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LIVING UP TO EXPECTATIONS:
HOW JOB TRAINING MADE WOMEN BETTER OFF AND MEN WORSE OFF

Paloma Acevedo
Guillermo Cruces
Paul Gertler
Sebastian Martinez

ABSTRACT

We study the interaction between job and soft skills training on expectations and labor market outcomes in the context of a youth training program in the Dominican Republic. Program applicants were randomly assigned to one of 3 modalities: a full treatment consisting of hard and soft skills training plus an internship, a partial treatment consisting of soft skills training plus an internship, or a control group. We find strong and lasting effects of the program on personal skills acquisition and expectations, but these results are markedly different for young men and young women. Shortly after completing the program, both male and female participants report increased expectations for improved employment and livelihoods. This result is reversed for male participants in the long run, a result that can be attributed to the program's negative short-run effects on labor market outcomes for males. While these effects seem to dissipate in the long run, employed men are substantially more likely to be searching for another job. On the other hand, women experience improved labor market outcomes in the short run and exhibit substantially higher levels of personal skills in the long run. These results translate into women being more optimistic, having higher self-esteem and lower fertility in the long run. Our results suggest that job-training programs of this type can be transformative – for women, life skills mattered and made a difference, but they can also have a downside if, like in this case for men, training creates expectations that are not met.

Paloma Acevedo
InterAmerican Development Bank
Washington DC
palomaa@iadb.org

Guillermo Cruces
CEDLAS
Univesidad Nacional de La Plata
Calle 6 entre 47 y 48, 5to. piso, oficina 516
(1900) La Plata
Argentina
gcruces@cedlas.org

Paul Gertler
Haas School of Business
University of California, Berkeley
Berkeley, CA 94720
and NBER
gertler@haas.berkeley.edu

Sebastian Martinez
Inter American Development Bank
smartinez@iadb.org

1. INTRODUCTION

Vocational training programs have long been one of the mainstays of active labor market policies. The basic premise of these programs is that by providing skills rewarded in the labor market, the unemployed will find better paying jobs faster. In a simple labor supply model, the new skills raise wage offers to program participants so that there are now jobs available above their reservation wages. The evidence on the effectiveness of these programs, however, is decidedly mixed (Blattman and Ralston, 2015; Brown and Koettl, 2015).[1]

Among the possible hypothesized reasons for the mixed results of these programs is that the labor market may not value the specific skills being taught. In particular, the curricula may lack important "soft" personal and social ("non-cognitive") skills training (Heckman et al. 2006; Cunningham and Villaseñor 2014). Another concern with these programs is that they might generate expectations that are ultimately not rewarded by the labor market, and participation in the program might thereby end up discouraging workers. Increased expectations might raise the reservation wage, but if the training does not transfer skills that are sufficiently well rewarded in the labor market, the subsequent wage offers would not match these enhanced expectations. In this case, the worker would not be able to find jobs that matched her expectations, and over time, could become discouraged.

In this paper we use an at-scale randomized field experiment to examine the impact of imbedding a soft skills component into an at-scale vocational training for youth in the Dominican Republic on skill development, future expectations, labor market outcomes, and well-being. The program, "Programa Juventud y Empleo" (PJyE), was designed to improve the employment opportunities of at-risk youth,[2] given the relatively high level of unemployment among youth.[3] PJyE's main objective is to improve the employment opportunities of at-risk youth by building their vocational and soft skills. The program provides in-classroom training and an internship in a private business. It also financed participants' transportation, medical and accident insurance, and

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[1] For extensive reviews of job training programs see Betcherman, et al. 2004 and 2007, Card et al. 2010 and 2015, Greenberg et al. 2003, Heckman et al. 1999, J-PAL 2013, and Kluve 2010.

[2] PJyE, like many vocational training programs in low and middle-income countries, is targeted to low-income youth who have not completed secondary education (Vezza, 2014).

[3] The unemployment rate youth age 15 to 24 was 9.2% compared to 3.6% those aged between 25 and 65 in 2000 (CEDLAS and World Bank, 2016).

provided them with a small stipend. Between 2002 and 2013, the program conducted 3,627 courses training over 72,500 youth, of which 57% were women.

We consider two interventions randomly assigned to program participants: (1) vocational training combined with soft skills training and an internship and (2) soft skills only training with an internship. We study both the short (12-month) and long run (36-month) effects, testing the effectiveness of the two alternative curricula. For women, we find that both curricula have strong positive effects on soft skills and on expectations of future labor market and life success. For men, however, there appears to be no effect of either curriculum on skills, but a positive effect on expectations from the curricula with vocational training. Hence, for men, we have the conditions that might lead to a discouraged worker effect where expectations exceed the returns to acquired skills.

In fact, there were striking gender differences in the effects on short-run labor market outcomes. For women, both curricula were associated with higher employment rates in higher paying jobs with higher job satisfaction 12 months after program completion. Remarkably, there were no differences in effects between the vocational and soft-skills only curricula suggesting limited marginal value of the vocational training on top of soft-skills training plus internship. However, while for men there was no effect from the soft-skills only curricula on labor market outcomes, and there was a negative effect of the vocational curricula on short-run employment. This latter effect is consistent with the program having had no effect on skills but creating expectations of higher wage offers that did not materialize, which may have led to higher unemployment. The higher expectations induced by the program may have raised the reservation wage, perhaps resulting in men turning down more job offers.

In the long run neither curricula had an impact on the labor market outcomes of either women or men. However, the results and their interpretation differ by gender. The training gave women skills that allowed them to find higher paying jobs faster than those in the control group. Over time, the women in the control group were able to catch up. On the other hand, men in the treatment group lowered their expectations over time and eventually accepted whatever jobs they could get.

The different labor market experiences of men and women led to different effects on long-term welfare. After 3 years, women in the treatment group still had significantly higher positive

expectations about future labor market and life success than did the control group. They also reported higher job satisfaction and self-esteem and that they now needed higher salaries to meet their basic needs. On the other hand, men in the treatment group reported higher rates of active job search (even if employed), lower self-esteem, and lower salaries necessary to meet their basic needs. In other words, while the program positively improved women's lives, men were ultimately disappointed and discouraged, leading to deterioration in the quality of their lives.

This paper makes a number of contributions to the literature. First, to our knowledge, this is the first study to shed light on understanding why vocational training programs may have limited and even negative impact on labor market outcomes by focusing on how programs affect both expectations and skills.

Second, it helps to disentangle the marginal impact of the vocational component from the soft-skills component and the internship. Despite the popularity of training programs that combine different skills trainings (usually vocational, soft-skills, and apprenticeships), the evidence on the effectiveness of each of the components is very scarce. There are several experimental evaluations of training programs in low- and middle-income countries with a combination of different skills tracks and apprenticeships.[4] However, none of these studies separate out the marginal effects of the different components. An exception is Groh et al. (2016), who show that a soft-skills training for females in Jordan increased the optimism and the expectations of the females about the future; however, the authors found no impact on labor outcomes. To date, this is the first study that identifies the marginal impact of the vocational component. Since the vocational component generally accounts for the bulk of the resources of these programs, this has practical implications in term of cost-effectiveness.

Third, it provides long-term experimental evidence of the impact of training programs in developing countries. While long-term effects of training programs have been studied in developed countries[5], the long-term experimental evidence in developing countries is still scarce. Attanasio et. al (2015) use experimental data of a training program in 2005 in Colombia and find that even up to ten years later, the program had a positive and significant effect on the probability of working

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[4] See for example Adoho et al. (2014), Alzua et al. (2016), Attanasio (2011), Bandiera et. al (2012), Card et al. (2011), Ibarraran (2015), and Diaz and Rosas (2016).

