Soft Skills and Hard Skills in Youth Training Programs

Long Term Experimental Evidence from the Dominican Republic

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Abstract

This paper studies the effects of a youth training program which included soft skills, hard skills and internships in the Dominican Republic, with different modalities randomly assigned to applicants. We find strong and lasting effects on soft skills and expectations, but these results are markedly different for young men and young women. Shortly after completing the program, both male and female participants in both training arms (soft and hard skills and soft skills only) experience a strong increase in their employment expectations. This result is reversed for male participants in the long run, who exhibit worse expectations in general. These results can be explained by the program's effect on skills and on labor market outcomes. Participating women exhibit substantially higher levels of soft skills three years after completion of the program. There is no such effect in the long run for men in these social skills. Moreover, women who took the combined training also exhibit substantially higher levels of resolution as measured by a standard grit test. Women also have better labor market outcomes than men: women in both treatment arms exhibit higher levels of employment, higher wages and higher levels of satisfaction with their jobs compared to those in the control group in the short term. In contrast, men participating in the program exhibit significantly lower employment levels than those in the control group in the short and in the long term. The results on expectations for women are still present after three years, even if we find no discernible effect on employment, on-the-job search, hours worked, salary or formal employment for women in the long run. While the short term negative effect in employment for men seems to dissipate in the long run, employed men are substantially more likely to be look for another job and they are also less likely to be engaged in formal employment. Finally, consistent with the empowerment and sexual education contents of the soft skills training, we find a reduction on the probability of having children for women, and a small but still statistically significant effect on the total number of children in the short term. In the long run, there is no statistically discernible effect on the probability of having children for women, although there is still a negative and significant effect on the number of children for those in the soft skills training only group in the long run. Men in both training arms, on the other hand, exhibit a lower and statistically significant probability of having children and a corresponding negative effect in the total number of children. Two dimensions of our analysis set it apart from the existing literature: on the one hand, we are able to study the short run and long run effects of the program on participants. On the other hand, the evaluation was designed to disentangle the potentially differential effects of hard and soft skills training. While there are effects from both types of training, vocational training seems to have induced a higher level of skill acquisition (even for soft skills) and higher expectations for women, although the lack of skills and the negative employment outcomes also implied higher levels of frustration for men in the long run from this type of training. While women get skills and a better view of the future, men become discouraged. This type of 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.

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1. Introduction

Over the last two decades, young people have become one of the groups most targeted in innovative social policy, with a rise in global and regional active labor market programs that aim to improve employment among this group. In both developed and developing countries, the challenges youth face in their transition to employment have been recognized, and have inspired action from the public sector. In developing countries, policy interventions have centered on youth at-risk, including low income youth who have not completed their education, are poor or have experienced poverty, and are either unemployed or working under precarious conditions (see Vezza, 2014, for an overview of these initiatives in Latin America). However, evidence regarding the effectiveness of these programs in developing countries is still relatively scarce. A notable exception is the "Programa Juventud y Empleo" (Youth Employment Program, hereafter, PJyE), part of a series of initiatives created by the government of the Dominican Republic that have attempted to mitigate youth unemployment. The PJyE figures as one of the region's pioneer programs aimed at addressing to the problems faced by youth at-risk. The program was implemented by the Ministry of Labor with funding from international institutions (IDB and World Bank). It began in 2001, and since that time, has undergone several revisions and modifications, although it remains focused on the same demographic target. Other early programs in Latin America include Chile Joven, Jóvenes en Acción in Colombia (Attanasio et al., 2011), and PROJOVEN in Peru. Unlike most programs of its kind, PJyE has incorporated an experimental evaluation design for several of its different editions, allowing for a precise identification of its causal effects (Card et al., 2011). The program has also included several innovations, for instance the incorporation of "soft" skills as a complement of the more traditional vocational training features of programs of its type.

The PJyE main objective is to improve the employment opportunities of at-risk youth by building their technical skills, work experience and life-skills. To do this, the program enrolls participants in training and internships in the private sector. The target population is individuals between 16 and 29 years old who have not completed secondary school and are unemployed, under-employed or inactive, and who come from the poorest 40% of households (according to the government's information system for social assistance, SIUBEN).

The 2008-2009 cohorts of the PJyE that we study have the relatively rare feature (for Latin America at least) of having follow-up data on outcomes for the short term and for the long term (with the exception of Ibarrarán et al's. 2015 6-year follow-up study). For the latter, we rely on the programs' impact evaluation household survey (described in Section 4.1), carried out from October 2012 to March 2013, about 3.5-4 years after the program. This is a longer post-treatment period than the existing experimental evaluations of job training programs in the region and for developing countries in general. For instance, Card et al.'s (2011) evaluation of the 2004 cohort of the PJyE program is based on a follow-up survey conducted 10 to 14 months after the program; Ibarraran et al.'s (2014) evaluation of an earlier 2008 PJyE cohort is based on a follow-up survey conducted 18 to 24 months after most trainees had finished their initial course work; and Attanasio et al.'s (2011) study of a similar program in Colombia is based on data collected between 19 and 21 months after the beginning of the program. The only experimental evaluation of a job training program with a comparable time frame are Hirshleifer et al.'s (2014) study of Turkey, Alzua et al.'s (2016) study of the Entra21 program in Argentina, which relies on data from up to 36 months after completion of the

training, although both studies rely on administrative data rather than surveys and thus cannot distinguish non-employment from informal employment. The program evaluation household survey used in this paper was substantially more comprehensive than the short term telephone surveys, and this allows us to examine the long term effects of the PJyE on more detail. Studies of previous cohorts of the same program found mixed effects. Card et al. (2011) do not find significant effects on employment, and only modest gains on wages for those employed. Evidence from the 2008 cohort indicates that the program had small or null effects on overall employment, with small impacts on formal jobs and salaries for those employed (Ibarrarán et al., 2014). Ibarrarán et al. (2015) present a 6 year follow-up of the same cohort, and they still fail to find any effects on employment, although there are significant long run effects on formal work for program participants. Recent studies have also attempted to trace the effects of training programs in Latin America in the longer run. Attanasio et al. (2015) present a longer term study of the impact of the Jóvenes en Acción program in Colombia, first studied in Attanasio et al. (2011), following participants of the 2005 cohort with social security contributions data for the period 2008 to 2014. The program had a positive and significant effect on participants' labor market outcomes: they were more likely to hold a formal job, they had higher earnings (11.8%) than those in the control group, and they were more likely to to work for a large firm. Kugler et al. (2015), in turn, study the effects of the same program in the longer term on educational outcomes, and they find that it induced higher levels of completing secondary schooling and of attending tertiary education.

