Beyond 'Faint Evidence':
Establishing the Impact of Entrepreneurship Training in Tanzania

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Abstract (max 150 words)

This paper estimates the impact of a youth entrepreneurship program on the financial literacy and employment knowledge of economically disadvantaged youth in Tanzania. This study used propensity score matching within a lagging-cohort design to assess the extent that the knowledge, skills, and attitudes of marginalized youth in several communities in rural Tanzania changed as a result of participating in a youth entrepreneurship-training program. The study analyzes program effects in an observational field setting, in which conventional control groups were not available. The findings are particularly relevant to both those involved in the design and implementation of youth entrepreneurship-training programs and those assessing program impacts through mixed methodology surveys.

1. Introduction and Motivation

A comprehensive World Bank-sponsored review of hundreds of youth job-training program evaluations concluded that most evidence on labor market outcomes for these youth in developing countries was weak (Betcherman, Godfrey, Purto, Rother and Stavreska, 2007), and even when positive effects were present, the evidence was faint or inconsistent. Youth unemployment is particularly high worldwide, affecting 74.8 million youth aged 15-24 years old in 2011 (International Labour Organization, 2012). Development organizations and governments are increasingly turning to entrepreneurship training as a strategy for poverty alleviation and youth unemployment reduction. While there are many factors that contribute to the success of these youth when they leave the training and enter the labor market, it is important to first know if the program itself had an impact on youth's ability to sustain employment or entrepreneurship.

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This paper addresses that gap in substantial evidence by measuring the impact of a youth entrepreneurship program on the financial literacy and employment knowledge of disadvantaged youth in Tanzania.

Alleviating the devastating effects of poverty on individuals and nations is one of the main challenges of the twenty-first century. Almost half the world's population lives on less than $2.50 a day (Shah, 2010). Worldwide, one out of every five individuals survives on less than $1 a day (Food 4 Africa, 2011). Those caught in poverty face a convergence of disadvantages: less access to health care, poorer quality schooling, and marginalized participation in civic life, among other things. International development organizations have identified poverty alleviation as their highest priority (Asian Development Bank, 2011; Gerrard, 2005; Narayan, 2002; Perry, Serven, Maloney, Lopez & Arias, 2006). While governments and development organizations are undertaking efforts to address the immediate needs of those caught in poverty, an equally important concern is to break the cycle of poverty through improving youth employment.

Many caught in poverty lack the human capital to sustain formal employment, navigate credit markets for successful self-employment or to attain the necessary business skills to create their own earning opportunities. And while policy discussions about employment, entrepreneurship and microfinance often focus on credit constraints, they assume that subject to those constraints, entrepreneurs are managing business optimally. However, most small business owners or self-employed in sub-Saharan Africa have no formal training in business or entrepreneurship skills. This has led to a growing interest among governments and development organizations in equipping those in poverty with the entrepreneurship knowledge, financial literacy skills, and confidence in labor market navigation that would help secure employment or start their own business. Generally captured in the notion of 'entrepreneurship training', particularly for those who have not completed formal education, such programs aim to strengthen basic literacy, provide vocational and life skills and, in some cases, give participants practice in saving money and accessing credit.

The rise of these entrepreneurship-training programs as the centerpiece of some organizations' poverty alleviation efforts represents, to a considerable extent, a shift in the underlying philosophy of international economic and social development efforts (Baxter et al. 2013). Previous poverty reduction strategies have traditionally been seen as the responsibility of national governments, often assisted by bilateral and multilateral aid organizations. In sub-Saharan Africa, however, these government efforts at poverty reduction have not been particularly successful (Handley, Higgins, Sharma, Bird and Cammack 2009; Collier 2007; Sasaoka 2006). The premise of many of the entrepreneurship-training programs, on the other hand, is that the market may be successful in rewarding the human capital gain relative to other poverty-reduction government programs that may provide assistance without building skills. In this approach, these training programs conduct market research to teach skills demanded by local industries, but individuals end up bearing the main responsibility for improving their own

welfare. Once provided with the knowledge and skills relevant to entering and competing in the labor market, the presumption is that those receiving this training will seek employment in their community or start their own small business. While training efforts can increase the skills and knowledge of youth, it is not yet clear if these efforts will truly enable youth to successfully transition into the labor market.

There is a need to overcome the limited evidence to gain reliable insight into program impacts. Too often, observational evaluations settle for assessing change over time among program participants, without the benefit of a comparison group. A number of time variant factors may affect outcomes in the lives of youth for reasons unrelated to the training, such as normal maturation, the influence of friends and family, and other community-level or national events that occur outside the program. The question of greater interest to many program sponsors and funders is the extent to which observed changes are due to participation in the entrepreneurship-training program. In this study, we focus our analysis on measuring the intermediary mechanisms, such as financial literacy and employment knowledge, which are important steps in realizing entrepreneurial success.

A common reason for these weaknesses in evaluation design is the difficulty of using observational data that lack a meaningful control group. It is widely understood that the gold standard in assessing whether entrepreneurship-training programs yield intended changes in participants' knowledge, skills, and attitudes is a randomized control trial (RCT). There are both practical and financial reasons an RCT is difficult to implement in the context of a community-led training program. In a development program run by a locally-operated NGO, such as the one featured in this paper, the imposition of an RCT can undermine the implementation of the program. For example, one goal of community-led training programs is local capacity-building and community ownership over the program itself. The community is more likely to address youth unemployment without outside intervention in the future if they are involved in the design and implementation of this training program.

From the perspective of an RCT, the expansion of youth training in participating districts of the U-Learn program would contaminate the control group. However, the spread of other similar community-led programs that address youth unemployment can be seen as a positive spillover of the U-Learn program. Through local ownership and participation, the community accountability for youth employment can be achieved sustainably. For this reason, an RCT was not ideal in this context. With concerns over local ownership and management of the entrepreneurship program, the researchers, local partners, and funder opted for a mixed method evaluation style including qualitative interviews, demographic participant data and a quantitative survey without randomization. Further, even the creation of an appropriate population of similar but non-participating youth in a comparison group has its problems. Trainee selection in most programs is not random; community program managers select local participants quite intentionally to favor those most likely to succeed in the program or the most marginalized, but

motivated, youth. Consequently, just selecting from a demographically similar group of students misses the subtler and unobservable differences between participants and non-participants.

This paper is organized as follows. Section two reviews the literature on training programs and evaluation methodologies in a non-randomized setting. Section three explores the U-Learn youth entrepreneurship program in Tanzania. Section four discusses the strategy this paper uses for measuring program impact and the different sensitivity analyses conducted. Section five presents the empirical results from the various methods employed. Finally, section six concludes by discussing the findings and policy implications.