[5] For example see Couch (1992), Cave et al. (1993), Schochet et al. (2008), and Flores- Lagunes et al. (2010)

in the formal sector, and earnings were 11.8% higher. Hirshleifer et al. (2014) used administrative data to study the impacts of a vocational training in Turkey six years after the intervention; Alzua et al. (2016) studied the effects of the program Entra 21 in Argentina 36 months after the completion of the project; and Ibarraran et al. (2014) follows a different cohort of the PJyE for six years.

Finally, our results on gender differences are consistent with findings described by Attanasio et al. (2011), who evaluated Colombia's Jovenes en Accion program, which has a similar curriculum as PJyE. Conducted 20 months after the beginning of the intervention, the authors found positive labor market effects for females but not for males.[6]

The paper is structured as follows. Section 2 describes the interventions considered in this study. Section 3 describes the experimental evaluation design including random assignment, data collection, descriptive statistics, and estimation strategy. Section 4 presents the results and the final section concludes.

2. INTERVENTION

We consider two interventions: (1) vocational training combined with soft skills training and an internship and (2) soft skills only training with an internship. This allows us to identify the marginal impact of the vocational training, the most expensive part of the intervention. We study both the short (12-month) and long run (36-month) effects, testing the effectiveness of the two alternative curricula.

2.1. Training Curriculum and Internships

PJyE built job skills through classroom training and internships, offered by private institutes known as Operation Centers for the System (COS) that are authorized by the National Institute for Professional Training (INFOTEP). INFOTEP also determines and standardizes the curriculum content of courses offered in the PJyE. The Program Coordination Unit (UCP) of the Ministry of Labor monitors the COS in order to ensure that the courses and internships meet minimum standards.

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[6] There are two other studies that look at female-only programs. Both studies found positive effects on employment outcomes (Maitra and Mani 2014; and Adoho et al. 2014).

The classroom component of the program consisted of vocational training (hard skills) and/or personal skills development (soft skills). The vocational training module included 150 hours of training in occupations, such as sales, beauty salon assistant, tourism and hospitality, carpentry, electricity and others. The personal skills component consisted of 75 hours focused on promoting self-esteem and self-realization, communication skills, conflict resolution, life planning, time management, teamwork, decision-making, hygiene and health, and coaching on risky behaviors. Once the in-classroom training phase was completed, all participants were also assigned to 240-hour internships at private companies, for which participants received a daily stipend of approximately US$2 and basic insurance. During this period, participants received oversight and job counseling.

PJyE follows what Card et al. (2011) call the "Chilean model" of job training programs in Latin America, where private institutions rather than employers provide classroom training and arrange for internships. The vocational training curricula were developed jointly with the private sector to cover the technical skills that participants would need for the subsequent internship phase. In 2009, the program offered 520 courses for 49 occupations. Over 91% of courses in 2009 targeted the commerce and service sectors, with only 3% in agriculture and 6% in others. Sixty percent of the courses were concentrated in six occupations: sales (23%), waiter-waitress (10%), beauty salon assistant (9%), pharmaceutical assistant (7%), sales assistant (7%) and secretarial assistant (6%). Other occupations available included graphic and web designer, network technician, network administrator, PC repairer, agro-industry manufacturing assistant, tractor operator and private security guard, among others. Table 1 provides a breakdown of the main occupations of the courses and the percentage of participants in the sample of the study that applied for each of them.

The personal skills development component consisted of 75 classroom hours and assignments to be completed by students after class. The curricula aimed to develop participant's "soft skills" contributing to their development as human beings and to provide participants with the tools to face and manage social risks. Major crosscutting themes in the curricula include values, attitudes and basic personal skills (self-fulfillment, basic cognitive abilities, and social skills) for a successful family, and social and work life. Table 2 describes the personal skills development course content.

2.2. Eligibility and Recruitment

The COSs promote the program, maintain applicant registries, and evaluate applicant eligibility. The UCP conducts a second review of the applicant registry and examines each candidate's application for eligibility. Eligible program applicants were individuals between the ages of 16 and 29, found to be at-risk, and Dominican Republic citizens in possession of a personal identification card. At-risk was defined as unemployed or underemployed and not having completed secondary school. Moreover, eligible applicants must belong to households with a per capita income not exceeding US$120 per month and located in regions known as Priority I and II according the SIUBEN index.[7] A special effort is made to reach out to enroll women. These criteria were meant to target PJyE to the poorest sectors of the population.

Each COS conducted a preliminary screening of candidates who expressed interest in enrolling to ensure that they met the program's eligibility criteria. Eligibility screening included a crosscheck of the applicant's identity card with the official national identity database, as well as other sources of auxiliary information. The UCP also intervened on occasion to help confirm an applicant's eligibility and supervised promotion of the program and pre-selection of youth by crosschecking each of the courses' participants with other available data, prior to enrollment. Of the more than 20,000 youth that applied for the program in 2009, 16,373 fulfilled the eligibility requirements and were selected by their respective COS to be part of the selection process.

3. EXPERIMENTAL DESIGN

One of the most innovative aspects of PJyE was the inclusion from the onset of an ongoing experimental enrollment process. Individuals applied to PJyE by filling out an application form, which was used to check applicants' socioeconomic and work background in order to confirm eligibility. Following this initial screening, applicants were randomly assigned to either enroll in the program (treatment) or not (control).[8]

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[7] SIUBEN (Unified System of Beneficiaries by its Spanish acronym) is a database of poor households in the Dominican Republic that determines eligibility for social programs.

[8] This design was exploited in two experimental evaluations of previous editions of the PJyE for both the 2004 and the 2008 cohorts. The 2004 program included vocational training in the classroom and an internship. The program had no effects on employment but did have statistically significant but modest effects on salaries and benefits 10 to

3.1. Random Assignment

Enrollment for this study was conducted in two waves, a first cohort enrolling between January 2009 and February 2009, and a second cohort between July 2009 and August 2009. As in previous editions of the program, the number of applicants exceeded the slots available in the program. In this context, eligible applicants were randomly assigned to the program through a lottery process, seen as an inherently fair way to allocate limited places. The primary innovation in 2009 relative to previous years was the expansion of the personal skills component, whereby the program opened a number of soft-skills only courses. Participation in these courses was also randomly assigned within the pool of eligible applicants, allowing for the identification of differential impacts through the complete course package relative to the soft-skills only component and a control. Both treatment groups also included internships with private employers.

The random assignment process was accomplished by means of a lottery under the coordination of the UCP. Each COS recruited 35 applicants per course and sent the list of names and ID numbers to the UCP. Next, applicants were randomly assigned to one of four groups using a computerized process, stratifying by gender to maintain a proportional number of males and females in each group relative to the original applicant pool.[9] From each course-cohort of 35 applicants, 20 individuals were randomly assigned to the hard and soft skills course; 5 individuals, to the soft-skills only course; 5 individuals, to a waiting list (granted admission if a vacancy became subsequently became available); and 5 individuals, to the control group (not granted admission to the program).[10] The soft skills only courses grouped 5 applicants from 4 separate course-cohorts, making up a total of 20 individuals per soft-skills only course. Figure 1 illustrates the random assignment process.

Of the more than 20,000 youth who applied for the program in 2009, 16,373 fulfilled the

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14 months later (Card et al., 2011). In 2008, the program added a "soft" life skills training component. Results showed that 2008 PJyE also had no effect on employment, but significant positive effects on non-cognitive skills, salaries and benefits (Ibarrarán et al., 2014). A six-year follow-up of the same cohort found no effects on employment or job quality, although there are significant long run effects on formal work (Ibarrarán et al., 2015).

