11.74	4,785.07	8.76
Standard deviation	2,372.53	4.35	9,009.20	16.50	9,508.34	17.41
N	189	189	139	139	130	130

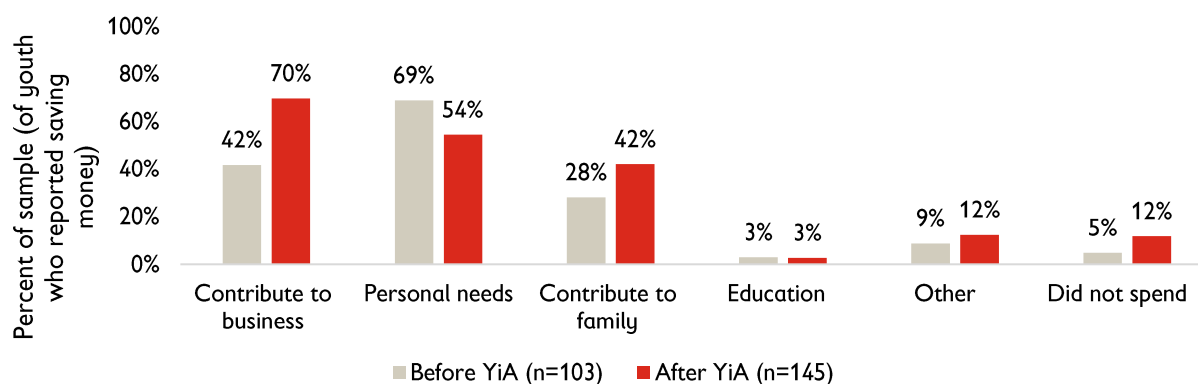
\*  $p < 0.05$ . \*\*  $p < 0.01$ . \*\*\*  $p < 0.001$

**Youth used the money they saved primarily to contribute to business (especially after YiA), personal needs, and contribute to family.** There is no difference in how male and female youth spend the money they save.

<sup>6</sup> Youth who did not save before or after YiA are included with a 0 value for savings amount.

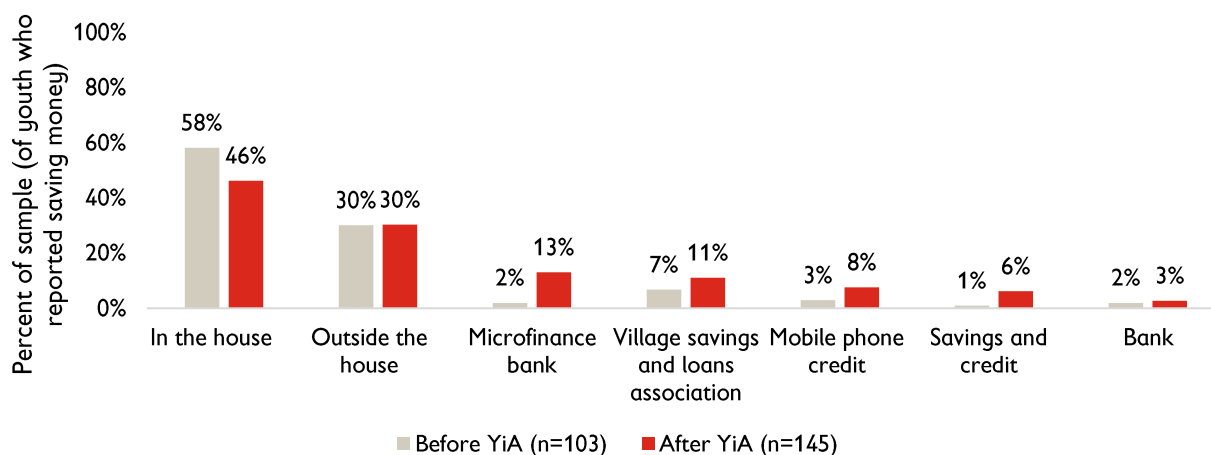


**Figure 5. How youth spend saved money**



The majority of youth who reported saving do so at home or somewhere outside the house, although after YiA more youth reported using microfinance banks, village savings and loans groups (VSLA), mobile phone credit, and savings and credit. There is no difference in where male versus female youth save their money.