2. Evidence on Youth Training Programs

While the philosophy of entrepreneurship or skills training programs is attractive to many governments and development organizations, the extent that such training programs actually yield the intended benefits has yet been elusive (Karlan and Valdivia, 2011; Oosterbeek, Van Praag, Ijsselstein, 2010). The World Bank-sponsored review of 289 studies from 84 countries of interventions aimed at integrating youth into the labor market found weak evidence in favor of positive labor market impacts (Betcherman, Godfrey, Purto, Rother and Stavreska, 2007). Claims of program effect were often based on faint or inconsistent evidence. Card et al. (2007) found that while a randomized evaluation of a job-training program in the Dominican Republic revealed no positive impact on employability, the non-randomized evaluation methods did measure a positive impact of the program on the same outcomes. A USAID review of 54 research and evaluation studies published between 2001 and 2012 on the topics of youth employment, business development, school to work transition and youth entrepreneurship concluded that these programs in developing countries have a positive impact on employment and earnings but also that the evaluation design of many studies was weak (USAID, 2013). Card et al. (2007) also note that rigorously evaluating job-training programs is important to demonstrate the limitations of such programs in addressing the labor market barriers faced by disadvantaged youth. However, because workforce development and entrepreneurship-training programs include various facets of implementation and take place across different location, trainers and cohorts, the inclusion of rigorous evaluation methods can be challenging. Given the substantial amounts of funding now being directed to supporting such programs and the challenge of their evaluation, funders need a stronger evidence base.

Two seminal papers have established propensity score matching as a valid method to evaluate training programs. First, Heckman, Ichimura and Todd (1997) analyze the possibility of devising a matching procedure for evaluation of a job-training program that produces impact estimates close to those of a randomized social experiment. The authors find support for the estimation techniques that match individuals based on their propensity for participation in the training program. They also note the importance of having a control or comparison group that participates in the same labor market as training recipients. Dehejia and Wahba (1999) used the

National Supported Work data (U.S. based training program) to evaluate the performance of propensity-score matching methods, including pairwise matching and caliper matching. The authors also confirm that matching estimators succeed in closely replicating the results in earnings obtained through experimental evaluation of the program. Dehejia and Wahba conclude that matching approaches are, in fact, more reliable than traditional econometric estimators.

More recent studies of job-training programs, using various methods of evaluation, have yielded results that are less optimistic and can be difficult to interpret. McKenzie and Woodruff (2005) reviewed the evaluation literature on training and entrepreneurship programs and found modest impacts of training on the survivorship of existing firms. However, they did find stronger evidence that training programs help prospective owners launch new businesses. In an RCT evaluation of a comprehensive business-training program in Peru, Karlan and Valdivia (2011) found that the treatment group of trainees had no change in profits, business revenue or employment within their small businesses. This two-year program included both business skills and strategy development for current business owners. Yet, despite the lack of changes in major business outcomes, the authors did observe improvements in business *knowledge* among trainees. Although not direct income-related measurements, business knowledge and financial literacy are intermediary mechanism on the trajectory to employment.

Training programs that target marginalized populations (women, school dropouts or people out of the labor force) have had slightly more success. Attanasio et al. (2011) found evidence through a randomized control trial in Colombia that subsidizing vocational training for disadvantaged youth had a significant positive impact on earnings and the probability of employment for female participants, although it curiously had little impact on male participants. Field, Jayashandren and Pande (2010) explore the complicated imposition of social institutions on women of various castes in India. They find that Hindu women who face severe social restrictions benefitted the most (in terms of business income) from a basic financial literacy-training program. De Mel, McKenzie and Woodruff (2012) specifically targeted entrepreneurial training in Sri Lanka towards women running subsistence businesses and those out of the labor force. Their results show that within a year of the program, women who received a grant and training as a packaged approach had significant improvements in business profitability and that training was generally more effective for new business owners.

This type of packaged skills development program, although extensive in its objectives, may have more success in improving the skills and income of participants. Deshpande and Zimmerman (2010) present existing evidence on the dual development potential of youth savings accounts, which not only promote access to credit and savings, but can induce financial behavioral change as well. The authors point to the growth from both the social development and microfinance sectors, but conclude that more research is needed on the role of savings accumulation, training, mentoring and skills training. The present study addresses this gap in the

literature by analyzing the impact that a holistic entrepreneurship-training program has on financial literacy and business skills development for marginalized youth in sub-Saharan Africa.

3. The U-Learn Program & Youth Characteristics

The present study assessed the extent to which an entrepreneurship-training program designed and implemented by Swisscontact, a Swiss Non-Governmental Organization (NGO), was able to significantly increase relevant knowledge, skills, and attitudes of economically disadvantaged youth in rural Tanzania. This study draws on survey data collected from 434 youth participating in the nine-month entrepreneurship program called U-Learn in Tanzania. This program targets school dropouts aged 15-26 years old by supporting youth learning, earning and saving. Components of the program include: technical and entrepreneurship skills-training, internships, job placement, business start-up support, linkages to financial service providers, the formation of savings groups, and life skills counseling.

This study was undertaken to assess the impact of the U-Learn program, an entrepreneurship-training program offered by Swisscontact, an international NGO that is operated locally in northwestern Tanzania[2]. The training program is being implemented in both rural areas, such as Nshamba, and urban areas, such as Bukoba. It includes elements focused on knowledge, vocational skill development, and life skills and is intended to lead to either employment in an existing enterprise, self-employment (in either the formal or informal economy), or further education. This program focuses on out-of-school youth and utilizes an apprenticeship model of technical and vocational-training using community and business mentors and experts. Participants develop vocational skills through participation in relatively small learning groups (~ 20 participants), and savings groups that are linked with financial service institutions. Youth form these self-governed savings groups, called Mavuno saving and lending groups, where they can earn interest on savings as well as offer micro-loans to one another. Each program lasts approximately nine months.

The U-Learn youth entrepreneurship-training program is nine months duration, after which a new cohort was recruited and provided with training. The first two cohorts of youth receiving this training are included in this paper. Cohort 1 was implemented in eight districts and Cohort 2 in ten districts, with six districts that offered programming to both Cohort 1 and Cohort 2 participants. It is important to note that the determination of Cohort 2 program locations was not based on youths' reported success during Cohort 1 and that village leaders were not led to believe this to be the case. As part of the evaluation of program effects, each cohort completed a quantitative survey at the beginning of the training program period and again

[2] More information on the Swisscontact U-Learn program can be found at http://www.swisscontact.org/en/projects-and-countries/projects-by-core-areas/projects/p/Project/show/u-learn-lerngruppen-youth-learning-groups-und-zugang-zu-finanzdienstleistungen-fuer-jugendliche.html

at the conclusion of their training. Cohort 2 entered the program at the same time that Cohort 1 was completing the program. Figure 1 shows a timeline of when these two cohorts were surveyed. The survey was designed as a close-ended survey and was administered orally in Swahili, as literacy skills among the trainees varied.