[9] In other words, if a third of the applicants were male, then a third of the spots would be randomly assigned to male applicants, and two thirds would be randomly assigned to female applicants.

[10] During the initial days of each course, the program replaced students who were absent or who dropped out with individuals randomly selected from the waitlist. The Information System of the PJyE (SIPJyE) only maintained registrations of selected applicants in treatment or control once replacements were made. Thus, the lottery used is not strictly the original lottery, but rather the selection in place 10 days following the start of the course.

eligibility requirements and were selected by their respective COS to be part of the selection process. Of this group, by means of random assignment, 10,397 individuals were offered admission to a hard and soft skills course and 1,604 were offered admission to a soft-skills only course, with the remainder either waitlisted or assigned to the control group.

3.2. Data Collection

Data were collected in three survey rounds (Table 3). Upon applying to PJyE, applicants completed an enrollment form that doubled as a baseline survey. The survey included questions covering socioeconomic and demographic characteristics, as well as employment and educational histories.

Follow-up surveys were conducted on a random sample of individuals from treatment and control groups. The evaluation sample included a total of 4,700 youth, of whom 1,638 applicants had been offered admission to a hard and soft skills course, 1,613 to a soft-skills only course and 1,449 applicants were from the control group (see Figure 1).[11]

Three short telephone surveys were conducted within the first year of completing the program (see Figure 2). Surveys were conducted using Computer-Assisted Telephone Interviewing (CATI), which was supplemented by in-person interviews for a sub-sample of youth who could not be reached by telephone.[12] The purpose of these telephone surveys was to keep updated re-contact information for the evaluation sample and measure short-term results. The survey included a limited set of questions on job search and employment, number of hours worked, wages and job satisfaction, and future expectations. The response rate was over 90% when both telephone and personal interviews were used.

A final round of data was collected from the evaluation sample approximately 3.5-4 years after program completion. The survey covered both labor and non-labor long-term outcomes including employment histories, risk behaviors, attitudes and expectations, participation in social networks, and life skills. While the survey's response rate was lower in the telephone surveys, it still exceeded 80%. Contrasting the final measurements with the baseline data illustrates that data loss in this study stayed at acceptable levels, and as detailed below, the attrition patterns were

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[11] Sample sizes were calculated to achieve minimal detectable effect sizes on the main outcomes of interest (labor market outcomes and cognitive and non-cognitive abilities), maintaining 95% confidence and a power of 80%.

[12] The size of this sub-sample was approximately 10% of the total sample.

similar for the treatment and control groups.

3.3. Descriptive Statistics, Baseline Balance and Attrition

Baseline data presented in Table 4 suggests that the program's selection process was successful in reaching its target population of young Dominicans with low education levels, from poor households and who were unemployed or underemployed. On average, applicants were 21 years old; 62% were female; and 79% of applicants were single. Almost all applicants had not completed secondary school, which reflected the program's focus on youth who have either dropped out or put off completion of their secondary education.

Confirming program eligibility rules, unemployment amongst applicants was substantially higher than for the same age group in the general population. About 60% of applicants reported being unemployed during the week before their application; whereas, the national labor force survey (Encuesta Nacional de Fuerza de Trabajo (ENFT)) reported 24% unemployment for the same age group during the first semester of 2009. On the other hand, amongst those employed, the level of underemployment is similar between program applicants and the general population of the same age range with 72% of employed applicants reporting temporary or occasional employment. Finally, only 19% of applicants were students—a number that complies with the participation quota for students.

Table 5 reports baseline characteristics for treatment and comparison groups. As expected, a majority of characteristics are balanced, and there are no economically meaningful differences. Amongst males, a few notable exceptions include age, residence in Santo Domingo and poverty score, which we attribute to chance. Despite these differences amongst males, we cannot reject the null hypothesis of the F-statistic of joint significance for these variables at a 95% level of confidence.[13] Moreover, an analysis of the attrition patterns for the telephone and household surveys is shown in Appendix 1. It indicates that there was no correlation between treatment status and participation in the follow-up surveys[14].

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[13] *P*-values for the F-statistic test of joint significance comparing control group vs. soft-skills only are 0.46 for females and 0.02 for males; control group vs. hard and soft skills are 0.14 for females and 0.02 for males; and soft-skills only vs. hard and soft skills are 0.17 for females and 0.61 for males.

[14] . As an additional robustness check, we replicated the main results of the paper by controlling for the unbalanced characteristics found at baseline and in the attrition analysis. We find no significant differences. The results are available upon request.

3.4. Estimation

We estimate intention-to-treat (ITT) effects by comparing the outcomes of individuals randomly assigned to the treatment and the control groups irrespective of compliance with the treatment status. We argue that the ITT effects capture the policy relevant parameter, since policy makers in most cases can only offer job training, and participation is voluntary.

For the analysis, we work with the sample of individuals who responded to both the third round of the telephone survey and to the final household survey. We also excluded individuals from training centers that did not offer both the combined training and soft-skills only training (Vezza et al., 2014). The final analytic sample consists of 1,051 males and 1,728 females from 70 COSs.

We present simple OLS regressions of outcomes against binary variables representing each of the two treatment groups separately for men and women. We include a minimum set of controls[15] with the purpose of improving estimate precision (Duflo et al. 2008). In terms of inference, we cluster standard errors by COS and treatment group.

4. RESULTS

We report the effect of PyJE on skills, expectations, labor market outcomes and well-being measures both 12 months and three years after the intervention ended. The results are presented separately for females and males. For each outcome we present three sets of results: (1) effects for the combined vocational plus soft skills training, (2) soft-skills only training, and (3) a pooled coefficient that combines both treatment arms. We also include *p*-values for two-sided tests of statistical significance adjusted to account for multiple hypotheses within each outcome category based on Romano and Wolf (2005).

4.1. Skills Acquisition

The program sought to improve participant's labor market prospects by building technical/vocational skills and improving so called "soft" non-cognitive personal-social skills.

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[15] The variables included are COS and the sector of the course with fixed effects for cohort.

Because vocational skills varied from course to course, we were unable to construct a single standardized measure for vocational skills. We are, however, able to measure soft skills acquisition using a battery of skills tests adapted for the Dominican Republic from the Grit indices (Duckworth et al., 2007), which measure the tendency to sustain interest and effort in obtaining long-term goals, and Social and Personal Competencies (CPS, its Spanish acronym) scales that measure personal and social skills, including leadership, conflict resolution, social skills, order, and empathy.[16] The soft-skills scales were based on a combination of validated survey modules from existing literature that were piloted and adapted by professional psychologists to suit the local context.[17] The definitions for the measures are presented in Figure 3. All indicators were rescaled in terms of standard deviations of the control group, and as such the means of the control group are all zeros.

The results are presented in Table 6a for females and 6b for males. Each column represents a different dependent variable. Even measured three years after program completion, women in both treatment groups exhibited substantially higher levels of soft skills than those in the control group. The impacts are positive for all measures and statistically significant for the seven indicators in the combined vocational and soft-skills group, and the effects are positive in the soft-skills only group. Moreover, we cannot reject that the effects for combined vocational plus soft skills training improved skills, since the indicators are not statistically different than the soft-skills only training. In pooled estimates, the estimated effects are all significantly different from zero. In the last column, we combine all of the skills into a single summary index by averaging the individual indices. The effect of treatment on the summary soft skills index is statistically significant across the board with a treatment effect of approximately 0.1 standard deviations.