**Figure 6. Where youth save**



### Support from family

Support from family is conceptualized in three ways: financial support, material support, and emotional support.

In terms of **financial support**, 45% of youth reported receiving money from their family prior to YiA, compared to 62% after; this difference is practically but not statistically significant. **After YiA, a greater percentage of female youth reported receiving financial support from their families (73% of female youth versus 55% of male youth,  $p < 0.05$ ).**

Given the limited number of youth (27) 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 for the significance in gains, and we find no difference between male and female youth in terms of the amount of financial support received.

**Table 9. Amount of financial support from families**

	Amount family gave before YiA		Amount family gave after YiA	
	CFA	USD	CFA	USD
Mean	2326.08	4.26	3253.77	5.96
Standard deviation	2970.60	5.44	6444.05	11.80
N	38	38	106	106

**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. **We find a significant increase in number of types of material support from families before and after YiA, from 2.4 to 3.1 types of support ( $p < 0.001$ ).**

**Table 10. Material support from family**

	Before YiA	After YiA
Family gives land	63%	76%
Family gives space	64%	88%
Family gives tools	63%	82%
Family gives animals	49%	60%
Number of types of material support from family (of 4)***	2.4	3.1
N	83	172

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

**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. As in material support, we created an index of emotional support, defined as the number of types of emotional support received (of 4). Again, 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 emotional support before and after YiA. **Youth reported greater emotional support from their family after YiA, from 3.0 to 3.7 types of emotional support ( $p < 0.01$ ).**

**Table 11. Emotional support from family**

	Before YiA	After YiA
Family helped learn skills	69%	81%
Family supported ideas	86%	98%
Family gave time	80%	97%
Family helps manage	68%	91%
Number of types of emotional support from family (of 4)**	3.0	3.7
N	83	172

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

There were no differences between female and male youth in reported material support or emotional from family.

## Support from mentors

Youth were also asked about support from a mentor. **Youth were much more likely to have a mentor after participating in YiA. 30% said that they had a mentor before YiA, compared to 83% 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 both before and after YiA. Most of the mentors were relatives or friends, although after YiA a greater percent of youth said their mentor was a CBO/NGO worker or extension worker from the MSE.

**Table 12. Relationship between mentors and youth**

	Before YiA	After YiA
Relative	54%	43%
Friend	13%	6%
Community member	26%	28%
CBO or NGO worker	2%	7%
Teacher or facilitator	5%	2%
Extension worker from MSE	0%	11%
N	61	169

We also asked youth 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). This is the outcome we use to test for a statistical difference in overall support from mentors before and after YiA. **On average youth reported about one additional type of support from their mentor after YiA, a small but statistically significant gain.** There is no difference in reported support from mentors between male and female youth.

**Table 13. Support from mentor**

	Before YiA	After YiA
Mentor shares information	59%	88%
Mentor provides emotional support	64%	94%
Mentor builds confidence	62%	95%
Mentor teaches skills	61%	96%
Youth can go to mentor for advice	69%	93%
Number of types of mentor support (of 5) <sup>***</sup>	3.2	4.7
N	61	169

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

## Autonomy in economic decision-making

We operationalize 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).<sup>7</sup>

<sup>7</sup> 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.

**On average, youth reported having a say in one decision prior to YiA, and two after YiA.** 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. There is no difference in autonomy between male and female youth.