The objective of this work is to study the effects of the PJyE in the Dominican Republic on the 2008-9 cohorts, particularly to identify the differential effect of the main innovation of that edition, the incorporation of two components of the training program (technical and vocational skills and basic skills) in the short and long term.

We find strong and lasting effects on soft skills and expectations, but these results are markedly different for young men and young women. In the short run, shortly after completing the program, both male and female participants in both training arms (soft and hard skills and soft skills only) experience a strong increase in their employment expectations. These expectation effects are more pronounced for women, who show improved expectations of life conditions in general (and not only in employment expectations) from participating in the program. In the long run, young women still report better expectations compared to those in the control group. Despite similar expectations than women in the short run, the result is reversed for male participants in the long run, who exhibit worse expectations in general.

These results can be explained by a combination of the program's effect on skills and on labor market outcomes. On the one hand, a remarkable finding is that participating women exhibit substantially higher levels of soft skills measured three years after completion of the program. There is no such in the long run for men in these social skills. Moreover, women who took the combined training also exhibit substantially higher levels of resolution as measured by a standard grit. Women thus seem to have acquired substantial soft skills from the program, and the pattern of results also suggests that the hard and soft skills training components seem to reinforce each other.

On the other hand, there is also noticeable difference in the program's impact on labor market outcomes for women and men. The results indicate sizable employment and wage gains for women, and employment losses effects for men in the short term. These effects dissipate in the longer run. In

fact, male participants exhibit significantly lower levels of formal employment and higher levels of on the job search in the long run. Female beneficiaries who work exhibit higher levels of job satisfaction in the short run. Notably, female participants exhibit higher expectations about job and life prospects in long run, and this effect is stronger for those who received both vocational and life skills training.

We find further evidence that men are worse off than women in terms of labor market outcomes in the long run. Participant women are more likely to have refused a job offer than those in the control group. Moreover, women who took the combined soft and hard skills training are substantially more likely to report that they could earn a salary that could cover their needs. The effect for men on this indicator is the opposite: men are less likely to consider that they could earn a salary to cover their needs.

Finally, consistent with the empowerment and sexual education contents of the soft skills training, we find a reduction on the probability of having children for women, and a small but still statistically significant effect on the total number of children of about 0.16. In the long run we find no statistically discernible effect on the probability of having children, although there is still a negative and significant effect on the number of children for those in the soft skills training only group.

For men, the effects on the probability of having children and on the number of children are negative but substantially smaller than those for women, and not statistically significant in the short run but significant on the long run. Finally, both women and men in the two training arms exhibit a lower probability of having a partner, although the effect is about twice as large for men than for women.

Our interpretation is that women benefited substantially from both the soft and hard skills components of the training, and the effects on expectations were further reinforced by the short run positive effects on employment. While in terms of labor market outcomes in the long run these expectations did not pan out, the lasting positive effect on skills seems to have been rewarding, as reflected in the higher expectations in different aspects in life. Participating women seemed to have delayed their fertility in the short run, although as these labor market rewards did not materialize they seemed to catch up with their counterparts in the control group in the long run. However, the lower probability of having a partner suggests that they did so in a more independent and empowered way. 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, probably because men do 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, based on the Rosemberg scale (Table 5). While we find virtually no effect on women, there is a negative and significant effect for men who took the combined hard and soft skills training arm. They might also explain the fertility and partnering patterns: participating men are frustrated and unsuccessful in the long run, and thus less eligible as partners and as fathers.

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 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 – this 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, vocational training seems to have induced a higher level of skill acquisition (even for soft skills) and higher expectations for women, although the lack of 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, 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.

There are two dimensions of our analysis that set it apart from the existing literature: on the one hand, we are able to study the short term (from 12 to 18 months after the program) but also, exceptionally for a developing country, the long term (3.5-4 years after the program)[1] effects of the program on participants. On the other hand, the evaluation was designed to disentangle the potentially differential effects of hard and soft skills training: one group of participants was randomly assigned to undergo only soft skills training, while another group was exposed to both hard and soft skills training.

This document is structured as follows. Section 2 presents a summary of the PJyE program, including a description of its previous versions, of the specific aspects of the cohorts that will be evaluated here, and of the outcomes of interest for these cohorts. Section 3 describes the evaluation design, including the random assignment procedure, sample selection, and further details about modifications made in the 2008-9 cohorts. Section 4 describes the data sources and the estimation strategy. Section 5 details both the short and long term empirical results. The final section presents some conclusions from the analysis.

2. The Program

2.1. The Original Program Design and Previous Evaluations

The PJyE was created in 2001, at which time it fell under the auspices of an initiative funded by the Inter-American Development Bank (IDB) called the "Programa de Capacitación y Modernización Laboral." The PJyE functioned as a job-training component of this program. Although the original loan that funded this initiative concluded in 2006, the PJyE had a second phase of financing by the IDB in 2007-8.[2]

The motivation for the program was the relatively high level of unemployment for youth. The aggregate unemployment rate was relatively low at 4.7% in 2000 and 5.5 in 2001, but the respective rates were substantially higher for youth: it was 9.2% in 2000 and 11.4% in 2001 for those aged 15

[1] Card et al.'s (2011) meta-review classifies the timeframe of programs of this type as "short-term impact estimate – measuring the effect on participant outcomes approximately one year after the completion of the programme", a "medium-term estimate giving the effect approximately 2 years after completion," and "longer-term (3 year) impacts".
[2] This second initiative was carried out as part of the Programa de Mercados Laborales y Transferencias Sociales.

to 24, while it was 3.6% and 4.1% for the same respective years for those aged between 25 and 65 (SEDLAC-CEDLAS and World Bank, 2014). The primary goal of this early job training initiative was to address problems surrounding labor insertion by offering training in specific skills that were considered in demand by the private sector.