On the other hand, we find no detectable effects on either treatment on any of the soft skills measure for men (Table 6b). Estimated coefficients on all of the measures are close to zero with many of the signs being negative and not statistically significant for either treatment arm. This

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[16] Because of the duration of the tests, the measures were collected only in the long-term follow up.

[17] The CPS scales were adapted modules from the *Positive Youth Development Student Questionnaire-Institute for Applied Research in Youth Development* (Lerner et al., 2005), the *Self-Description Questionnaire-II* (Marsh, 1990), the *Life Effectiveness Questionnaire* (Neill et. al., 1997), the *Review of Personal Effectiveness* (Richards et. al, 2002), the *Adolescent Coping Scale* (Frydenbergand Lewis, 1993), and the *Sense of Community Scale* (McMillan and Chavis, 1986). See Brea (2011) for details of the adaptation of these survey tools to the context of the Dominican Republic and of the PJyE program.

indicates that the program had no lasting effects on soft-skills acquisition for participating men.

4.2.   Short-Run Expectations

Next, we examine the effects of PJyE on expectations for future employment and livelihoods measured 12 months after the training completed. One of the objectives of the soft skills components was to increase optimism about the future. We find that participating in the training had positive and significant effects on expectations of improved future employment conditions and of improved future living conditions for both treatment groups for women (Columns 1 and 2 of Table 7). Again, we cannot reject that the estimated effects are different for the combined and soft-skills only groups. The pooled samples show increases of 3.5 percentage points for the expectations of improving employment opportunities and 3.0 percentage points in the expectations of improving living conditions. Similarly, we find that for men, the training increased the expectations of improved employment conditions by 3.6 percentage points in the pooled sample (Column 3). However, in contrast to women, there was no effect on expectations of improved living conditions for men (Column 4).

4.3.   Short Run Labor Market Outcomes

The program's impact on labor market outcomes 12 months after the training completed is markedly different for women and men. The impact on the probability of employment for women is 7.0 percentage points in the combined vocational and soft skills treatment arm and 5.2 percentage points in the soft-skills only group, which represents relative increases of 32% and 23.6% respectively (column 1 of Table 8A). There is no statistical difference in the estimated impacts between the two arms on employment. In the pooled sample, we find an increase in employment of 5.9 percentage points that translates into an increase of 26.8%.

We also find that both intervention arms are associated with women not only finding more employment, but also higher quality employment in terms of salary and job satisfaction. We find a large and positive effect on women's salaries of about 17%, with very similar effects for the two treatment arms (column 3 of Table 8A).[18] We also find a large and positive effect on the share of women who are satisfied with their jobs, again with very similar effect size for the two treatment

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[18] Although the adjusted Romano-Wolf p-value for the combined training is not significant at standard levels, we cannot reject that the combined and the soft skills coefficient are equal and the p-value for the Romano-Wolf of the pooled sample is also significant.

arms (column 4 of Table 8A).[19] On average, women in the combined treatment group are 16.3 percentage points more likely to be satisfied with their job, which is a 39% increase in job satisfaction.

In contrast, the impact of the program on men's employment is substantially different and contingent on the type of treatment: the combined vocational and soft skills treatment led to a negative and strongly significant effect on short-run employment of -0.11 percentage points, a relative reduction of about -20% with respect to the control group. On the other hand, men in the soft-skills only group experienced no detectable changes in employment relative to the control group. We can reject the equality of coefficients at the 5% level between the combined and soft skills only arms, which indicates that the negative effect on employment for men was caused by the hard skills/vocational component of the program's curricula as men who participated in the soft-skills only training had no significant changes in the likelihood of holding a job. There are also no significant effects of either treatment on salaries or job satisfaction.

Taken together, these results indicate that, in the short run, the intervention successfully increased employment in higher quality jobs for women but not for men, and the hard skills training resulted in a nontrivial and negative short-run employment effect for men and no improvements in earnings. Given that the estimated coefficients for both groups are statistically indistinguishable for skills, employment, salary and job satisfaction, it is likely that the vocational training component of the program did not contribute to the improved labor market outcomes for women. Rather, short-run employment effects appear to be generated through increased soft skills combined with labor market experience through internships. This suggests that the soft-skills training and internship, and not vocational training, led women to achieve higher employment in jobs with higher salaries that are more satisfying.

The labor market outcome effects are consistent with the results on skills and expectations. Women acquired more skills and appear to have been rewarded for these skills in the labor market. Men on the other hand did not acquire skills, but did raise their expectations in the combined vocational and soft skills treatment. Since men did not acquire skills, their wage offers may not

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[19] Although the adjusted Romano-Wolf p-value for the combined training is not significant at standard levels, we cannot reject that the combined and the soft skills coefficient are equal and the p-value for the Romano-Wolf of the pooled sample is also significant.

have risen. However, men may have turned down job offers that they otherwise might have accepted but now did not meet their higher expectations, and hence leading to lower employment rates.

4.4. Longer Run Labor Market Outcomes

Table 9 presents the effects of PJyE on the main employment outcomes three years after the program ended. In contrast with the results for the short term, there are no lasting effects of the program on the probability of working on the quality of employment for women or men after three years. All of the estimated coefficients for all groups are statistically insignificant and close to zero.

Taken together with the short-term employment findings above, these results indicate that the training contributed to large gains in employment, increased salaries and higher job satisfaction for women in the short term, but these effects dissipated in the longer term. For men, the vocational training component reduced the likelihood of working in the short run, but that effect again dissipated in the longer run. Men in the soft-skills only training course seem to have been largely unaffected by the program either in the short or longer term.

4.5. Longer-Term Well-being

Finally, we explore effects of PJyE on the well-being of program beneficiaries in the three years after the training, measured in terms of job satisfaction (Table 9), future expectations, and self-esteem. Women in the treatment group seem to be just as satisfied with their current employment as those in the control group in that they are not more likely to be searching for another job. However, men in the treatment groups are more unsatisfied with their current employment in the treatment groups and are more likely to be searching for better opportunities. Moreover, the treatment effect for men on job search while employed is very large in magnitude. Men in the pooled treatment group are 11 percentage points more likely to be searching, which translates into a 54% higher rate of search than the control group.

Women in the treatment groups also report significantly higher optimism about the future than those in the control group even after three years out the program, while men in the treatment group report significantly diminished future expectations (Table 10). Specifically, women in the

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treatment groups are significantly more likely to expect higher future salaries and that their children will lead good lives. Women in treatment groups also report higher relative wealth positions compared to those in the control group. In contrast, compared to the control group, men in the combined vocational and soft skills treatment group report significantly lower expectations for salaries in the future and that their children will be worse off.

Finally, we report results for the effect of the training on self-esteem (Table 10). After three years it appears that women in the treatment groups had significantly higher self-esteem than those in the control group. In contrast, men in the treatment groups seem to have lower self-esteem than those in the control group, although the effects are not statistically significant.

These long-run effects are consistent with the fact that, despite both females and males having finished the training with high future expectations (12 months), only females acquired skills and achieved results in the labor market after completion of the course. In the long run, the effects in the labor market disappeared for females, but they still maintain the gains in soft skills acquired in the training, keeping their self-esteem high and maintaining higher expectations for a better future. Males, on the contrary, had increased labor market expectations, but failed to gain soft skills and experienced reduced short-run employment in the combined training arm. While the program had no sustained long-run employment effects other than increased job search amongst males, men show signs of discouragement in terms of reduced optimism about future employment and wealth for themselves and future generations.