Figure 1: Timeline of Data Collection of the two Cohorts

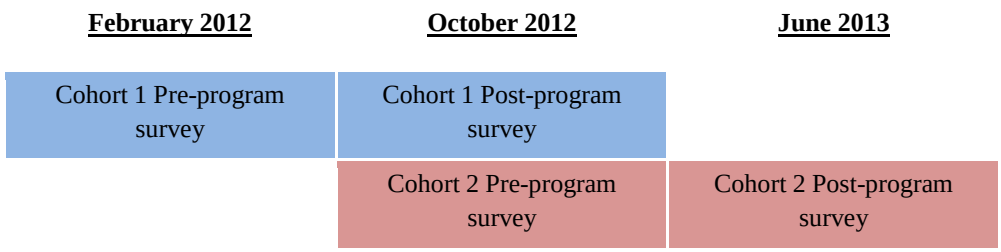


Table 1 provides descriptive statistics of youth participating in Cohort 1 and Cohort 2 of the entrepreneurship-training program. In both cohorts, there are slightly more male youth in the program than female. The participants range in age from 14 to 26 years old, with the average age of 20 years old. Most of the participants are located in rural areas and have an average of seven people living in their household. Most youth live in a male-headed household and a small percent of youth are the head of the household themselves. Most youth are single and without children, however more women are married and have children than men in the program. Overall, 16-18% of all youth report their mother is deceased and 28-39% report their father is deceased.

Table 1: Descriptive Statistics of Youth in Cohort 1 and Cohort 2

	Cohort 1		Cohort 2	
	Mean	**St. Dev.**	**Mean**	**St. Dev.**
Female	0.42	0.49	0.48	0.50
Average Age	20.33	2.78	20.41	2.64
Rural	0.73	0.45	0.41	0.49
Number of people living in household	7.25	3.48	6.57	2.67
Number of income earners in the household	1.47	1.33	1.68	0.95
Married	0.18	0.38	0.10	0.31
Children	0.45	0.87	0.17	0.55
Dependents	1.81	1.97	0.96	1.51
Mother is alive	0.84	0.37	0.82	0.38
Father is alive	0.62	0.49	0.72	0.45
Employed at the start of the program	0.12	0.33	0.12	0.32
Participated in vocational or skills training before entering the program	0.09	0.30	0.16	0.37
Participated in an internship before entering the program	0.22	0.42	0.28	0.45
Started an enterprise before the program	0.26	0.44	0.29	0.46
Entered the program with a savings account	0.06	0.24	0.07	0.25
Applied for a loan before entering the program	0.03	0.18	0.04	0.19
N	**202**		**232**	

At the start of the program, the majority (58%) of youth have only completed primary school (Standard 7). In Cohort 1, only 26% of youth completed Form 4 and in Cohort 2, 32% completed Form 4. At the start of the program, only a small percentage of participants reported that they were currently employed (12%) and few have previously participated in vocational or skills training or internships. Additionally, only a handful of the youth have previously started their own enterprises. Most of the participants live in households where someone earns income, but of these, the majority come from a single income households. A very small percentage of the youth report that they currently have a savings account and of those who do, most have an individual account. Only a handful of youth report having applied for a loan in the past and of those who have received the loan, they used it for small business activities, school fees, selling fish, and to upgrade farming activities.

4. Research Framework

As a preliminary first step in the analysis, nonparametric tests of the difference in responses from pre-program to post-program were conducted in Table 2. This analysis indicated the presence of a statistically significant difference in how youth in each cohort responded to the

survey questions before and after the training. This undoubtedly does not control for unobservable factors that affect the way youth responded to these questions.

Evaluating social programs using observational data is challenging, at best. Observational studies usually violate the ignorable treatment assignment assumption and thus, selection bias is assumed to be present in program participation (Rosenbaum & Rubin, 1983). In this setting, selection bias occurs when youth self-select or are selected into a program based on unobservable characteristics and these characteristics lead them to be more likely to gain from the program (Smith and Todd, 2001). Although the youth are all disadvantaged, some may have unobservable characteristics such as ambition and motivation that lead them to participate in the program in the first cohort (as compared with those in a subsequent cohort). The methods of ex-post program evaluation center on imputing the missing *counterfactual*: the outcomes that would have occurred in the absence of the program.

One widely used method of observational program evaluation is a comparison of the outcomes of program participants to similar matched non-participants to impute the counterfactual (Chowa et al., 2013; Dehejia and Wahba, 2002; Todd, 2008). For a more formal consideration of imputing the counterfactual through propensity score matching, let us denote $E(Y_0|Z, W = 1)$ as the average employment or financial knowledge of youth in the first cohort and $E(Y_0|Z, W = 0)$ as the average employment and financial knowledge of youth in the second cohort, both conditional on Z a vector of individual characteristics. Because both outcomes were observed before the program, we can define the treatment effect as a mean difference: $E(\hat{y}_1|z, w = 1) - E(\hat{y}_0|z, w = 0)$, where τ denotes treatment effect. In estimating the program's impact, the dilemma of not observing post-program outcome of Cohort 1 had they not completed the program is resolved by examining the average outcomes of the right comparison group of youth from Cohort 2.

Propensity score matching offers a way to test for this potentially causal relationship: conditional on observed characteristics of the youth (Z), the program has an impact on employment and financial skill outcomes. Using the imputed comparison group, propensity score analysis matches youth who have participated in the program with youth who are just entering the program and to compare their learning, earning, and saving outcomes. Previous research has noted that matching methods do nothing to correct for unobserved differences between treated and untreated observations (Smith and Todd, 2001). Despite this, there are some advantages of matching over ordinary least squares (OLS) regression analysis (Berk, 2004; Glewwe and Todd, 2013; Ravallion, 2007). First, the average treatment effect (ATE) can be calculated without specifying a functional form of the effect, through a conditional mean, as opposed to a linear or quadratic relationship. Secondly, the performance of the ATE estimate is improved by imposing the condition of common support, avoiding forced and potentially bad matches. Lastly, matching youth based on observable characteristics emulates a random

experiment to some degree by aligning the distribution of the observable characteristics in both the matched comparison and treatment groups (Glewwe and Todd, 2013).