**Table 14. Youth decision making**

Youth decides:	Before YiA	After YiA
...the kind of work s/he should do	19%	51%
...how to spend money	24%	61%
...where to save	28%	34%
...how to spend saved money	31%	56%
Number of decisions made by youth (of 4)***	1.0	2.0
N	204	204

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

### Entrepreneurial skills

To assess self-reported entrepreneurial skills, youth were asked if they knew how to do a series of eight activities (see table 17). 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, 88% or more feel competent.**

Similar to the support and autonomy variables, 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), and used this to test the significance of reported gains before and after YiA. **On average youth reported having 1 to 2 entrepreneurial skills, compared to about 7 after YiA** ( $p < 0.001$ ).

**Table 15. Youth skills**

Percent who respond “agree or strongly agree” when asked if they know how to...	Before YiA	After YiA
Create a business plan	13%	81%
Identify customers and competitors for a business	25%	86%
Plan a business for different seasons	20%	88%
Decide the best price at which to sell an item	35%	92%
Identify places to get money to start or grow a business	23%	82%
Budget money for your business and personal life	23%	84%
Identify how much money you need to start a business	30%	90%
Track how much money you spend and on what	25%	85%
Number of entrepreneurial skills (of 8)***	1.94	6.89
N	204	204

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

**Male youth reported slightly more skills than female youth after YiA** (7.1 compared to 6.6,  $p < 0.05$ ).

## 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, months since completing YiA, and reported changes in socioeconomic and livelihoods outcomes. Table 16 describes the outcomes and Appendix C presents the fitted estimates.<sup>8</sup> Several of these outcomes only apply for youth who worked before and after YiA (change in daily income, change in material support from family, and change in emotional support from family). Change in mentor support only applies to those youth who had a mentor before or after YiA. This results in a smaller analytic sample for these outcomes, meaning the regression models lack statistical power, and findings are not necessarily representative of the population of youth who participated in YiA in Burkina Faso but rather just those who worked before and after, and who had a mentor before and after.

**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 CFA	219.01	486.49	-515.3	2695.4	62
Change in household assets	Difference in self-reported household assets before and after YiA, of 13	0.75	1.26	-2.0	5.0	204
Change in savings	Difference in self-reported savings amount before and after YiA, in 2017 CFA	4,785.07	9,508.34	-1	4	130
Change in material support from family	Difference in the number of types of material support received from family before and after YiA, of 4	0.65	1.18	-1.0	4.0	79
Change in emotional support from family	Difference in the number of types of emotional support received from family before and after YiA, of 4	0.54	1.52	-4.0	4.0	79
Change in mentor support	Difference in the number of types of support received from mentors before and after YiA, of 5	1.44	2.27	-5.0	5.0	57
Change in autonomy in economic decision making	Difference in the number of decisions about work and how to spend and save money that youth	1.01	1.53	-2.0	5.0	204

<sup>8</sup> We do not include change in financial contribution from family as an outcome variable in the regression analysis because there are only 27 youth who reported the amount of financial contribution they received from their family before and after YiA.



	make before and after YiA, of 4					
Change in entrepreneurial skills	Difference in the number of entrepreneurial skills youth say they have before and after YiA, of 8	4.95	3.00	-8.0	8.0	204

In the first set of models, we estimate the association between youths' sociodemographic characteristics and the changes they reported by modelling these changes as a linear function of *age in years*, *sex*, and *years of education prior to YiA*.<sup>9</sup> Only two factors that significantly predict changes in outcomes. **Years of education is associated with greater increase in household wealth.** Each additional year of education is associated with a small increase in household wealth (less than one additional household asset) ( $p < 0.05$ ). In other words, youth with more years of education experienced slightly greater gains in household wealth. **Age is associated with changes in savings amount – older youth made slightly greater gains in savings than younger youth.**

Next, we estimated the association between the amount of time in months that has passed since youth completed YiA and the changes they reported, controlling for the above sociodemographic characteristics (age, sex, and educational attainment) and household wealth. **We find no relation between months after 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.** However, an important caveat is that there is limited variation in the tracer study sample in terms of the amount of time since completing YiA (19% of the sample has been out for 23 months, 51% has been out for 25 months, and 29% has been out for 30 months). There may be a relation between time since completion and reported changes that we cannot detect with this data.