5. Discussion

Job training programs for poor and at-risk youth in developing countries are widespread, despite relatively weak empirical evidence as to their effectiveness and cost-effectiveness (Blattman and Ralston, 2015). While the specific curricular and quality of the intervention content varies from program to program, these interventions have generally consisted of a mix of hard (i.e. vocational) skills and soft (i.e., inter-personal) skills that are meant to improve beneficiaries' job prospects, reduce poverty, and improve their well-being. One salient aspect of these programs that has received less attention is their potential to alter beneficiaries' employment and livelihood expectations. If in fact these programs generate high expectations that are not met in reality, they could result in discouraged workers with worse long-term outcomes.

We explore the short- and long-term effects of a vocational and soft-skills training program in the Dominican Republic using a unique experiment that randomly assigned potential participants to receive a combined package of vocational training, soft skills and internship; a soft skills and internship only arm, or a control group. This design allows us to sort out the marginal contribution of the vocational training component, which makes up the bulk of time and costs related to most job-training programs.

Our findings add a number of insights to the existing body of evidence. We find that the program increased short-run expectations for both men and women, but that the effects on labor market outcomes are different for these two groups. Young women benefited from the program in the short run; whereas, men did not experience any improvements in employment. The interaction of these common expectations and different labor market results produce very different long-run outlooks on life. For women, the increased short-term expectations are met with positive effects in terms of both soft skills acquisition and short-term employment. While women in the control group catch up to the treatment in terms of employment and salary over time, women in the treatment groups retain a more positive outlook for the future and have higher self-esteem in the long run. For men, on the other hand, the increased short-run employment expectations are not born out in the labor market. In fact, men in the vocational training arm experience a reduced likelihood of employment in the short run, and men have sustained negative impacts on their long-run expectations and wellbeing.

Our interpretation is that women benefited substantially from both the soft and hard skills components of the training, and that the positive effects on expectations were further reinforced by the short-run positive effects on employment. While these expectations did not pan out in the labor market outcomes in the long run, the lasting positive effect on skills seems to have been rewarded as reflected in the higher future expectations and self-esteem.

Our interpretation indicates a completely different effect of the program for men. While the program seems to have induced higher employment expectations, these did not materialize even in the short run. One explanation for this is that these men may not seem to have acquired skills from the training. These unmet prospects are reflected in the negative effects of the program on expectations in general in the long run, which were also probably reinforced by the relatively worse labor market outcomes in terms of non-satisfaction (on-the-job-search) and employment

quality (lower formal employment). These results, taken together, might explain the pattern of program effects on self-esteem in the long run. While we find virtually no effect on men, there is a positive and significant effect for women.

For women, the program implied a reinforcing pattern of skill acquisition and strengthened expectations despite the dissipation of positive short-run employment effects in the long run. For men, on the other hand, the failure to acquire skills and the negative employment results in the short run seems to have reinforced a cycle of negative outcomes and expectations. Men seem to have waited to find better jobs because of their higher expectations, but they did not acquire skills – which is reflected in the lack of reward in the labor market, which in turn makes them become disillusioned.

While there are effects from both types of training, hard skills training seems to have induced a higher level of skill acquisition (even for soft skills) and higher expectations for women, although the lack of personal skills and the negative employment outcomes also implied higher levels of frustration for men in the long run from this type of training. Women get skills and a better view of the future; men become discouraged.

The main message is that programs of this type can be transformative – for women, soft skills training mattered and made a difference, but they can also have a downside if, like in this case for men, training creates expectations that are not met. Moreover, governments in both developed and developing countries will most likely continue carrying out programs of this type, so it is very important that research efforts also identify their potential downsides and help inform their design and implementation to mitigate them. Further research could concentrate on the mechanisms through which these programs seem to be more effective for women than for men, and attempt to derive conditions under which male youth could also benefit from training in both their hard and soft skills and their employment outcomes in the longer run. Finally, while we have provided evidence to disentangle the effects of hard and soft skills training, future experimental designs could also attempt to isolate the effect of internships on labor market outcomes but also on skills, expectations and self-esteem, since it is likely that these early work experiences can shape future career prospects and participants' well-being in general.

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Figures

Figure 1: Random assignment.
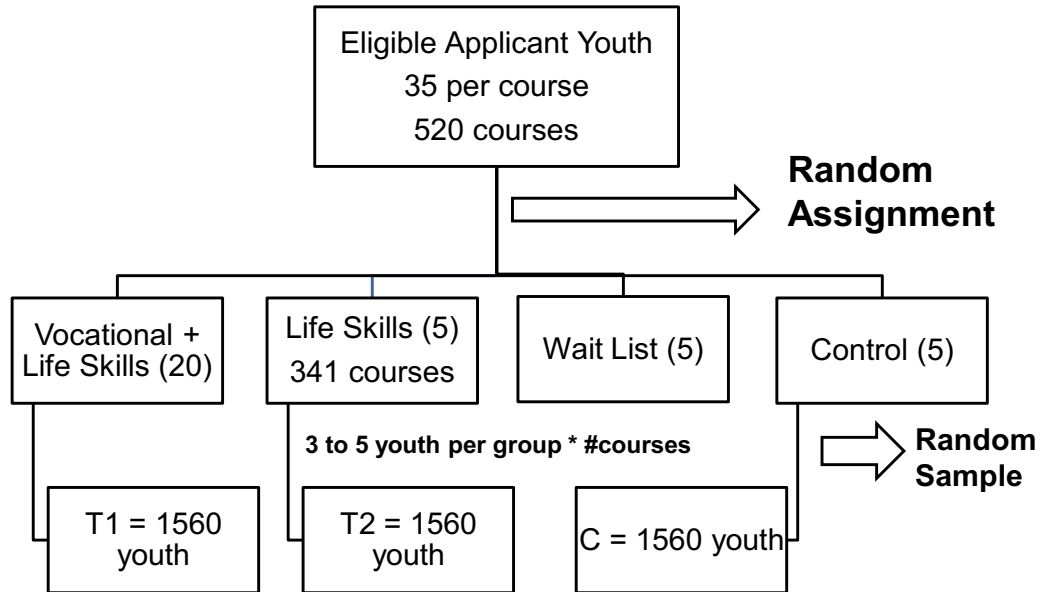
Figure 2: Intervention and survey timeline
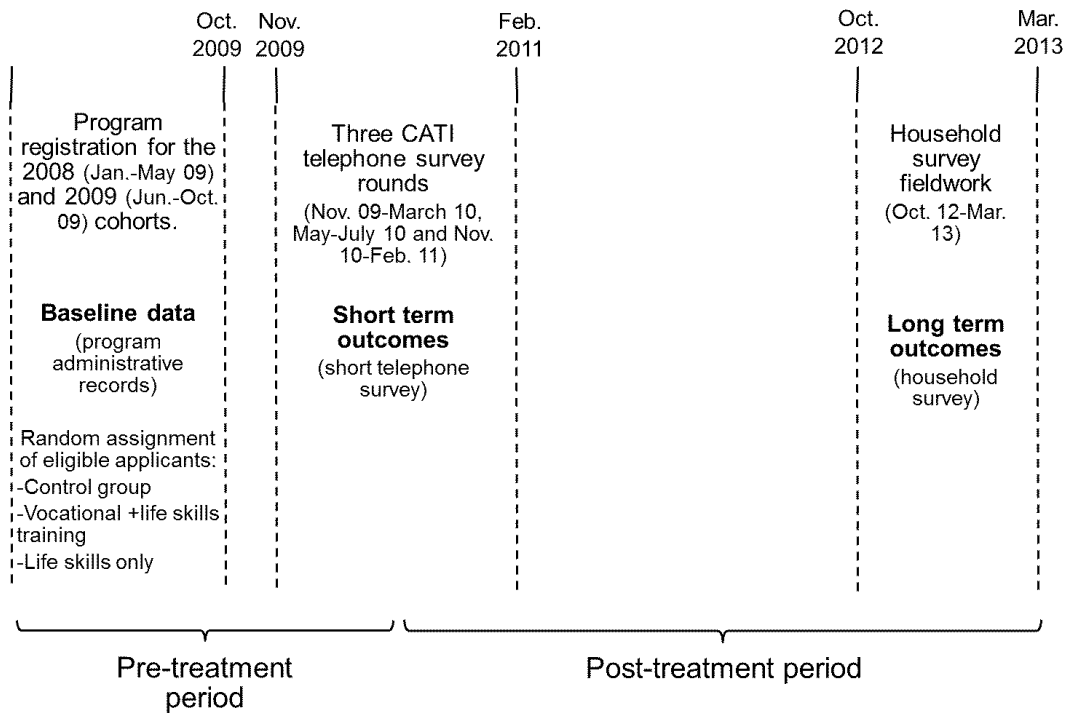
Figure 3: Definitions of Soft Skills Measures