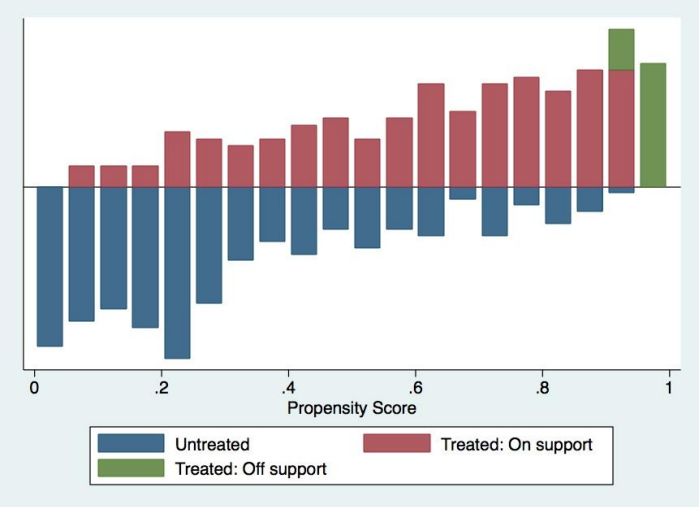
Since participant selections were not random and no contemporaneous comparison group was available, this study used propensity score analysis to address selection bias. We employ cross-sectional matching using a set of 35 observed characteristics, Z, such that outcomes are independent of program participation conditional on these observed characteristics. The main findings reported in this study applied the matching procedure using Epanechnikov kernel weights to match youth between Cohort 1 and Cohort 2. Kernel matching estimates the average treatment effect by nonparametric kernel regression where the weights are obtained through a multiplicative kernel using the Epanechnikov function. The standard errors for the Epanechnikov kernel method were bootstrapped (250 iterations) and were clustered by district. Because it is still unclear if bootstrapping is appropriate for nearest neighbor matching methods (Abadie and Imbens, 2008), we only applied this standard error estimation to the kernel, radius matching and Mahalanobis distance matching methods. While there are multiple methods to use in matching, the Epanechnikov kernel method is becoming standard in the matching literature (Binzel and Assaad, 2011). To confirm the robustness of our results, we also report results from multiple matching techniques including nearest neighbor matching with and without replacement, ten nearest neighbors matching, and Mahalanobis matching.

To construct a comparison group for this program, we matched youth who had already participated in the program (Cohort 1) with youth who had not yet participated in the program (Cohort 2). The selection criteria for program participation were the same across cohorts; youth must be between 15 and 26 years of age and have not completed secondary school. Further, youth are selected by their community leaders because of their level of marginalization as determined in a one-on-one interview, including their family life, household structure, types and sources of income, if any. After this interview, some youth are screened out of the pool of candidates as a result of the selection criteria and program requirements and others choose not to enter the program because of their lack of motivation or interest in the program. Because of the consistent selection criteria across the two cohorts, the youth in the second cohort who have not yet participated make a valid comparison group for the youth in the first cohort. However, the somewhat subjective selection criteria by community leaders could also be a source of bias. The committee that selects youth participants may (whether intentionally or not) identify youth that they believe would be most successful in the program; this would imply an overestimation of the true impact of the program. It could also be the case that the committee may have chosen youth to participate in the program who they think would most benefit from it (perhaps they are the poorest or most marginalized); this would imply an underestimate of the true impact of the program. After conversations with the NGO staff and community stakeholders, we think it is likely that both sources of bias are present in the selection committee. Therefore, the impact on our average treatment effect estimate is ambiguous.

As stated above, propensity score analysis matches youth in two different groups based on 36 observable demographic characteristics, or covariates, Z. Youth are matched based on these demographic characteristics, including: age, sex, education level, number of children, number of dependents, rural or urban, whether or not their father is alive, the number of people living in their house, whether or not the respondent has ever participated in training, and the number of people who earn income in the household. For example, we might match a nineteen year old with no apprentice experience on Cohort 1 to a nineteen year old in Cohort 2 who also has no apprentice experience. In addition to this demographic information, we were also able to match on variables that capture more subjective aspects of individual character including the participants' values (e.g., do you value having your children educated), and life skills (e.g., do you set goals for yourself?) and family context social supports (e.g., are adults able to help you in practical ways?) This offers a way of correcting for the effects of selection bias based on these available demographic, character and social support covariates and provides a more rigorous estimation of the average impact of the program. Appendix A3 shows a balancing table with the observable demographic characteristics, values, social support, and life skills characteristics before and after matching.

After matching the youth, the graph of the area of 'common support' shows the region of comparable youth observations with similar characteristics across the two cohorts. Figure 2 shows the histogram of common support across various propensity scores using the Epanechnikov kernel method. Those youth that did not match or are not in the 'area of common support' are those who are too dissimilar to be comparable (for example, they may be an outlier in that they have too much work experience). Of the 434 youth in this sample, only 24-37 did not match well and were dropped from the analysis (depending on the matching method) because they failed to meet this condition. It is not particularly surprising that so few observations were dropped, given that youth in each of the two cohorts were selected for the program based on the same criteria. The fact that the sample populations are so similar helps to reduce some of the possible bias that is usually introduced with a comparison group. After the matches are made, the difference in means of each survey question for the two groups, weighted by the propensity of treatment, is tested for statistical significance. The average treatment effect on the treated (ATT) tells us the size of the impact of the program, while reducing bias through the matching process. The ATT tells us the estimated difference in the means, given that the person participated in the program. We also calculate the percent change as the difference of the average treatment effect on those who received programming compared to mean of that outcome variable for all youth in the matched sample.

Figure 2: Area of Common Support



Finally, linear regression analyzes the impact of the program on youth's employment and financial skill outcomes using ordinary least squares with individual fixed effects. The demographic characteristics of youth are time-invariant and therefore accounted for through the fixed effect. In the equation below, Y_{it} represents the employment and financial skill variables from the survey at time t. The variable w_{it} represents the impact of time, indicating whether the survey response is from before or after the program. The variable of interests are those on coefficient β_1, which is the effect of time on individual outcomes, and with the individual fixed effects, represents a proxy for the effect of the program. The regression includes individual fixed effects, α_i.

Comment [ASM1]: Add discussion of cross sectional linear reg

$$Y_{it} = \beta_o + \beta_1 w_{it} + \alpha_i + \epsilon_{it}$$

A linear regression can check the robustness of the results from the propensity score matching using a different estimation technique. While an OLS regression, even with controls for individual fixed effects, still cannot account for all unobservable factors affecting program outcomes, the results of the regression support the robustness of the propensity score analysis results.

5.1 Results

This section of the paper is organized as follows. First, findings from simple nonparametric tests are presented as a preliminary step in the analysis. Second, the results from

propensity score analysis using Epanechnikov kernel matching are discussed. Finally, linear regression results provide a robustness check to the propensity score analysis findings.