In the third set of models, we estimated the association between the YiA pathway youth chose (Entrepreneurship or Apprenticeship) and their reported outcomes, controlling for sociodemographic characteristics. **Relative to youth who chose the Entrepreneurship pathway, youth in the Apprenticeship pathway experienced slightly lower gains in savings amount and autonomy.** This association corresponds to about 3,803 CFA less in savings (7 USD), and one less economic decision youth reported made by youth themselves.

Finally, we explored how youths' reported changes vary depending on whether or not they had children before they started YiA. **Controlling for sociodemographic characteristics, we found that youth who had children before YiA reported lower gains in household wealth and material support from their families.** To clarify, on average, youth who had children prior to YiA *did* report gains, but these gains were smaller than those for youth who were not parents prior to YiA. In practical terms these differences are small, equivalent to about one fewer household asset ( $p < 0.001$ ) or type of emotional support from families ( $p < 0.05$ ). Regardless, only 10% of the sample (21 youth) had children prior to YiA, so the fact that we have found any significant relation between having children and outcomes is telling.

## 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 (20-30 months after completing YiA). In this sense, **we rely on**

<sup>9</sup> Change in household assets is also an outcome (dependent) variable. For this regression model, we do not include household assets prior to YiA as an independent variable.

**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 even 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 livelihoods 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/income as they mature, regardless of intervention, so this limitation is critical acknowledge.

Because of these three reasons—retrospective study, experience-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 (although, it is worth noting that inflation as minimal in Burkina Faso during the time since youth entered (2015) YiA to present (2017), less than 1 percentage point).

Finally, **the Burkina Faso tracer study is 60% male and 40% female.** This minor gender imbalance means that the findings speak more to male youth's experiences in YiA than females', and there may be differences in outcomes between male and female youth that the tracer study data cannot identify.

## 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 after YiA. Self-reported gains in income were small but significant (219 CFA, or 0.40 USD), and youth also reported a significant gain in household assets after YiA. In terms of the enabling environment, youth reported increases in the types of material and emotional support received from their family. They were more likely to have a mentor after YiA, and received greater support from mentors. Finally, youth reported greater autonomy in socioeconomic and livelihood decisions, and there are large gains in self-reported entrepreneurial skills. These results are consistent regardless of the amount of time that has passed since youth completed YiA.

Our findings suggest that **male and female youths' socioeconomic and livelihoods experiences before and after YiA were similar, with a few exceptions.** First, male youth were more likely to save



**money before YiA, but after YiA this gap has closed**—we find no significant difference in the percent of male versus female youth who reported saving money after YiA. Second, **after YiA, a greater percentage of female youth reported receiving financial support from their families.** Finally, **male youth reported more entrepreneurial skills than female youth after YiA,** although the magnitude of this difference is small (7.1 types of skills for male youth, versus 6.6 types of skills for female youth).

Holding age, education, and household wealth constant, **youth who participated in the Entrepreneurship pathway experienced greater gains in savings amount and autonomy in economic decision-making relative to those who participated in the Apprenticeship pathway.** We hypothesize that this difference is because of the varying amounts of time that youth in the different pathways spend on starting their own business. Youth who chose the Apprenticeship pathway spend more time developing technical skills; however, those who chose the Entrepreneurship pathway start their business while in the action phase and so start accumulating a regular income and savings much earlier. It is likely that if we were to return after even more time has passed, the difference between youth in the two pathways will have mostly vanished.

Meanwhile, compared to youth without children before YiA, **youth who had children prior to YiA experienced slightly smaller gains in household assets and material support from their families.** We do not have a strong hypothesis to explain this finding. It is possible that youth who had children prior to YiA had more commitments outside of their business. This may mean that family members were more cautious when providing them with material support or helping them grow their household assets.