Skill	Measure definition
Perseverance	The measure assesses the belief that it is important to sustain efforts to achieve long-term goals and complete plans. It is a true positive indicator of long-term success and disassociated with a disciplined and deeply rooted desire to achieve individual success.
Ambition	The measure assesses the desire for power or superiority.
Leadership	The measure assesses the ability to influence peers and work towards a common goal, to be known and admired by peers, willingness to actively participate in important community issues, and the ability to work with others and commit to come to agreement and coordinate activities with others.
Conflict Resolution	The measure assesses the ability to recognize, express and manage emotions and before acting, as well as the ability to identify the source of a social or interpersonal conflict, to understand the perspectives of all parties involved in the conflict, and to propose solutions.
Social Skills	The measure assesses the ability to establish and maintain social ties and the knowledge of how to behave in a social context to function.
Organization	The measure assesses the ability to plan activities and the willingness to maintain the order of the tools and materials that are used in everyday development. It also implies a commitment to the goals set by the team and the social environment of the person.
Communication	The measure assesses the ability to understand and accept other people, to take the place of these, to receive the views of others and be respectful (a) to people, ideas, values, and / or customs different from the individual's own. At the same time, it is also the ability to express and understand ideas or messages accurately and safely, which may subject you to maintain a good relationship and social adjustment.

Tables

Table 1: Courses and Participants by Sectors (2009)

Courses	Percentage of Participants [1]
Sales	38%
Hotel and Restaurant	20%
Professional Services	11%
Beauty	10%
Health	9%
Commerce	4%
Agriculture	3%
Computer/IT	3%
Security	2%
Construction	0%

[1] Participants are assigned to the course they applied for

Table 2: Competencies Addressed in Soft Skills Training

Competencies	Hours
Development of Self-Esteem, Personal Skills and Self-Fulfillment	20
Self awareness	
Communication skills	
Management of human relationships	
Development of Skills for Life and Work Success	35
Development of a life project	
Working with quality and being productive	
Decision making	
Hygine, health, and labor rights	
Development of Social Skills	20
Management of conflict resolution	
Participation in social solidarity networks	
Total number of hours	75

Table 3: Data Sources and Sample Sizes

Time after the training:	Registration Form	Telephone Survey			Household Survey
	Before the training	0 months	6 months	12 months	3 years
Treatment	3,251	2,856	2,940	2,935	2,697
Hard and Soft Skills	1,638	1,419	1,481	1,470	1,366
Soft Skills	1,613	1,437	1,459	1,465	1,331
Control	1,449	1,259	1,298	1,286	1,176
Total Number Observations	4,700	4,115	4,238	4,221	3,873

Source: Baseline data came from the registration form that the participants had to fill out to apply for the program. Short term follow up data come from three rounds of telephone surveys: the first one was conducted inmediatly after the program finished following the rolling basis scheme of the program (from November 2009 to March 2010), the second was conducted six months after the program (from May to July 2010), and the third round one was conducted one year after the program concluded (from November 2010 to February 2011). The long term follow up data was collected in a household survey from October 2012 to March 2013, that is aproximately 3 years after the training concluded for our study sample.

Table 4: Applicant Characteristics at Baseline

	Mean study sample	Mean Population
Female	62%	50%
Age	20.9	20.9
Household Size	3.8	4.7
Education (maximum level attained, not necessarily completed)		
Elementary	25%	31%
Secondary	72%	49%
Tertiary	0%	17%
Colleage	0%	3%
Don't Know	2%	0%
Marital Status		
Single	79%	69%
Civil Union	19%	22%
Married	2%	3%
Divorced	0%	6%
Widow	0%	0%

Source: Baseline study sample and National Labor Survey 2009
Note: The study sample is restricted to individuals in training facilities that offered the two treatments, and to individuals who were found in both the 12 months' follow up telephone survey and the 3 years' follow up household survey.

Females

	Mean at Baseline			P-Values		
VARIABLES	Hard Skills and Soft Skills	DCB	Control	Hard and Soft Skills vs Control	Soft Skills vs Control	Hard and Soft Skills vs Soft Skills
Age	21.176	21.159	21.092	0.903	0.886	0.772
Family Size	3.984	3.841	3.821	0.156	0.033	0.340
Urban=1	0.783	0.796	0.771	0.778	0.889	0.644
Sto. Domingo=1	0.251	0.216	0.255	0.208	0.538	0.952
Poverty Score	60.355	61.106	61.131	0.022	0.050	0.914
Years of Education	9.904	9.789	9.822	0.198	0.644	0.518
Studying=1	0.269	0.266	0.240	0.860	0.296	0.192
Literacy head of household	0.891	0.909	0.923	0.080	0.063	0.756
Literacy spouse of head household	0.400	0.436	0.402	0.192	0.703	0.082
Working	0.026	0.020	0.029	0.465	0.845	0.354
Related Experience=1	0.093	0.111	0.120	0.190	0.615	0.503
Unemployed=1	0.538	0.553	0.547	0.971	0.976	0.943
Previous Work=1	0.107	0.106	0.096	0.746	0.168	0.079
Receive remittances	0.040	0.039	0.031	0.929	0.227	0.159
Has children=1	0.547	0.506	0.547	0.192	0.721	0.097
Number of children	0.897	0.818	0.935	0.323	0.275	0.041
Single=1	0.745	0.723	0.710	0.281	0.108	0.462

Males

	Mean at Baseline			P-Values		
VARIABLES	Hard and Soft Skills	Soft Skills	Control	Hard and Soft Skills vs Control	Soft Skills vs Control	Hard and Soft Skills vs Soft Skills
Age	20.31	20.53	20.86	0.01	0.13	0.23
Family Size	3.70	3.74	3.70	0.98	0.85	0.86
Urban=1	0.79	0.82	0.84	0.18	0.66	0.38
Sto. Domingo=1	0.25	0.29	0.24	0.03	0.19	0.04
Poverty Score	62.95	63.27	61.67	0.03	0.02	0.94
Years of Education	9.63	9.74	9.60	0.41	0.21	0.70
Studying=1	0.26	0.27	0.24	0.18	0.12	0.99
Literacy head of household	0.90	0.92	0.88	0.12	0.02	0.38
Literacy spouse of head household	0.37	0.38	0.37	0.96	0.93	0.97
Working	0.06	0.06	0.06	0.29	0.98	0.24
Related Experience=1	0.14	0.16	0.12	0.82	0.29	0.43
Unemployed=1	0.68	0.68	0.72	0.09	0.08	0.90
Previous Work=1	0.22	0.22	0.18	0.09	0.07	0.98
Receive remittances	0.06	0.08	0.10	0.17	0.69	0.24
Has children=1	0.12	0.12	0.16	0.33	0.09	0.48
Number of children	0.17	0.16	0.22	0.37	0.16	0.71
Single=1	0.91	0.90	0.88	0.10	0.12	0.87