The original PJyE program targeted low-income youth between the ages of 16 and 29 who experienced difficulty finding employment, and who had not completed secondary education. A special effort was made to target women.[3] The program funded training in two phases: an in-classroom training phase and an internship phase, and also financed participants' transportation, a stipend, medical and accident insurance. The first courses were held in 2002. During the 2002-8 period, the IDB financed the program for 27,500 beneficiaries, of which 57.7% were women (IDB, 2006). From 2008 to 2013, the program has been financed by the World Bank and has conducted an additional 1,924 courses. In total, the program has conducted 3,627 courses since 2002. The courses and internships were administered by private providers, Centers for Operating System (COS) - see the following subsection for more details.

One of the most innovative aspects of the original PJyE structure and of several of the subsequent versions was the inclusion from the onset of an experimental impact evaluation design based on the random allocation of potential beneficiaries to treatment and control groups. While this has been a feature of several training programs in developed countries, such as the Job Training Partnership Act and the Job Corps in the United States, this type of experimental design was relatively uncommon in active labor market programs in Latin America. Individuals applied to receive benefits by filling out an application form, which was in turn used to check applicants' socioeconomic and work background and confirm they met all program requirements. Following this initial screening, participants were selected randomly and two groups were generated: the first group was composed of individuals enrolled in the program and the second group was composed of those who qualified, but were not selected to participate. The impact evaluations of previous versions of the program relied on representative sample from both groups, which were polled in several follow-up surveys to measure the program's effect on outcomes of interest.

Experimental evidence for previous editions of the PJyE is available for both the 2004 and the 2008 cohorts. Results for the 2004 cohort were obtained by comparing the results of baseline surveys and the follow-up surveys conducted between 10 and 14 months after the end of the course. The 2004 program had statistically significant but modest effects on the salaries of those youth who were employed and had been selected for the program, as compared to those who were employed and had not been selected. Analysis also shows improved quality of work for program participants as compared to non-participants with similar levels of education, (here provision of health insurance was used as the measure of work quality). However, there was no statistically significant effect on employment indicators (Card et al., 2011).

The results from the first evaluation informed the design of future versions. In keeping with its innovative tradition, the new version of the PJyE incorporated explicitly the results from the literature that stressed the importance of non-cognitive ability and life-skills in the labor market (Heckman, Stixrud and Urzua, 2006). A second evaluation was conducted for the 2008 cohort. This

[3] At least 45% of beneficiaries would be women, and this ratio would be also applied for the randomized selection of applicants.

cohort experienced a modified version of the program in which there was a more substantial focus on basic non-cognitive skills as compared to employer-recommended training. The baseline survey and the household survey taken 18 to 24 months following the completion of training were compared using a representative sample of selected participants and non-selected applicants. Analysis showed that PJyE had significant positive effects on job quality among men (defined as a job with health benefits) and in salaries among those individuals who were already employed. Compared to the control group, selected participants also demonstrated improved perceptions and expectations of the future, as well as improved non-cognitive abilities. Studies of this cohort also found a reduction in teen pregnancy among participants (Ibarrarán et al., 2014). However, there were no significant effects on overall employment, as in Card et al. (2011).

2.2. The 2008-2009 Cohorts: Specificity and Outcomes of Interest

The PJyE continued to be financed by the World Bank until 2013 and maintained the same eligibility requirements used in 2007 and 2008. During the period considered in this report, two bidding processes took place with financial support from World Bank. In each of the bidding processes, the different centers or institutes (COS, Centers for Operating System) in which courses would be taught postulated to assume the provision of services inherent to the components of training and internships. These institutions were key in the implementation of the program. The PJyE follows what Card et al. (2011) call the "Chilean model" of job training programs in Latin America, were private institutions (rather than employers) provide classroom training and arrange for internships for beneficiaries. The COS are private institutions authorized by the National Institute for Professional Training (INFOTEP for Instituto Nacional de Formación Profesional). In addition to certifying the COS, INFOTEP controlled curriculum content of courses offered in the PJyE. The Ministry of Labor (MT), particularly the Program Coordination Unit (UCP for Unidad Coordinadora de Programas), oversaw the program and the COS conducted the courses and ensured they met the supervising agency's standards. The COS not only oversaw instruction but also coordinated with companies where internships were arranged and adjusted training contents to suit the needs of the private sector. COS also promoted the program in the targeted priority areas, maintained the applicant registries, and evaluated applicant eligibility, ensuring that each individual in the lottery complied with the program's basic requirements. The UCP further complemented these actions by providing a second review of the applicant registry and examining each candidate's application for inconsistencies.

Previous versions of the program incorporated specific elements to develop life skills and other general cognitive and non-cognitive abilities, and these have been incorporated as additional outcomes of interest (beyond the typical labor market outcomes) in evaluations of previous versions of the program, as detailed in Ibarraran et al. (2014). The main innovation of the 2008-2009 cohorts of the program under World Bank funding was its evaluation strategy, built into the program. This strategy consisted in offering a group of participants both hard and soft skills, and only soft skills to another group. This design allows to separate the differential effects of the traditional hard skills elements from those of the relatively newer soft skills components of the program, as detailed in the following section.

As a job training program, labor market outcomes, such as employment, labor force participation, type of employment, type of contract, and wages (among others), constitute the first set of outcomes

of interest. The program emphasized "soft skills": in fact, one of the groups of beneficiaries did not receive any vocational training, which has usually been considered a cornerstone of job training programs. For this reason, a second set of outcomes is related to perceptions and expectations in the labor market, such as job satisfaction and expectations about work prospects, and to indirect effects of any potential impact on labor force participation (for instance, fertility outcomes). A third set of outcomes of interest is more directly related to the life skills component of the program. On the one hand, we will evaluate its effect on life satisfaction, self-esteem and expectations in general, as well as participation in organizations, satisfaction with interpersonal relations, and non-cognitive skills. On the other hand, given the content of the specific modules carried out in the 2008-2009 cohorts, we will also analyze any potential impact of the program on attitudes and risk behavior.

3. Evaluation Strategy: Program Characteristics and the Random Assignment Process

3.1. Eligibility and Program Characteristics of the 2008-2009 Cohorts

Young persons registered to the program were considered eligible if they met the following qualifications: participants must be between the ages of 16 and 29, found to be at-risk, and were Dominican Republic citizens in possession of a personal identification card. At-risk was defined as either unemployed, under-employed or inactive, or not having completed either secondary school or "adult education."[4] Moreover, applicants must have income levels and place of residency categorized as below the poverty line. Specifically, eligible applicants must belong to households with a per capita income that did not exceed US$120 per month, and be located in regions known as Priority I and II, according the official poverty map. Poverty I and II zones are defined by the SIUBEN[5] quality of life index. These measures and restrictions were put in place in order to guarantee that the PJyE accurately targets the poorest sectors of the population.