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 Burkina Faso, 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. Burkina Faso's Ministry of Youth, Training and Professional Development provides detailed information on the demographic and socio-economic status of youth (15-35 years) in the country, albeit the last survey for which data is available is from 2015.

Based on the 2015 data<sup>10</sup> the overall youth employment rate in the country is 63%, with the youth employment rate in the YiA regions being as follows: Boucle du Mouhoun: 64%, Cascades: 77%, and Hauts-Bassins: 60%. 32% of YiA youth across these three regions said they were working before YiA, and 87% said they are currently working. In other words, the average YiA youth of 19 years struggled with unemployment before YiA; however, several months after YiA youth who attended the program were more likely to have decent work than their counterparts in their communities who had not attended the program.

This comparison, though coarse and non-precise, leads 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 23-30 months after completing the project. And, when compared to national employment trajectories, YiA youth reported a higher rate of employment than the regional or national average.

<sup>10</sup> Ministère de la jeunesse, de la formation, et de l'insertion professionnelles (2015). Annuaire statistique 2015. Retrieved from [http://cns.bf/IMG/pdf/annuaire\\_statistique\\_2015\\_mjfp.pdf](http://cns.bf/IMG/pdf/annuaire_statistique_2015_mjfp.pdf)

## Appendix A: Sociodemographic information of the sample

**Table 17. Distribution of the sample according to district**

	Number of Youth	Percent
Cascades	64	31%
Hauts Bassins	61	30%
Mouhoun	79	39%
Total	204	100%

**Table 18. Basic sociodemographic information, by sex**

	Female youth	Male youth	p-value
Age in years (average)	19.43	19.44	
Years of education completed	2.468	1.967	
Percent married before YiA	0.259	4%	***
Percent with child(ren) before YiA	21%	3%	***
Percent married after YiA***	0.593	16%	***
Percent with child(ren) after YiA**	0.556	9%	***
N	81	123	

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

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

*Table 19. Scale reliability coefficient (Alpha) for socioeconomic and livelihood outcome indices*

	<b>Before YiA</b>	<b>After YiA</b>
Material support from family	0.68	0.61
Emotional support from family	0.74	0.53
Support from mentor	0.91	0.85
Autonomy in economic and livelihoods decisions	0.77	0.80
Entrepreneurial skills	0.88	0.87



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

Fitted estimates in tables 16 through 19 are modelled as linear regression functions, with robust standard errors.

**Table 20. Fitted estimates of the association between sociodemographic characteristics and reported changes in socioeconomic and livelihood outcomes**

	Daily income (CFA)		Household assets		Savings amount		Material support from family		Emotional support from family		Mentor support		Autonomy		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	-14.25 (57.20)	-0.03	0.10 (0.08)	0.07	1442.08** (536.15)	0.15	0.08 (0.09)	0.07	0.20 (0.16)	0.13	-0.01 (0.22)	-0.01	0.11 (0.07)	0.07	0.18 (0.12)	0.06
Sex (male)	-94.99 (146.32)	-0.19	0.11 (0.21)	0.08	-1013.38 (1949.44)	-0.10	-0.45 (0.32)	-0.37	-0.04 (0.44)	-0.02	0.84 (0.87)	0.36	-0.11 (0.24)	-0.07	-0.04 (0.49)	-0.01
Years of education	-14.92 (23.68)	-0.03	0.08* (0.03)	0.06	311.25 (294.19)	0.03	0.06 (0.06)	0.05	0.03 (0.08)	0.02	0.04 (0.11)	0.02	0.02 (0.04)	0.01	0.09 (0.08)	0.03
SES	1.87 (91.35)	0.00			-808.55 (1124.93)	-0.08	-0.29 (0.19)	-0.24	-0.37 (0.24)	-0.24	0.10 (0.31)	0.04	-0.08 (0.10)	-0.05	-0.21 (0.23)	-0.07
Constant	618.71 (1174.11)	1.23	-1.27 (1.48)	-0.93	-23295.09* (10804.46)	-2.38	-0.76 (1.90)	-0.62	-3.28 (3.31)	-2.11	1.13 (4.56)	0.48	-1.12 (1.37)	-0.72	1.32 (2.41)	0.44
R <sup>2</sup>	0.0124		0.0411		0.0659		0.0997		0.0745		0.0237		0.0184		0.0211	
N	57		187		119		73		73		51		187		187	