Source: Baseline study survey
Note: The study sample is restricted to individuals in training facilities that offered the two treatments, and to individuals who were found in both the 12 months' follow up telephone survey and the 3 years' follow up household survey.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Perseverance	Ambition	Leadership	Conflict Resolution	Social Skills	Organization	Communication
Combined Vocational and soft skills training							
β_1	0.211***	0.188***	0.095*	0.095*	0.102*	0.141**	0.159**
Standard Error	(0.058)	(0.060)	(0.063)	(0.065)	(0.064)	(0.066)	(0.060)
Romano Wolf p-value	0.001	0.007	0.068	0.068	0.068	0.034	0.014
Soft skills training only							
β_2	0.104	0.096	0.054	0.078	0.107	0.101	0.026
Standard Error	(0.054)	(0.056)	(0.056)	(0.057)	(0.055)	(0.057)	(0.055)
Romano Wolf p-value	0.183	0.183	0.197	0.183	0.183	0.183	0.32
Pooled sample							
β_3	0.147**	0.133**	0.071*	0.085*	0.105*	0.117*	0.079*
Standard Error	(0.051)	(0.052)	(0.052)	(0.054)	(0.052)	(0.054)	(0.050)
Romano Wolf p-value	0.029	0.038	0.083	0.082	0.057	0.053	0.082
Observations	1,728	1,728	1,728	1,728	1,728	1,728	1,728
R-squared	0.071	0.059	0.038	0.047	0.042	0.046	0.076
Control Mean	0	0	0	0	0	0	0
p-value $\beta_1=\beta_2$	0.0263	0.0631	0.455	0.763	0.937	0.482	0.0141
p-value $\beta_1=0$ & $\beta_2=0$	0.00118	0.00709	0.317	0.292	0.126	0.0817	0.0141

Notes: Standard errors clustered at the course and treatment group level in parenthesis. Romano Wolf *p-values* in brackets. All regressions include controls for the educational institution, the sector of the course, and the training cohort. *** p<0.01, ** p<0.05, * p<0.1

Table 6b. Impact on Skills after 3 Years, Males

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Perseverance	Ambition	Leadership	Conflict Resolution	Social Skills	Organization	Communication
Combined Vocational and soft skills training							
β_1	-0.029	-0.066	0.053	-0.008	-0.011	-0.025	-0.076
Standard Error	(0.075)	(0.076)	(0.086)	(0.076)	(0.079)	(0.084)	(0.074)
Romano Wolf p-value	1	1	1	1	1	1	1
Soft skills training only							
β_2	-0.065	-0.067	0.017	0.017	-0.003	0.006	0.003
Standard Error	(0.070)	(0.072)	(0.073)	(0.072)	(0.073)	(0.075)	(0.069)
Romano Wolf p-value	1	1	1	1	1	1	1
Pooled sample							
β_3	-0.050	-0.066	0.032	0.006	-0.006	-0.007	-0.030
Standard Error	(0.064)	(0.065)	(0.067)	(0.064)	(0.064)	(0.067)	(0.063)
Romano Wolf p-value	1	1	1	1	1	1	1
Observations	1,051	1,051	1,051	1,051	1,051	1,051	1,051
R-squared	0.092	0.089	0.073	0.073	0.080	0.069	0.098
Control Mean	0	0	0	0	0	0	0
p-value $\beta_1=\beta_2$	0.600	0.988	0.662	0.746	0.928	0.708	0.262
p-value $\beta_1=0$ & $\beta_2=0$	0.642	0.594	0.822	0.945	0.991	0.928	0.471

Notes: Standard errors clustered at the course and treatment group level in parenthesis. Romano Wolf *p-values* in brackets. All regressions include controls for the educational institution, the sector of the course, and the training cohort. *** p<0.01, ** p<0.05, * p<0.1

Table 7: Impact on Expectations after 12 Months

	(1) A. Females	(2)	(3) B. Males	(4)
	Expect Employment Opportunities to Improve	Expect Living Standards to Improve	Expect Employment Opportunities to Improve	Expect Living Standards to Improve
Combined Vocational and soft skills training				
β_1	0.033**	0.028**	0.045**	0.007
Standard Error	(0.016)	(0.013)	(0.017)	(0.016)
Romano Wolf *p*-value	0.041	0.041	0.019	0.524
Soft skills training only				
β_2	0.037**	0.032***	0.029	0.006
Standard Error	(0.014)	(0.012)	(0.018)	(0.015)
Romano Wolf *p*-value	0.013	0.013	0.26	0.51
Pooled sample				
β_3	0.035**	0.030**	0.036*	0.006
Standard Error	(0.014)	(0.011)	(0.016)	(0.014)
Romano Wolf *p*-value	0.013	0.013	0.055	0.475
Observations	1,728	1,728	1,051	1,051
R-squared	0.046	0.036	0.078	0.061
Mean Control Group	0.917	0.943	0.924	0.955
p-value $\beta_1 = \beta_2$	0.753	0.665	0.285	0.993
p-value $\beta_1 = 0$ & $\beta_2 = 0$	0.039	0.025	0.032	0.899

Notes: Standard errors clustered at the course and treatment group level in parenthesis. Romano Wolf *p*-values in brackets. All regressions include controls for the educational institution, the sector of the course, and the training cohort. *** p<0.01, ** p<0.05, * p<0.1

Table 8. Impact on Labor Outcomes after 12 Months

VARIABLES	(1) Working	(2) Hours per week	(3) Log (Salary)	(4) Satisfied with job
A. Females				
Combined Vocational and soft skills training				
β_1	0.070**	1.814	0.174*	0.197**
Standard Error	(0.027)	(2.451)	(0.103)	(0.072)
Romano Wolf p-value	0.023	0.14	0.066	0.023
Soft skills training only				
β_2	0.052*	1.532	0.179*	0.143*
Standard Error	(0.025)	(2.201)	(0.098)	(0.067)
Romano Wolf p-value	0.078	0.139	0.078	0.078
Pooled sample				
β_3	0.059***	1.641	0.177*	0.163***
Standard Error	(0.023)	(2.095)	(0.094)	(0.062)
Romano Wolf p-value	0.009	0.434	0.06	0.009
Observations	1,728	448	445	451
R-squared	0.055	0.144	0.204	0.200
Mean Control Group	0.220	39.30	8.431	0.416
p-value $\beta_1=\beta_2$	0.487	0.885	0.944	0.345
p-value $\beta_1=0$ & $\beta_2=0$	0.025	0.731	0.171	0.021
B. Males				
Combined Vocational and soft skills training				
β_1	-0.111**	1.867	0.067	0.090
Standard Error	(0.040)	(2.051)	(0.076)	(0.061)
Romano Wolf p-value	0.025	0.386	0.386	0.264
Soft skills training only				
β_2	-0.031	-1.228	-0.039	0.010
Standard Error	(0.038)	(1.634)	(0.064)	(0.052)
Romano Wolf p-value	1	1	1	1
Pooled sample				
β_3	-0.065	-0.118	-0.001	0.039
Standard Error	(0.035)	(1.493)	(0.059)	(0.048)
Romano Wolf p-value	0.323	1	1	1
Observations	1,051	519	512	522
R-squared	0.098	0.197	0.218	0.163
Mean Control Group	0.541	45.46	8.775	0.547
p-value $\beta_1=\beta_2$	0.0328	0.137	0.145	0.171
p-value $\beta_1=0$ & $\beta_2=0$	0.016	0.326	0.344	0.284