Enrollment for the 2008 and 2009 cohorts was carried out over the year 2009. Most of the 2008 cohort enrolled in January 2009 (3,481 potential beneficiaries) and February 2009 (994 candidates), although the enrollment period remained open until May 2009. Most of the 2009 cohort enrolled in July 2009 (6,024 potential beneficiaries) and August 2009 (2,787), with some cases entering the program as late as October of the same year.

In this version of the program, participants enrolled in an in-classroom training phase and an internship phase and received the benefits previously outlined - a stipend and insurance. The TTP ("Técnica Teórico-Práctica", practical-theoretical and technical training) vocational skills module included 150 hours of training in occupations such as sales, beauty salon assistant, tourism and hospital ity, carpentry, electricity and others. The DCB ("Desarrollo de Competencias Básicas", development of basic skills) life skills component included a shorter module of 75 hours and focused

[4] The education level of the beneficiaries had to be below the overall average level. A maximum of 30% of young persons registered could be composed of youth that fit the other requirements but were attending adult education courses or distance learning.

[5] SIUBEN (for Unified System of Beneficiaries), part of the Dominican government, is the institution responsible for creating and managing the database of poor households across the country and the register of eligible households for benefits offered by different social programs and government subsidies like the Solidaridad CCT or subsidies for electricity and natural gas.

on promoting self-esteem and self-realization, communication skills, conflict resolution resources, life planning, time management, team work, 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 hours apprenticeships or internships in private companies, for which they received a daily stipend of about US$2 and basic insurance. During this period, participants received oversight and job counseling.

The content of the in-classroom TTP training module was developed jointly with the private sector, and was designed to cover the skills that the beneficiaries would need for the subsequent internship phase. The COS selected for the 2008-2009 cohorts studied in this report administered 520 courses. Over 60% of those were concentrated in six occupations: sales (23%), waiter-waitress (10%), beauty salon assistant (9%), pharmaceutical assistant (7%), sales assistant (7%) and secretarial assistant (6%). However, the 2008-2009 PJyE edition offered training in 49 occupations, with innovations such as the inclusion of graphic and web design, network technician, network administrator, PC repair, assistant for agro-industry manufacturing, tractor operator and private security guard, among others. Over 91% of courses in 2008-2009 targeted the commerce and service sectors, with only 3% in agriculture and 6% in others.

The DCB life-skills component required 75 hours of classroom training, as well as homework to be completed by students after class. The module was designed to provide training in citizen and worker's rights and obligations, as well as developing values to carry out an ethical and socially responsible life. The stated objective of this module was to develop the skills to allow beneficiaries to fulfill a successful family, social and work life, to contribute to their integral development as human beings, and to provide tools to face and manage social risks. The module thus reinforces three areas: values, attitudes and basic skills (self-fulfillment, basic cognitive abilities, and social skills).

3.2. The Random Assignment Process

As in previous editions of the program, there were more applicants than vacancies available for each cohort. This situation facilitated the random selection of beneficiaries from the pool of applicants, since a lottery is an inherently fair way to allocate limited places. The main difference of the 2008-2009 WB cohorts was the evaluation strategy, which was designed to identify the differential effect of the two components of the training program (technical and vocational skills and basic skills) and to gauge their relative contribution to the beneficiaries' labor market and other outcomes. The applicants were not simply divided into a control group and a treatment group: once determined to be eligible, the beneficiaries were also randomly assigned to one of two possible versions of the program: one included the TTP classroom-based vocational training and the DCB life-skills elements, while a second group was offered only the DCB life-skills component (both types also included internships with private employers). The experimental impact evaluation relies on the random assignment of participants to a control group or to one of the two types of training.

The random assignment process was accomplished by means of a lottery under the coordination of the UCP. Its implementation was delegated among various actors with shared roles and responsibilities. The lottery was conducted in two stages. The COS needed to obtain 35 applicants

for each of the

520 courses that were organized in the 2008-2009 cohorts. Applicants' names and ID numbers were released to the UCP to be entered in a computerized random lottery. In the first stage, the program selected 20 individuals at random from a group of 35 applicants per course, maintaining gender rates among the participants in the first model of the in-classroom training phase, TTP+DCB.[6]6 Twenty individuals were informed that they would participate in the course and 15 individuals were placed on the waiting list, from which they could be called in as a replacement if slots opened up over the course of the first ten days of instruction.

Once courses with two modules (TTP and DCB) were formed, a second lottery was conducted. From the pool of applicants that were not selected in the first lottery, this second lottery randomly selected 5 participants for a second version of the coursework phase. This group only received DCB instruction. The DCB courses were composed of five applicants from the control group (once the 10 day replacement period was over), of four COS courses, making up a total of 20 individuals per DCB course.[7] Figure 1 illustrates this process.

Thus, a group of applicants were randomly selected to participate in the PJyE's first mode of training (TTP+DCB) and the internship; and another group of applicants were selected to participate in the second mode of training (DCB) and the internship. This stratified treatment plan allowed for the measurement of potential effects of the DCB as compared to the TTP and enabled the possibility of studying the cost-effectiveness of each module. Finally, the participants that were not assigned to either program became part of a control group. Of the more than 20,000 young people that applied for the 2008-2009 cohorts of the PJyE, 16,373 fulfilled the eligibility requirements and were selected by their respective COS to be part of the random lottery assignment. Of this group, by means of random selection, 10,397 were selected for the first model (TTP+DCB). Of the 5,976 applicants that were not selected, 1,604 were randomly selected for the second model (DCB) and the remaining 4,372 remained part of the control group.

4. Data Sources and Estimation

4.1. Data Sources

The data used in this study come from three separate instances of data collection, as illustrated in Figure 2. First, upon applying to PJyE, prospective participants had to complete an enrollment application form, which was akin to a survey of basic individual and household socioeconomic characteristics, and contained also some information on labor market outcomes. This source was created when the Ministry of Labor began the program lottery and the COS began the process of applicant registration. Each COS conducted a preliminary screening of candidates who expressed interest in enrolling in courses, to ensure that they met the program's target criteria. Eligibility screening included a crosscheck of the applicant's identity card with the official national identity

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

[7] In some cases, when COS were smaller, DCB courses were formed by integrating three courses, which is to say with 15 individuals. Thus integrated DCB courses were made up of individuals of different COS when it was considered operationally convenient.