5.1 Analysis of pre- to post-program responses

Non-parametric tests were conducted to calculate the statistical significance of this change in the average response from pre- to post-program. Non-parametric methods should be used when we do not want to impose the assumption of normal distribution, which is common with smaller sample sizes. It is also used for studying response options that have a ranked order, such as from 'I know nothing' to 'I know a lot'. The non-parametric test statistic used is called the Wilcoxon statistic, which calculates a statistic for a paired sample. In the case of the pre- to post-program analysis, the paired sample is the pre-program and the post-program responses to the same survey question for each individual youth. This simple comparison of the means provides some information, but only weak evidence because it doesn't account for differences that may have occurred between the two time periods. Table 2 reports the findings from nonparametric tests comparing the survey responses on employment from before and after the program.

Table 2: Pre- to Post- Program Nonparametric (Wilcoxon Signed Rank) Test Results on Employment Items for Cohort 1

Variable	Pre-program Mean (St. Dev.)	Post-program Mean (St. Dev.)	Z statistic
Do you know how to find employment in your community?	2.20 (0.86)	2.98 (0.72)	-8.28***
Do you know how to develop a business plan?	2.02 (0.83)	2.94 (0.85)	-9.02***
How easy do you think it will be to find employment at the end of this program/school?	2.78 (0.84)	3.10 (0.32)	-4.49***
Would you like to be self-employed?	3.58 (0.74)	3.68 (0.65)	-1.93
Will the knowledge and skills you learn in this program/school help you find employment?	3.45 (0.65)	3.53 (0.57)	-1.62
Will the knowledge and skills you learn in this program/school help you improve your earnings?	3.42 (0.70)	3.55 (0.59)	-2.39*
Do you have skills that employers are looking for?	2.25 (1.07)	3.23 (0.60)	-8.81***
Do you know how to create a personal budget?	2.52 (0.95)	3.21 (0.72)	-6.94***
How much do you know about tracking your expenses?	2.61 (0.89)	3.28 (0.72)	-7.54***
When you have money, are you able to decide how to use it?	3.25 (0.85)	3.21 (0.82)	-0.30
Do you know how to apply for a savings account?	1.50 (0.93)	2.61 (1.12)	-9.27***
How important is it to you to save money?	3.54 (0.75)	3.65 (0.49)	-1.74
Has group savings helped you to learn to save (on your own)?	1.83 (0.99)	3.41 (0.72)	-10.58***
How comfortable do you feel borrowing money from a savings or credit institution?	2.28 (1.17)	2.84 (0.92)	-5.95***
When you have money, are you expected to share most of your money with others?	2.44 (0.97)	2.65 (0.75)	-2.52***

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

This initial comparison showed that youth reported increases in almost of all of the survey items from pre-program to post-program, however, not all of these increases were statistically significant. Significant and positive gains were found in youth's knowledge of how to find employment in their communities, how to develop a business plan, and their confidence that they have skills employers are looking for. In addition, youth also reported smaller increases in their thinking that it will be easier to find employment at the end of the program and that the knowledge and skills learned from the program will help them improve their earnings. At the beginning of the program, most youth desired to be self-employed, and this did not change at the end of the program. Similarly, at the beginning of the program, youth generally thought that the knowledge and skills they would learn in the program would help them find employment, and this view did not change by the end of the program.

From Table 2, the findings on finances suggest that youth reported increases in their financial literacy after the program. For instance, there were significant increases in youths' knowledge of how to create a personal budget, apply for a savings account, track expenses, and that group savings has helped them to save on their own. In addition, there was a significant increase in youth reporting they feel comfortable borrowing money from a savings or credit institution. There was a slight, but significant increase in youth reporting that they are expected to share most of their money with others when they have it. Lastly, there was no change in reports that youth are able to decide how to use their money or the importance of saving money.

5.2 Propensity Score Analysis

Turning to the propensity score analysis, the findings in Table 3 suggest that there was a significant impact of the program on youth in Cohort 1 (those who have completed the program) in nine of the survey questions regarding employment and finances using Epanechnikov kernel matching. For the questions about how easy youth think it will be to find employment at the end of the program, their desire to be self-employed, the importance of saving money and how much they are expected to share money with others, there is essentially no difference in how youth who completed the program and youth in the comparison group responded. Further, participants respond similarly to non-participants entering the program with respect to their beliefs about how the knowledge and skills learned in the program will help them find employment and improve their earnings. This finding suggests that youth enter the program optimistic about their employment and earnings prospects and maintain this belief directly following completion of the program. Since participants were surveyed as they exited the program, it is unclear if youth will maintain this optimism about the impact of the program as they transition to the labor market.

Table 3: Findings from Propensity Score Analysis for Swisscontact Tanzania using Epanechnikov Kernel Matching

Variable	Average Treatment Effect on the Treated (ATT) (Standard Error)	Percent Change
Do you know how to find employment in your community?	1.04*** (0.14)	55.32%
Do you know how to develop a business plan?	1.21*** (0.13)	70.35%
How easy do you think it will be to find employment at the end of this program?	0.12 (0.16)	4.12%
Would you like to be self-employed?	0.18 (0.13)	5.03%
Will the knowledge and skills you learn in this program help you find employment?	-0.13 (0.11)	3.59%
Will the knowledge and skills you learn in this program help improve your earnings?	0.02 (0.18)	0.57%
Do you have skills that employers are looking for?	1.19*** (0.25)	61.66%
Do you know how to create a personal budget?	0.97*** (0.18)	45.54%
How much do you know about tracking your expenses?	1.05*** (0.22)	50.24%
When you have money, are you able to decide how to use it?	0.45*** (0.21)	16.54%
Do you know how to apply for a savings account?	1.27*** (0.21)	96.95%
How important is it to you to save money?	-0.07 (0.13)	1.90%
Has group savings helped you to learn to save (on your own)?	1.83*** (0.27)	108.28%
How comfortable do you feel borrowing money from a savings or credit institution?	0.98*** (0.28)	58.68%
When you have money, are you expected to share most of your money with others?	-0.06 (0.15)	2.46%

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

Youth that have completed the program report that they are 55.32% more knowledgeable about finding employment in their community compared to those youth who have not yet completed the program. Youth who completed the program not only have more knowledge about finding employment, but report being 70.35% more knowledgeable about developing a business plan than youth in the comparison group. Similarly, youth who completed the program report 61.66% more confidence that they have skills desired by future employers. According to

these findings, youth not only increased their knowledge about finding employment and creating a business plan as a result of the program, but in their confidence that they have employable skills.

With respect to financial literacy, youth who completed the program report having 45.54% more knowledge about how to create a personal budget and 50.24% more knowledge about tracking expenses than youth in the comparison group. Further, youth who completed the program report that they have 16.54% more financial decision-making power in their households and 96.95% more savings knowledge. Youth who finished the program are 108.28% more likely to attribute their learning about savings from the Mavuno group savings. As mentioned above, the Mavuno savings and lending groups are a key component of the Swisscontact U-Learn program and this experience appears to have made a substantial impact on participants.