Notes: Standard errors clustered at the course and treatment group level in parenthesis. Romano Wolf *p*-values in brackets. All regressions include controls for the educational institution, the sector of the course, and the training cohort. *** p<0.01, ** p<0.05, * p<0.1

Table 9: Impact on Labor Market Outcomes after 3 Years

	(1) Working	(2) Hours per week	(3) Log (Salary)	(4) Searching for Work While Employed
A. Females				
Combined Vocational and soft skills training				
β_1	0.016	0.600	0.012	-0.042
Standard Error	(0.033)	(1.863)	(0.092)	(0.043)
Romano Wolf *p*-value	1	1	1	1
Soft skills training only				
β_2	0.013	0.334	-0.027	-0.006
Standard Error	(0.029)	(1.741)	(0.085)	(0.039)
Romano Wolf *p*-value	1	1	1	1
Pooled sample				
β_3	0.014	0.440	-0.011	-0.020
Standard Error	(0.027)	(1.588)	(0.078)	(0.037)
Romano Wolf *p*-value	1	1	1	1
Observations	1,728	844	747	844
R-squared	0.060	0.111	0.176	0.099
Control Mean	0.490	35.38	8.259	0.306
p-value $\beta_1=\beta_2$	0.928	0.875	0.634	0.318
p-value $\beta_1=0$ & $\beta_2=0$	0.875	0.949	0.885	0.529
B. Males				
Combined Vocational and soft skills training				
β_1	-0.009	-1.019	-0.099	0.136***
Standard Error	(0.032)	(1.811)	(0.075)	(0.041)
Romano Wolf *p*-value	0.649	0.62	0.39	0.005
Soft skills training only				
β_2	-0.009	0.103	-0.039	0.092**
Standard Error	(0.030)	(1.706)	(0.058)	(0.033)
Romano Wolf *p*-value	1	1	1	0.025
Pooled sample				
β_3	-0.009	-0.354	-0.063	0.110***
Standard Error	(0.027)	(1.540)	(0.055)	(0.031)
Romano Wolf p-value	0.977	0.977	0.589	0.001
Observations	1,051	849	806	848
R-squared	0.069	0.116	0.114	0.107
Control Mean	0.822	45.22	8.746	0.203
p-value $\beta_1=\beta_2$	0.995	0.505	0.414	0.258
p-value $\beta_1=0$ & $\beta_2=0$	0.951	0.776	0.414	0.001

Notes: Standard errors clustered at the course and treatment group level in parenthesis. Romano Wolf *p*-values in brackets. All regressions include controls for the educational institution, the sector of the course, and the training cohort. *** p<0.01, ** p<0.05, * p<0.1

Table 10. Impact on Expectations and Self Esteem after 3 Years

	(1) Log (Expected Future Salary)	(2) Expect Children Will Have Better Life	(3) Expected Relative Wealth in 10 Years	(4) Self Esteem
A. Females				
Combined Vocational and soft skills training				
β_1	0.063**	0.073**	0.112**	0.137*
Standard Error	(0.028)	(0.037)	(0.049)	(0.063)
Romano Wolf *p*-value	0.041	0.041	0.041	0.062
Soft skills training only				
β_2	0.032	0.052	0.010	0.134**
Standard Error	(0.026)	(0.034)	(0.048)	(0.057)
Romano Wolf *p*-value	0.486	0.486	0.486	0.038
Pooled sample				
β_3	0.044	0.061	0.050	0.135**
Standard Error	(0.024)	(0.031)	(0.044)	(0.053)
Romano Wolf *p*-value	0.105	0.105	0.105	0.023
Observations	1,728	1,728	1,728	1,728
R-squared	0.100	0.062	0.059	0.051
Control Mean	9.208	4.532	3.947	0
p-value $\beta_1=\beta_2$	0.160	0.527	0.0189	0.948
p-value $\beta_1=0$ & $\beta_2=0$	0.081	0.132	0.0275	0.039
B. Males				
Combined Vocational and soft skills training				
β_1	-0.090*	-0.093	0.054	-0.051
Standard Error	(0.037)	(0.049)	(0.063)	(0.082)
Romano Wolf *p*-value	0.087	0.12	0.247	0.272
Soft skills training only				
β_2	-0.019	-0.068	0.082	-0.037
Standard Error	(0.030)	(0.044)	(0.059)	(0.072)
Romano Wolf *p*-value	0.681	0.681	0.681	0.681
Pooled sample				
β_3	-0.049	-0.078	0.070	-0.043
Standard Error	(0.029)	(0.041)	(0.053)	(0.064)
Romano Wolf *p*-value	0.287	0.287	0.287	0.373
Observations	1,051	1,051	1,051	1,051
R-squared	0.110	0.072	0.091	0.077
Control Mean	9.534	4.550	3.903	0
p-value $\beta_1=\beta_2$	0.036	0.547	0.635	0.862
p-value $\beta_1=0$ & $\beta_2=0$	0.043	0.139	0.373	0.795

Notes: Standard errors clustered at the course and treatment group level in parenthesis. Romano Wolf *p*-values in brackets. All regressions include controls for the educational institution, the sector of the course, and the training cohort. *** p<0.01, ** p<0.05, * p<0.1

Appendix 1. Attrition

Dependent variable: Not found either in the follow up survey or in the final survey

	(1) Female	(2) Male	(3) Female	(4) Male
Hard skills and soft skills training	-0.016	-0.018	-0.004	-0.001
	(0.024)	(0.029)	(0.025)	(0.032)
Soft skills training only	-0.014	-0.023	-0.005	-0.015
	(0.022)	(0.028)	(0.023)	(0.030)
Age			-0.010***	0.001
			(0.004)	(0.005)
Family Size			-0.014**	-0.011
			(0.007)	(0.009)
Urban=1			0.061**	0.057
			(0.026)	(0.039)
Sto. Domingo=1			0.142	-0.953***
			(0.132)	(0.083)
Poverty Score			0.001	0.001
			(0.001)	(0.002)
Years of Education			-0.017***	-0.016*
			(0.006)	(0.008)
Studying=1			0.003	-0.043
			(0.026)	(0.036)
Literacy head of household			0.005	-0.037
			(0.035)	(0.050)
Literacy spouse of head household			-0.022	-0.023
			(0.021)	(0.030)
Working			0.010	-0.049
			(0.065)	(0.064)
Related Experience=1			-0.025	-0.020
			(0.033)	(0.038)
Unemployed=1			0.044*	-0.045
			(0.025)	(0.041)
Previos Work=1			0.026	-0.034
			(0.032)	(0.037)
Receive remittances			0.126**	0.044
			(0.055)	(0.050)
Has children=1			-0.050*	-0.011
			(0.030)	(0.076)
Number of children			0.045***	0.022
			(0.017)	(0.050)
Single=1			-0.020	0.030
			(0.024)	(0.048)
Observations	2,144	1,374	1,914	1,195
R-squared	0.053	0.075	0.075	0.097
FE & CL:	Yes	Yes	Yes	Yes
Baseline Vars:	No	No	Yes	Yes

Notes: Standard errors clustered at the course and treatment group level in parentheses. All regressions include controls for the educational institution, the sector of the course, and the PJyE cohort. *** p<0.01, ** p<0.05, * p<0.1