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. Information gathered in the application form created the baseline dataset against which program effects were measured. The form was a necessary condition for applying, and it requested information about employment and educational history, participation in social networks, motivation, characteristics of other household members and housing conditions.

Following this initial screening, COS selected the application forms from qualified candidates. 16,373 applicants filled out the application form and passed eligibility requirements. Applicants enrolled in 2009 composed the majority (64%). From this baseline group, treatment and control groups were selected.

The second and third data sources consist of telephone and household surveys conducted after the program's selection process, and targeted to a random sample of individuals in both treatment groups and in the control group from the baseline group. The UCP and the COS created a representative sample from the eligible applicant pool, divided into a treatment group and a control group, which would be monitored and followed after the program was complete. The size of the evaluation sample was calculated by considering the distribution of applicants among the 520 courses and establishing a minimum of applicants per course to maximize the ability to observe changes in the main outcomes of interest (labor market outcomes and cognitive and non-cognitive abilities), considering the budgetary restrictions for the surveys at the individual level.[8] Finally the selected sample included 4,700 young people, of whom 1,638 applicants conformed to the TTP+DCB treatment, 1,613 to the DCB treatment and 1,449 applicants belonged to the control group (see Figure 1).[9]

Based on this random sample of the control and treatment groups, three rounds of a telephone survey were implemented shortly after the start of the program (see Figure 2). The purpose of these telephone surveys was to keep in touch with participants, and to evaluate the short term results from the program. The three rounds were conducted with the same short questionnaire which included only a minimum set of questions on labor market outcomes and more general perceptions and expectations. In most cases, individuals in the sample were reached using a Computer Assisted Telephone Interview (CATI), which was supplemented by personal interviews for a sub-sample of young people who could not be reached by telephone.[10] The main purpose of conducting three rounds of this longitudinal survey was to maintain contact information, and, thus, only a few questions on employment outcomes and risk behaviors were included. With regard to labor market outcomes, the surveys asked if the individual was employed, actively seeking work, and, if employed, the number of hours they worked, their wages and job satisfaction. Participants were also

[8] The statistical analysis program Optimal Design Software was used to determine the minimum number of individuals per course that would be required to find the effect of indicators of interest at 80% (90% in the case of employment rates).

[9] Over the course of implementation of the randomized design, the groups that were initially defined became revised due to difficulties in the treatment group formulation. During the first days of the course it was permitted to replace students who were chronically absent or who dropped-out. The Information System of the PJyE (SIPJyE) only kept registration of selected applicants in treatment or control once replacements had been made. Thus, the lottery used is not strictly the original lottery, but rather the selection in place 10 days following training beginnings. During this period of corrections (guided by the UCP) following the initial lottery, there was an increase in the number persons that went through the lottery process for treatment and, conversely a reduction of the size of the control group.

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

asked how many children they had, about risk behaviors and their expectations for the future.

These rounds of surveying were conducted at different intervals between November 2009 and February 2011. The first round of surveys covered the period from November 2009 to March 2010, the second covered the period from May to July 2010 and the third covered the period from November 2010 to February 2011. The response rate improved to 90% when both telephone and personal interviews were used. Most beneficiaries from the 2008 and 2009 cohorts were participating in the program during the first round of the telephone survey, and a significant number were also enrolled at the time of the second round. For this reason, the analysis of short term impacts in Section 5 is based on data from the third round of the telephone survey.

Finally, also based on the evaluation sample, the Ministry of Labor conducted a household survey with a long and detailed questionnaire covering several dimensions where the program could be expected to have an impact. The *Encuesta de Hogares para la Evaluación de Impacto de Programa Juventud y Empleo* survey was conducted between October 2012 and March 2013. It was implemented by the Centro de Estudios Sociales y Demográficos (CESDEM) for the Ministry of Labor.[11] This household survey covered outcomes reflecting the long term impact of the program, since it was implemented 3.5-4 years after the program. The questionnaire asked individuals about the level and quality of employment and sought to assess the impact of training on aspects of life beyond job opportunities, including risk behaviors, attitudes about personal development and health, participation in social networks, and life skills, in general. It was not possible to contact the entire sample and thus, the response rate was lower than in the first case, although 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 similar for the treatment and control groups.

The three datasets (the baseline registries, the short term telephone survey and the long term household survey) made up the data for evaluating the differences in outcomes of interest between the treatment groups and the control group.

4.2. Evaluation Sample: Characteristics, Experimental Balance and Attrition

The analysis of the characteristics of the individuals applying to the 2008-2009 cohorts of the program indicates that, as in previous editions, the selection process was successful in reaching the program's target population: the program focuses on young Dominicans with low education levels who are unemployed or underemployed, and from poor households.

A detailed analysis of the baseline administrative registry information indicates that the program drew applicants from the lower range of the eligible age range: on average, applicants were 21 years old, and 50% were aged between 16 and 20. The mode of the distribution of age for both men and women is 19 years old. A further 37% of applicants belonged to the 21-25 age range, with the remaining 23% was 26 to 29 years old.

[11] In 2012, almost all of the participants in Bahoruco, Independencia, San Juan and San Cristóbal were successfully interviewed. The first stage of surveys was completed by December 20. On January 9, 2013, the second stage began, covering the provinces of Azua, Elías Piña, San José de Ocoa, Barahona, Duarte, Puerto Plata, Sánchez Ramírez, María Trinidad Sánchez, Samaná, San Pedro de Macorís and Monte Plata, concluding on February 25, 2013.

The baseline PJyE population is also characterized by a higher proportion of young women - 62% (Table 2). These women represent the majority of applicants with children: of the 38 % of applicants with children, 33 percentage points correspond to women and only 5 to men.[12] Moreover, 45.8% of women with children had more than one child, and 55% were single. The predominant marital status for applicants was being single, with 79%, followed by a 19% in non-married couples. Finally, only 2% were married.