These findings show significant increases in the financial literacy of marginalized Tanzanian youth who have completed the nine-month U-Learn entrepreneurship-training program. However, on some employment outcomes, we observed little or no change in responses. For example, participants are no more likely to desire to be self-employed or to anticipate ease in finding employment at the end of the program.

5.3 Linear Regression Results

Table 4 presents findings from a linear regression estimating the impact of the program, displaying the results from the raw correlation coefficient and two models. The cross-cohort linear regression model estimates the impact of the treatment using the sample of Cohort 1 post-program scores with the Cohort 2 pre-program scores. This comparison most closely aligns with the sample using the propensity score matching because we are comparing the first cohort (those who have completed the program) to the second (those who are entering the program). For the correlation coefficient and the individual fixed effects model, we pooled the pre-program and post-program data from both cohorts to examine the program impact in a temporal way. The raw correlation coefficient shows the relationship between each outcome variable and the effect of treatment (without controlling for the individual). In the fixed effects model, we measure the impact of the program on each participant, controlling for an individual fixed effect. This model accounts for the effects of each individual, including time-invariant characteristics, both observed and unobserved. Although this model implies a parametric form (linear), unlike propensity score analysis, the fixed effect model has the benefit that it controls for unobserved individual characteristics.

Table 4: Linear Regression Results: Swisscontact U-Learn Program Impact Estimation

Outcome Variable	Cross-cohort Linear Regression (Standard Error)	Correlation Coefficient (Standard Error)	Pooled Individual Fixed Effects Model (Standard Error)
Do you know how to find employment in your community?	1.002*** (0.083)	0.935*** (0.054)	0.942*** (0.053)
Do you know how to develop a business plan?	1.115*** (0.093)	1.014*** (0.055)	1.012*** (0.053)
How easy do you think it will be to find employment at the end of this program?	0.202** (0.086)	0.292*** (0.053)	0.294*** (0.048)
Would you like to be self-employed?	0.214*** (0.080)	0.071 (0.049)	0.071* (0.042)
Will the knowledge and skills you learn in this program help you find employment?	-0.139** (0.063)	0.059 (0.040)	0.061* (0.038)
Will the knowledge and skills you learn in this program help improve your earnings?	0.007 (0.065)	0.108** (0.042)	0.108*** (0.035)
Do you have skills that employers are looking for?	1.267*** (0.088)	1.155*** (0.057)	1.150*** (0.057)
Do you know how to create a personal budget?	1.019*** (0.097)	0.844*** (0.060)	0.844*** (0.058)
How much do you know about tracking your expenses?	1.132*** (0.098)	0.867*** (0.060)	0.871*** (0.057)
When you have money, are you able to decide how to use it?	0.498*** (0.103)	0.083 (0.062)	0.083 (0.062)
Do you know how to apply for a savings account?	1.043*** (0.099)	1.161*** (0.064)	1.162*** (0.058)
How important is it to you to save money?	-0.031 (0.056)	0.108** (0.042)	0.104*** (0.039)
Has group savings helped you to learn to save (on your own)?	1.791*** (0.096)	1.641*** (0.060)	1.640*** (0.060)
How comfortable do you feel borrowing money from a savings or credit institution?	0.874*** (0.103)	0.862*** (0.070)	0.862*** (0.061)
When you have money, are you expected to share most of your money with others?	0.071 (0.099)	0.327*** (0.060)	0.330*** (0.055)

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

The linear regression findings suggest that, holding other things constant, the program has a significantly positive impact on youth's knowledge about employment and financial literacy. The cross-cohort linear regression model shows large and positive impacts on employment knowledge and confidence, knowledge about business planning, personal accounting, and on learning how to save. The pooled individual fixed effects model shows large and positive impacts on these same outcomes, although generally smaller effect sizes. This may be the case because the pooled individual fixed effects model is controlling for time-invariant individual characteristics, such as ability, that we are not able to account for in the cross-cohort linear regression.

In true adherence to the puzzling evidence in evaluations of entrepreneurship programs, some of the linear regression results leave us with inconsistent conclusions. For example, we observe a positive and statistically significant impact on participants' belief that they have skills employers seek across both models. At the same time, youth are skeptical that the knowledge and skills they learned in the program will help them find employment. In fact, in the cross-cohort regression, the estimate of the program impact on this outcome is actually negative, while it is positive in the fixed effects model. It also may the case that the youth are confident in their skills, but skeptical of the labor environment. This may be indicative of other major hurdles youth face in the structural labor market including corruption, lack of mobility, limited opportunities in their village.

Contrary to the findings from propensity score analysis, the fixed effects model shows a positive effect of the program on the expectation to share most of their income with others. Meanwhile, the propensity score analysis and the cross-cohort regression results showed an increase in a related outcome: post-program youth report more autonomy over their finances. However, the fixed effects results did not find the program to have a significant impact on this particular variable. Due to these contradictory findings, no conclusions can be made regarding the program's impact on youth's financial autonomy or the expectation to share their income.

The consistency in propensity score analysis and the regression results allows us to conclude that there is a large and significant improvement in participants' employment knowledge and financial literacy. The largest effect of the program was on learning to save. This finding reiterates the focus of the U-Learn program in improving the savings knowledge and behavior of participants. Not only do the Mavuno saving and lending groups appear to have an important impact on the participants' impression of the program, but youth's knowledge about how to apply for a savings account significantly increased over the course of the program as well. Across the nonparametric tests, propensity score analysis, and linear regression results we observe of large and positive impacts on employment knowledge and confidence, knowledge about business planning, personal accounting, and savings knowledge. The consistency of the results under the different models shows that the program effect is not sensitive to the methodology and provides evidence of a successful educational program.

6. Discussion

This study sought to answer two questions: First, did youth participating in the Swisscontact entrepreneurship training program in Tanzania change in positive ways in the knowledge, skills, and attitudes that the program was seeking to foster? Second, can the observed changes be attributed to participation in the Swisscontact training program? The Swisscontact U-

Learn entrepreneurship-training program in Tanzania did increase participants' self-reported knowledge in statistically significant and meaningful ways, in some cases to a surprising amount.