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

**Table 21. Fitted estimates of the association between months since completing YiA and reported changes in socioeconomic and livelihood outcomes, controlling for sociodemographic characteristics**

	Daily income (CFA)		Household assets		Savings amount (CFA)		Material support form family		Emotional support from family		Mentor support		Autonomy		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	-13.61 (58.23)	-0.03	0.09 (0.08)	0.07	1426.48** (527.00)	0.15	0.08 (0.09)	0.07	0.20 (0.16)	0.13	0.01 (0.24)	0.00	0.10 (0.07)	0.06	0.18 (0.12)	0.06
Sex (male)	-90.68 (153.01)	-0.18	0.10 (0.21)	0.07	-1027.11 (1933.45)	-0.10	-0.48 (0.32)	-0.40	-0.03 (0.45)	-0.02	0.90 (0.94)	0.38	-0.13 (0.24)	-0.09	-0.04 (0.49)	-0.01
Years of education	-13.52 (23.63)	-0.03	0.07* (0.03)	0.05	388.29 (286.53)	0.04	0.04 (0.06)	0.04	0.03 (0.08)	0.02	0.05 (0.11)	0.02	0.01 (0.04)	0.01	0.10 (0.08)	0.03
SES	-0.73 (92.46)	-0.00			-692.87 (1092.20)	-0.07	-0.26 (0.19)	-0.22	-0.38 (0.23)	-0.25	0.13 (0.34)	0.05	-0.09 (0.10)	-0.06	-0.21 (0.23)	-0.07
Months since completing YiA	-4.43 (17.38)	-0.01	0.05 (0.04)	0.03	-554.68~ (308.99)	-0.06	0.06 (0.05)	0.05	-0.01 (0.07)	-0.01	-0.04 (0.15)	-0.02	0.08~ (0.04)	0.05	-0.03 (0.09)	-0.01
Constant	716.08 (1199.99)	1.42	-2.27 (1.62)	-1.66	-8543.67 (10612.19)	-0.87	-2.12 (1.98)	-1.74	-2.93 (3.49)	-1.89	1.56 (4.98)	0.66	-2.98~ (1.51)	-1.93	2.00 (3.18)	0.66
R <sup>2</sup>	0.0129		0.048		0.0887		0.114		0.0751		0.0251		0.0384		0.0218	
N	57		4 187		119		73		73		51		187		187	

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

**Table 22. Fitted estimates of the association between YiA pathway chosen and reported changes in socioeconomic and livelihood outcomes, controlling for sociodemographic characteristics**