In keeping with the program eligibility rules, there was a very high incidence of unemployment among applicants, higher than the unemployment levels for the same age group in the general population. About 60% of applicants declared to be unemployed during the week before their application, whereas 24% of those from the same age group were unemployed according to the national household survey, the Encuesta Nacional de Fuerza de Trabajo (ENFT), during the first semester of 2009. The level of underemployment is similar among applicants to the program with respect to the general population of the same age range. Applicants with temporary or occasional employment represented 72% of those employed in the baseline, compared to 68.5% for those in the 16-29 age range. Finally, only 19% were students—a number which complies with the participation quota for students; 97% declared that the maximum level of education attained (not necessary completed) was wither elementary or secondary school, a reflection of the program's focus on youth that have either dropped out or who have put off completion of their secondary education.

An important issue for the evaluation strategy is the balance in observable characteristics between the control group and the treatment groups. Measures of initial characteristics or outcomes of the respective groups reveal that the lottery assignment among the groups was adequate and that the groups are comparable. The individual characteristics and the differences by experimental group and gender, presented in Table 3, indicate the presence of only a few statistically significant differences between the groups, and no economically meaningful differences. The only exceptions are presented for males in the variables of age, living in Santo Domingo and the poverty score, given to an unbalanced assignment in the control group, but these isolated differences can be attributed to chance. Despite the control group for males, we cannot reject the null hypothesis of the F-stat of joint significance for these variables at a 95% level of confidence[13].

Moreover, an analysis of the attrition in patterns for the telephone and household surveys is shown in Annex 1. It indicates that there was no correlation between treatment status and participation in the follow-up surveys.

As a robustness check, Annex 2 shows the main results of the paper by controlling for the unbalanced characteristics found at baseline and in the attrition analysis and find no significant differences.

4.3. Estimation

[12] The existing evidence from the Dominican Republic indicates a relatively high incidence of teenage pregnancy, with about 20% of women aged 15 to 19 pregnant or with at least one child (ONE, 2011; CESDEM, 2008).

[13] P-values for the F-stat test of joint significance comparing control group vs soft-skills only are 0.4596 for females and 0.0169 for males; control group vs. hard and soft skills are 0.1339 for females and 0.019 for males; and soft skills only versus hard and soft skills are 0.1728 for females and 0.6138 for males.

The main analysis is based on a measurement of the difference in results between individuals assigned to the treatment and the control groups, irrespective of whether the individuals assigned to the program actually completed the training and internship phases. This type of causal effects are known in the experimental literature as intention to treat (ITT hereafter) effects, because they capture the difference between offering participation in a program and not offering it - they only provide a lower bound for the causal effects of actually completing all the stages of the program. It can be argued, however, that these ITT effects capture the policy relevant parameter, since policy makers in most cases can only offer programs - as job training programs are entirely voluntary (even though participants have applied and been selected they are not obligated to take the courses), the information that is of most interest in policy design is the effect and outcomes produced by making the courses available to youth.

Previous evaluations of the PJyE relied on the random assignment of applicants to the program or to the control group, comparing then post-treatment outcomes of interest between the two groups - see Card et al. (2011), and Ibarrarán et al. (2014). The evaluation strategy for the 2008-2009 cohorts (described in Section 3) provides a richer mechanism experiment setup beyond the simple treatment and control dichotomy. There are two treatment groups, one with TTP+DCB training and the other with DCB training only. This design allows us to make the usual impact evaluation comparison between any of the treatment categories and the control group, but also to gauge the potential value added of the TTP vocational training component by comparing the differences in outcomes between the two treatment groups. For the cohorts evaluated in this report, we distinguish between individuals who were initially assigned to the group offered both the TTP and DCB courses (225 hours of instruction as well as an internship), the group only offered the DCB course (75 hours of coursework and an internship), or, finally, the group that was not offered any courses, the control group.

We present the results on the effect of the two PJyE versions on the outcomes of interest by means of OLS regressions of these outcomes against binary variables representing each of the two treatment groups. Since there is substantial heterogeneity in the program's impact according to the gender of beneficiaries, we present all regressions separately for men and women. We include a minimum set of controls[14] with the purpose of improving estimate precision.[15] In terms of inference, we cluster standard errors by COS (i.e, the institution in charge of the training) and treatment group. In the tables below, we also include a t-test for the equality of coefficients for the two treatment group dummies, which allows us to recover the difference in outcomes between the TTP+DCB and the DCB versions, which in effect captures the differential impact of the TTP component over and above the (common) DCB component. For the analysis below, we work with a balanced sample of individuals who responded to the telephone survey and to the final household survey. The attriters are balanced in terms of the treatment groups (see Appendix B). Finally, we restrict the sample to the training centers that offered both the vocational and the life skills training. We exclude centers that provided life skills training only because these are substantially different from the others, and do not allow us to compare the distinguish the effect of the two types of training from that of the differences in training centers (see Vezza et al., 2014, for a discussion).

[14] The variable included are: a variable to identify the cohort to which the individual belonged at the time of application, a set of variables to identify the COS at which the individual registered, and controls for the sector of the course.

[15] Although the point value for the coefficients of interest should not change significantly, the inclusion of these controls decreases the variance of the estimates, particularly if a lagged value of the result variable, or an observable feature that explains a significant part of its variability, is included. See Duflo et al. (2008).

5. Results

This section evaluates the short and long term effects of the PJyE on individuals' basic employment outcomes, expectations, skills, self-esteem and fertility, among other results. The tables follow the format described in the previous section.

The short term effects are based on the data collected from the third round of the telephone follow-up survey, which collected information for a period of about 12 to 18 months after enrollment into the program. As described in Section 4, some beneficiaries were still enrolled at the time of the first and second rounds of the telephone survey, and thus only the third round collected data for the post-treatment period for the treatment and control groups (see Figure 2).

5.1. Impact on Expectations

We find strong and lasting effects on expectations, but this result is markedly different for young men and young women. The first six columns of table 4 present the estimates of the short term effects of the program on expectations based on the third round of the telephone survey (the first two columns are an idex that summarizes the other four columns). One of the objectives of the DCB life skills components was to help beneficiaries reduce negative expectations and negativity in general. The program seems to have been successful in increasing expectations in the short run. The results in columns 3 and 4 indicate a positive and significant effect on the expectation of improving employment conditions for both treatments and for both women and men (the coefficient for men is only significant for the mixed training treatment, but we cannot reject the null that the coefficients for both treatments are equal). Moreover, further results (not shown) indicate that this positive and significant effect in expectations was present from the very onset of the program, with larger impact in the first round of the telephone survey which then fell over time. While we find a positive short term effect on employment expectations for both men and women, the program also induced a more general positive effect on expectations of improving life conditions, but only for women (roughly equal for the two treatments). The effects for men are small and not statistically significant.