Beyond the substantive finding about training programs, the present study confirmed the use of propensity score analysis using successive cohorts of youth participants as a workable means of establishing a comparison group. Because the same governing communities selected both cohorts under the same criteria, much of the possible unobservable biases that could be introduced using the second cohort as a comparison group are avoided. Governments and international development organizations are increasingly expressing a commitment to emphasize evidence-based practice, yet observe the weakness of available evidence. This paper builds on the non-randomized evaluation literature to promote rigorous examination of the effects of social programs using multiple analysis techniques, including propensity score analysis, and a sensitivity analysis to confirm robustness of the results. While RCTs are the gold standard in causal impact evaluation, more nuanced methodologies such as propensity score analysis provide insight into the effects of entrepreneurship training on youth without undermining local authority and capacity.

While most of the literature addresses the impact of training programs on income-related measurements, such as wealth, employment or behavior change, this program presents evidence on the intermediary effects of training programs. In particular, this study focused on the attitudes and perceptions of the participants, rather than their direct employment. These measurements are more subjective; for example, students report if they think it will be easier to find a job. However, this information provides insight into the mechanisms of employment trajectories. Evaluations that focus simply on the final income-related measurements of the program overlook the pathways in which youth experience positive effects of the program. This study sought to gain insight into the steps towards employment or small business ownership that were enabled by the program's human capital improvement.

The findings offer support to governments, NGOs and policy makers around the globe who encourage entrepreneurship programming as a way of tackling youth unemployment. The Swisscontact U-Learn program illustrates in Tanzania that training programs for marginalized young people can be effective in helping youth develop the knowledge and skills they will need to improve their livelihoods. Such findings must be kept in perspective, however. Ample literature demonstrates that a variety of factors external to individuals' knowledge, skills, and attitudes affect their ability to find or create employment opportunities (Baxter et al., 2014). Even the best training cannot overcome ensnarling government regulations, lack of capital, pervasive corruption, and social prejudice that youth face as they enter the labor market. Further, while we have shown the effect of the program on youth's attitudes, skills and knowledge, the short timeframe of the study has not allowed us to measure the impact of the program on long-term employment or income. And while results suggest that training can have a positive impact on youth's knowledge and skills, the utilization of that training will depend on a wider variety of

supportive conditions being in place. Regardless, identifying successful ways to enable youth to improve their livelihoods not only alleviates immediate poverty, but gives meaning to the lives of young people through occupation, identity and independence.

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Appendices

A.1 Survey Response Options

Survey Question	Response Options
Do you know how to find employment in your community?	1 I know almost nothing 2 I know a little 3 I know some things 4 I know a lot
Do you know how to develop a business plan?	1 I know almost nothing 2 I know a little 3 I know some things 4 I know a lot
How easy do you think it will be to find employment at the end of this program?	1 Not at all 2 A little 3 Somewhat easy 4 Very easy
Would you like to be self-employed?	1 Not at all 2 A little 3 Somewhat 4 Very much
Will the knowledge and skills you learn in this program help you find employment?	1 Not at all 2 A little 3 Somewhat 4 A great deal
Will the knowledge and skills you learn in this program help improve your earnings?	1 Not at all 2 A little 3 Somewhat 4 A great deal
Do you have skills that employers are looking for?	1 Not at all 2 A little 3 Somewhat 4 Many
Do you know how to create a personal budget?	1 I know almost nothing 2 I know a little 3 I know some things 4 I know a lot
How much do you know about tracking your expenses?	1 I know almost nothing 2 I know a little 3 I know some things 4 I know a lot

When you have money, are you able to keep most of it for your own use?	1 Almost never 2 Hardly ever 3 Some of the time 4 Most of the time
Do you know how to apply for a savings account?	1 I know almost nothing 2 I know a little 3 I know some things 4 I know a lot
How important is it to you to save money?	1 Not important 2 Somewhat important 3 Important 4 Very important
Has group savings helped you to learn to save (on your own)?	1 Not at all 2 A little 3 Somewhat 4 A great deal
How comfortable do you feel borrowing money from a savings or credit institution?	1 Not at all 2 A little 3 Somewhat 4 A great deal
When you have money, are you expected to share most of your money with others?	1 Almost never 2 Hardly ever 3 Some of the time 4 Most of the time

A.2 Sensitivity Analysis

	Near neighbor replacement	Near neighbor no replacement	10 nearest neighbors	Radius matching	Kernel matching	Epanechnikov kernel matching	Mahalanobis matching
Do you know how to find employment in your community?	0.94*** (0.14)	1.03*** (0.08)	0.99*** (0.11)	1.11*** (0.17)	1.06*** (0.19)	1.04*** (0.14)	0.91*** (0.15)
Do you know how to develop a business plan?	1.16*** (0.15)	1.19*** (0.09)	1.17*** (0.11)	1.25*** (0.19)	1.22*** (0.17)	1.21*** (0.13)	1.17*** (0.14)
How easy do you think it will be to find employment at the end of this program/school?	0.18 (0.13)	0.18** (0.08)	0.14 (0.11)	0.22* (0.14)	0.11 (0.12)	0.12 (0.16)	0.14 (0.14)
Would you like to be self-employed?	0.11 (0.13)	0.15** (0.07)	0.18 (0.10)	0.28** (0.17)	0.17 (0.16)	0.18 (0.13)	0.10 (0.09)
Will the knowledge and skills you learn in this program/school help you find employment?	-0.20 (0.09)	-0.15** (0.06)	-0.17** (0.08)	-0.11*** (0.14)	-0.14* (0.10)	-0.13 (0.11)	-0.11*** (0.12)
Will the knowledge and skills you learn in this program/school help you improve your earnings?	0.09 (0.11)	-0.02 (0.06)	0.06 (0.08)	-0.01 (0.12)	0.01 (0.13)	0.02 (0.18)	-0.03 (0.12)
Do you have skills that employers are looking for?	1.09*** (0.15)	1.29*** (0.08)	1.21*** (0.12)	1.02*** (0.26)	1.24*** (0.23)	1.19*** (0.25)	1.00*** (0.22)
Do you know how to create a personal budget?	1.02*** (0.18)	1.06*** (0.09)	1.01*** (0.13)	0.94*** (0.23)	1.00*** (0.18)	0.97*** (0.18)	0.81*** (0.29)