	Daily income (CFA)		Household assets		Savings amount (CFA)		Material support form family		Emotional support from family		Mentor support		Autonomy		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	-11.72 (67.61)	-0.02	0.09 (0.08)	0.07	1382.43** (527.26)	0.14	0.05 (0.08)	0.04	0.16 (0.16)	0.10	-0.10 (0.24)	-0.04	0.09 (0.07)	0.06	0.18 (0.12)	0.06
Sex (male)	-95.74 (148.51)	-0.19	0.13 (0.22)	0.09	-636.85 (1932.72)	-0.07	-0.46 (0.32)	-0.38	-0.06 (0.44)	-0.04	0.83 (0.92)	0.36	-0.07 (0.24)	-0.04	-0.04 (0.49)	-0.01
Years of education	-14.88 (23.80)	-0.03	0.08* (0.03)	0.06	265.59 (297.44)	0.03	0.06 (0.05)	0.05	0.03 (0.08)	0.02	0.04 (0.12)	0.02	0.02 (0.04)	0.02	0.09 (0.08)	0.03
SES	-1.38 (106.35)	-0.00			-1009.53 (1154.49)	-0.10	-0.24 (0.19)	-0.20	-0.32 (0.24)	-0.20	0.12 (0.30)	0.05	-0.07 (0.10)	-0.04	-0.21 (0.23)	-0.07
YiA Pathway (Apprenticeship)	36.48 (229.73)	0.07	-0.21 (0.22)	-0.16	-3868.78* (1683.54)	-0.40	-0.48 (0.29)	-0.39	-0.59 (0.37)	-0.38	-0.83 (0.69)	-0.36	-0.61** (0.22)	-0.39	-0.06 (0.45)	-0.02
Constant	561.48 (1386.11)	1.11	-1.06 (1.48)	-0.77	-21263.44* (10607.85)	-2.17	-0.01 (1.76)	-0.01	-2.35 (3.45)	-1.51	3.09 (5.06)	1.32	-0.49 (1.41)	-0.32	1.38 (2.49)	0.46
R <sup>2</sup>	0.0133		0.0461		0.0951		0.126		0.0992		0.0504		0.0504		0.0212	
N	57		187		119		73		73		51		187		187	

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

**Table 23. Fitted estimates of the association between having children prior to YiA and reported changes in socioeconomic and livelihood outcomes, controlling for sociodemographic characteristics**

	Daily income (CFA)		Household assets		Savings amount (CFA)		Material support from family		Emotional support from family		Mentor support		Autonomy		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	-8.88 (58.61)	-0.02	0.15* (0.08)	0.11	1671.26** (553.50)	0.17	0.10 (0.09)	0.08	0.20 (0.16)	0.13	-0.01 (0.23)	-0.00	0.12~ (0.07)	0.08	0.25* (0.12)	0.08
Sex (male)	-126.89 (168.23)	-0.25	-0.14 (0.23)	-0.10	-2083.15 (2143.48)	-0.21	-0.62~ (0.35)	-0.50	-0.09 (0.47)	-0.06	0.68 (1.12)	0.29	-0.16 (0.25)	-0.11	-0.41 (0.53)	-0.13
Years of education	-18.66 (26.08)	-0.04	0.06~ (0.03)	0.05	239.29 (305.45)	0.02	0.05 (0.06)	0.04	0.02 (0.08)	0.02	0.03 (0.13)	0.01	0.03 (0.04)	0.02	0.08 (0.08)	0.03
SES	15.58 (96.52)	0.03			-686.86 (1141.50)	-0.07	-0.26 (0.20)	-0.21	-0.37 (0.25)	-0.24	0.12 (0.31)	0.05	-0.05 (0.10)	-0.03	-0.21 (0.24)	-0.07
Parent before YiA	-201.90 (197.18)	-0.40	-1.06*** (0.26)	-0.77	-4254.23 (2908.32)	-0.43	-0.80* (0.39)	-0.66	-0.24 (0.44)	-0.15	-0.50 (1.04)	-0.21	-0.42 (0.46)	-0.28	-1.65~ (0.89)	-0.54
Constant	556.65 (1187.92)	1.10	-2.02 (1.47)	-1.48	-26420.60* (10837.35)	-2.69	-0.91 (1.87)	-0.74	-3.33 (3.32)	-2.13	1.28 (4.71)	0.55	-1.31 (1.35)	-0.85	0.31 (2.41)	0.10
R <sup>2</sup>	0.0189		0.0874		0.0823		0.134		0.0749		0.0269		0.0241		0.0451	
N	56		185		118		72		72		51		185		185	

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