In the long run, young women still report better expectations compared to those in the control group: higher expected salary, higher self-ranking in terms of current wealth, and better prospects in terms of future wealth and life conditions for their children, with a stronger effect for those who underwent the combined hard and soft skills training than for those who only took part of the soft skills track. Despite similar expectations than women in the short run, the result is reversed for male participants in the long run, who exhibit worse expectations in general (of future salaries, and of life prospects for their children, for instance), again with a stronger (negative) effect for those who took up hard skills training. The other results in table 4 present the effects of the program on a richer set of expectations collected in the longer term household survey. The results in Columns 3 and 4 in Panel B indicate that the program had a positive effect on salary expectations for women, with higher effects for the mixed training (about 6 percent) than for life-skills only (about 3 percent). At the same time, however, and probably linked to the negative employment effects found for men in the short term, the mixed training component seems to have substantially reduced salary expectations by about

8.5%, with smaller and non-significant effects for the life-skills only treatment. The results are similar for a broader set of expectations: the program had a positive effect on the expectation of own children having a better life than beneficiary parents (Table 4, columns 11 and 12) for women (with a stronger effect for the mixer training), but negative for men (again, more negative for the mixed training treatment, although the two coefficients are not statistically distinguishable).[16] On the other hand, the effects are positive for all treatments and for both men and women in terms of current and expected future relative position in terms of wealth (Table 4, columns 13 and 14), although these effects are only statistically significant for women in the mixed training treatment.

5.2. Impact on Skills and Self Esteem

Table 5 presents the long term effects of the program on other measures of soft or life-skills in the long term (these measures were not collected in the short term telephone survey). The Table presents the results on Personal and Social Skills, the Grit test, and the Rosemberg-selfesteem scale. The first two columns represent an aggregated index of the three variables. A remarkable finding is that participating women exhibit substantially higher levels of soft skills measured three years after completion of the program (Table 5). Women score substantially higher in a "personal social skills" scale designed by a team of Dominican psychologists specifically for this program, with somewhat higher effects for those who took the combined hard and soft skills training (0.16 sd) than those who took the soft skills training only (0,10sd), in any case, the difference between the two treatment arms is not statistically significant. There is no such in the long run for men in these social skills. Moreover, women who took the combined training also exhibit substantially higher levels of resolution (0,11sd) as measured by a standard grit test – the coefficient for the soft skills training only group is also positive but not statistically significant. Women thus seem to have acquired substantial soft skills from the program, and the pattern of results also suggests that the hard and soft skills training components seem to reinforce each other.

5.3. Labor Market Outcomes

This section evaluates the short and long term effects of the PJyE on individuals' basic labor market outcomes. We observe that the program's impact on labor market outcomes is also notably different for women and men. In the short run (Table 6, panel A), women in both treatment arms exhibit higher levels of employment of about 6 percentage points on average compared to those in the control group. The effect was slightly different for the mixed training than for the life-skills only training (7 and 5.2 percentage points respectively, representing an increases of about 32% and 23.6% with respect to the employment rate of for the control group), although the difference between the two arms is not statistically significant. The results for men are substantially different: the mixed training treatment induced a negative and strongly significant effect on employment (-0.11, about -20% with respect to the control group), whereas men in the life-skills only group experienced a

[16] The program had a positive effect on the expectation of having a better life than parents for women, but negative for men, especially for the mixed training treatment, although none of these coefficients are statistically significant (Table 4, columns 7 and 8).

lower reduction in their employment levels of about 3.1 percentage points (not statistically significant). We can reject the equality of coefficients at the 5% level, which indicates that the negative effect on employment for men was mostly due to the mixed training treatment.

While there do not seem to have significant effects on on-the-job search and hours worked (Table 6, Panel A, columns 5 to 8), the results in columns 7 indicate that the program had a large positive effect on women's salaries (for those working) of about 17%, with very similar effects for the two treatment arms. The coefficient for log monthly salaries for the mixed training treatment for men is positive (0.067), whereas that of the life-skills only is negative (-0.039), although they are not significantly significant. Finally, the results in column 9 indicate that the program had a large positive effect on job satisfaction for working women, with large effects for the mixed training than for the life-skills only training, although the difference between the two coefficients is again not statistically significant at standard levels. The results for men indicate a positive but (marginally) non-significant effect for men for the mixed training treatment, and a virtually null effect for the life-skills only group.

Taken together, these results indicate that, in the short run, the two versions of the program successfully and substantially increased employment, salaries and job satisfaction for women but not for men, and that the hard skills TTP module had at most a negligible positive effect on employment for women, and a non-significant but large negative effect for men.

The program evaluation household survey was substantially more comprehensive than the short term telephone surveys, and this allows us to examine the long term effects of the PJyE on more detailed labor market outcomes. Table 6, Panel B presents the effects of PJyE on the main employment outcomes for the long run. In contrast with the results for the short term in Panel A, there are no statistically significant effects of the program on the probability of working for neither women (small positive coefficients of 0.016 and 0.013) nor men (small negative coefficients of -0.009 for both treatments) (columns 1 and 2). Moreover, the program did not seem to have any substantial effect on hours worked or monthly earnings (columns 5 to 8), in contrast to the strong positive effects on salaries for women in the short run.

However, there are some effects of the program on other dimensions of employment for those who are working. The results in column 4 (Table 6, Panel B) indicate that the program had a large positive and significant effect on the probability of on-the-job search for men (13.6 and 9.2 percentage points for the mixed training and life skills only), which was even larger for those who were selected for the mixed hard and soft skills training (although the difference between the two coefficients is not statistically significant). On the job search might be considered a positive outcomes, in the sense that beneficiaries seem to be more open to new opportunities, but at the same time it can reflect dissatisfaction with the current employment conditions. For women, the program effect on on-the-job search is negative, substantially smaller than for men and not statistically significant.

The results in column 10 of Table 6, Panel B, indicate in turn that men who were selected to participate in the program have a 6.1 and 9.6 percentage points lower probability of working formally (i.e., with access to social insurance benefit) for the mixed training and the life-skills only training, respectively. While only the coefficient for the latter is statistically significant, we cannot

reject the equality of the two coefficients, which implies that men in both treatment groups who worked in the long term did so in lower quality jobs than working men in the control group.