	Near neighbor replacement	Near neighbor no replacement	10 nearest neighbors	Radius matching	Kernel matching	Epanechnikov kernel matching	Mahalanobis matching
How much do you know about tracking your expenses?	1.04*** (0.17)	1.17*** (0.09)	1.07*** (0.13)	0.98*** (0.27)	1.07*** (0.23)	1.05*** (0.22)	0.86*** (0.23)
When you have money, are you able to decide how to use it?	0.62*** (0.18)	0.51*** (0.09)	0.58*** (0.14)	0.45*** (0.30)	0.47*** (0.18)	0.45*** (0.21)	0.44*** (0.16)
Do you know how to apply for a savings account?	1.43*** (0.14)	1.26*** (0.10)	1.26*** (0.12)	1.25*** (0.27)	1.27*** (0.19)	1.27*** (0.21)	1.12*** (0.19)
How important is it to you to save money?	-0.05 (0.10)	-0.02 (0.06)	-0.09 (0.08)	-0.01 (0.12)	-0.07 (0.12)	-0.07 (0.13)	-0.15 (0.10)
Has group savings helped you to learn to save (on your own)?	1.87*** (0.18)	1.77*** (0.09)	1.83*** (0.12)	1.79*** (0.33)	1.84*** (0.27)	1.83*** (0.27)	1.60*** (0.34)
How comfortable do you feel borrowing money from a savings or credit institution?	1.11*** (0.17)	1.11*** (0.10)	1.09*** (0.14)	1.01*** (0.31)	1.04*** (0.26)	0.98*** (0.28)	0.83*** (0.37)
When you have money, are you expected to share most of your money with others?	-0.18 (0.18)	0.19** (0.09)	0.06 (0.13)	0.01 (0.19)	-0.03 (0.11)	-0.06 (0.15)	0.09 (0.16)

Standard errors in parenthesis; * p<0.10, ** p<0.05, *** p<0.01

A3. Covariate Imbalance Tests Pre- and Post-Matching for Epanechnikov PSM Estimator

		Mean		t-test	
Variable	**Sample**	**Treated**	**Control**	**t-statistic**	**p-value**
Female	Unmatched	0.424	0.476	-1.100	0.273
	Matched	0.418	0.440	-0.420	0.674
Age	Unmatched	20.33	20.42	-0.330	0.743
	Matched	20.30	20.50	-0.750	0.453
Married	Unmatched	0.182	0.104	2.350	0.019
	Matched	0.163	0.146	0.460	0.649
Have children	Unmatched	0.448	0.177	3.930	0.000
	Matched	0.380	0.429	-0.510	0.609
Have dependents	Unmatched	1.813	0.961	5.080	0.000
	Matched	1.794	1.608	0.910	0.361
Rural	Unmatched	0.724	0.407	6.980	0.000
	Matched	0.701	0.693	0.170	0.868
Mother is alive	Unmatched	0.842	0.823	0.550	0.582
	Matched	0.842	0.845	-0.0600	0.952
Father is alive	Unmatched	0.616	0.723	-2.380	0.018
	Matched	0.641	0.598	0.860	0.392
Last grade completed	Unmatched	9.098	8.866	0.490	0.626
	Matched	9.098	9.045	0.0900	0.924
Number of people living in household	Unmatched	7.251	6.554	2.360	0.019
	Matched	7.098	6.994	0.310	0.755
Youth previously participated in vocational or skills training before entering the program	Unmatched	0.0985	0.165	-2.020	0.044
	Matched	0.103	0.113	-0.300	0.767
Youth were employed at the start of the program	Unmatched	0.124	0.117	0.220	0.827
	Matched	0.114	0.108	0.180	0.859
Youth had participated in an internship before entering the program	Unmatched	0.222	0.286	-1.530	0.128
	Matched	0.234	0.267	-0.740	0.463
Number of people earning income in the household	Unmatched	1.473	1.684	-1.920	0.056
	Matched	1.500	1.579	-0.650	0.515
Youth entered the program with a savings account	Unmatched	0.0591	0.0693	-0.430	0.668
	Matched	0.0652	0.0573	0.310	0.754
Youth had applied for a loan before entering the program	Unmatched	0.0345	0.0390	-0.250	0.805
	Matched	0.0326	0.0217	0.640	0.521
Before making a decision about spending money, do you consider the options?	Unmatched	3.232	3	2.650	0.008
	Matched	3.207	3.264	-0.610	0.541

		Mean		t-test	
Variable	**Sample**	**Treated**	**Control**	**t-statistic**	**p-value**
Do you think making good decisions can improve your life?	Unmatched	3.665	3.656	0.140	0.889
	Matched	3.685	3.742	-0.960	0.340
Are you willing to speak up for your ideas when a friend disagrees with you?	Unmatched	3.626	3.470	2.210	0.027
	Matched	3.625	3.704	-1.180	0.241
When something you try fails, do you try again?	Unmatched	3.222	3.260	-0.480	0.635
	Matched	3.239	3.340	-1.130	0.260
Are you confident in your work skills?	Unmatched	2.902	2.433	3.880	0.000
	Matched	2.853	2.727	0.940	0.347
Do you set goals for yourself?	Unmatched	3.389	3.052	3.710	0.000
	Matched	3.348	3.480	-1.490	0.137
Do you take action to achieve these goals?	Unmatched	3.054	2.661	4.380	0.000
	Matched	3.011	3.123	-1.180	0.237
Has your life improved because you have made good decisions?	Unmatched	2.823	2.584	2.810	0.005
	Matched	2.810	2.851	-0.460	0.648
How important is it to you to get additional training or education after completing this program?	Unmatched	3.749	3.429	4.790	0.000
	Matched	3.728	3.709	0.310	0.757
Are people your age (peers) willing to listen when you are having problems?	Unmatched	2.916	2.857	0.750	0.454
	Matched	2.913	2.830	0.930	0.352
Are adults you know willing to help you in practical ways (loan money, meals, or clothes)?	Unmatched	2.759	2.389	4.370	0.000
	Matched	2.712	2.716	-0.0500	0.960
Are adults you know available when you need them?	Unmatched	3.044	2.652	4.770	0.000
	Matched	2.967	3.003	-0.400	0.692

		Mean		t-test	
Variable	**Sample**	**Treated**	**Control**	**t-statistic**	**p-value**
Do you value being employed?	Unmatched	3.709	3.596	1.790	0.074
	Matched	3.717	3.778	-1.040	0.299
Do you value owning your own business?	Unmatched	3.700	3.465	3.270	0.001
	Matched	3.690	3.734	-0.700	0.486
Do you value having your children educated?	Unmatched	3.897	3.739	3.250	0.001
	Matched	3.886	3.910	-0.660	0.510
Do you value helping your community?	Unmatched	3.507	3.467	0.530	0.597
	Matched	3.533	3.522	0.130	0.899
How satisfied are you with your life?	Unmatched	2.212	2.147	0.730	0.468
	Matched	2.196	2.165	0.290	0.769
Do you believe earning money leads to a happier life?	Unmatched	3.719	3.619	1.780	0.075
	Matched	3.707	3.616	1.440	0.152
Do you believe developing strong employment skills will improve your life?	Unmatched	3.862	3.732	3.050	0.002
	Matched	3.853	3.874	-0.520	0.601
Do you believe you can change your opportunities in life?	Unmatched	3.473	3.320	2.330	0.021
	Matched	3.473	3.516	-0.670	0.503