Moreover, Table 7 presents further evidence that men are worse off than women in terms of labor market outcomes in the long run. Participant women are about 4.5 percentage points more likely to have refused a job offer than those in the control group, with small and not significant effects for men in the same variable. Furthermore, women who took the combined soft and hard skills training are substantially more likely (about 7 percentage points) to report that they could earn a salary that could cover their needs, although the effect on this indicator is close to zero for those who took soft skills training only, suggesting that women place a value in the long run on the hard skills they acquired even if these are not reflected on labor market outcomes. The effect for men on this indicator is the opposite: men who undertook the combined training arm are 9.2 percentage points less likely to consider that they could earn a salary to cover their needs (significant at the 1% level), with a negative effect of about 5.2 percentage points for those in the soft skills training only arm (we can reject that both coefficients are jointly zero at standard levels of significance).

Taken together, these results indicate that the large gains in employment for women that we found in the short term seem to dissipate in the longer term, and that the program seems to have induced worse employment conditions for working men in the long term. Male beneficiaries of the PJyE who were employed in the long term had worse labor market conditions than those in the control group (i.e., working informally) and they were less satisfied with their jobs, as reflected by their higher propensity to search while employed. At the same time, however, women participants, while not exhibiting higher employment rates as in the short run, seemed to be more satisfied with their jobs than those in the control group, as manifested by their lower desire to change job. All these effects were similar for the TTP+DCB and the DCB only treatment groups. Since all beneficiaries were exposed to the DCB life skills component, the TTP vocational training module does not appear to have added much both in terms of the positive or the negative impacts of PJyE.

5.4. Impact on Fertility

Finally, we present in Table 8 the effects of the program on fertility in the short and in the long run. Consistent with the empowerment and sexual education contents of the soft skills training, we find a negative effect of about 5.7 percentage points on average on the probability of having children for women, and a small but still statistically significant effect on the total number of children of about 0.16, similar for both training arms. There does not seem to be an effect on the probability of being pregnant at the time of the short run survey. For men, the short run effects on the probability of having children and on the number of children are negative but substantially smaller than those for women, and not statistically significant (there is also no effect on pregnancy at the time of the long run survey). This pattern is somehow reversed in the long run: we find no statistically discernible effect on the probability of having children for women, although there is still a negative and significant effect on the number of children for those in the soft skills training only group in the long run. Men in both training arms, on the other hand, exhibit a lower and statistically significant probability of having children of about 10 percentage points, and a corresponding negative effect in the total number of children. Finally, both women and men in the two training arms exhibit a lower

probability of having a partner, although the effect is about twice as large for men than for women (about -9.8 percentage points for men and -5.6 percentage points for women).

6. Discussion and conclusions

Our interpretation is that women benefited substantially from both the soft and hard skills components of the training, and the effects on expectations were further reinforced by the short run positive effects on employment. While in terms of labor market outcomes in the long run these expectations did not pan out, the lasting positive effect on skills seems to have been rewarding, as reflected in the higher expectations in different aspects in life. Participating women seemed to have delayed their fertility in the short run, although as these labor market rewards did not materialize they seemed to have caught up with their counterparts in the control group in the long run. However, the lower probability of having a partner suggests that they did so in a more independent and empowered way. Our interpretation indicates a completely different effect of the program for men[17]. While the program seems to have induced higher employment expectations, these did not materialize even in the short run, probably because men do 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, based on the Rosemberg scale (Table 5). While we find virtually no effect on women, there is a negative and significant effect for men who took the combined hard and soft skills training arm. They might also explain the fertility and partnering patterns: participating men are frustrated and unsuccessful in the long run, and thus less eligible as partners and as fathers.

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 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, vocational training seems to have induced a higher level of skill acquisition (even for soft skills) and higher expectations for women, although the lack of 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, 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.

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

[17] In order to ensure that the results are driven by gender instead of by certain courses majorly demanded by males or females, Annex 3 presents the main results for the subsample of courses that are balanced in terms of gender.

could also benefit from training in both their hard and soft skills and their employment outcomes in the longer run.

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8. Figures

Figure 1: Random assignment process, 2008-2009 program cohorts.

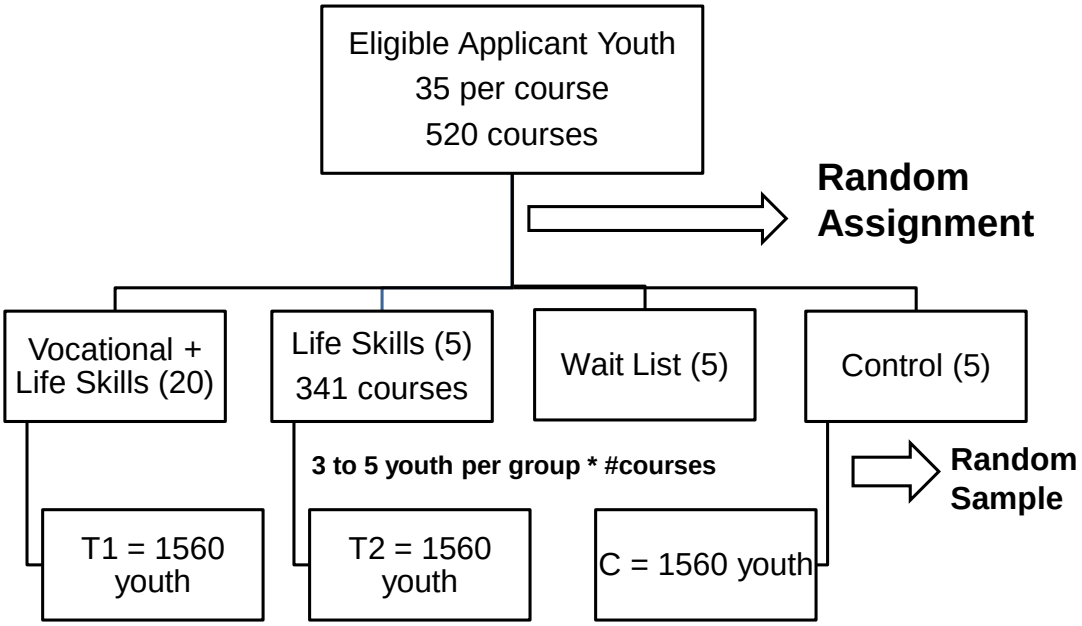
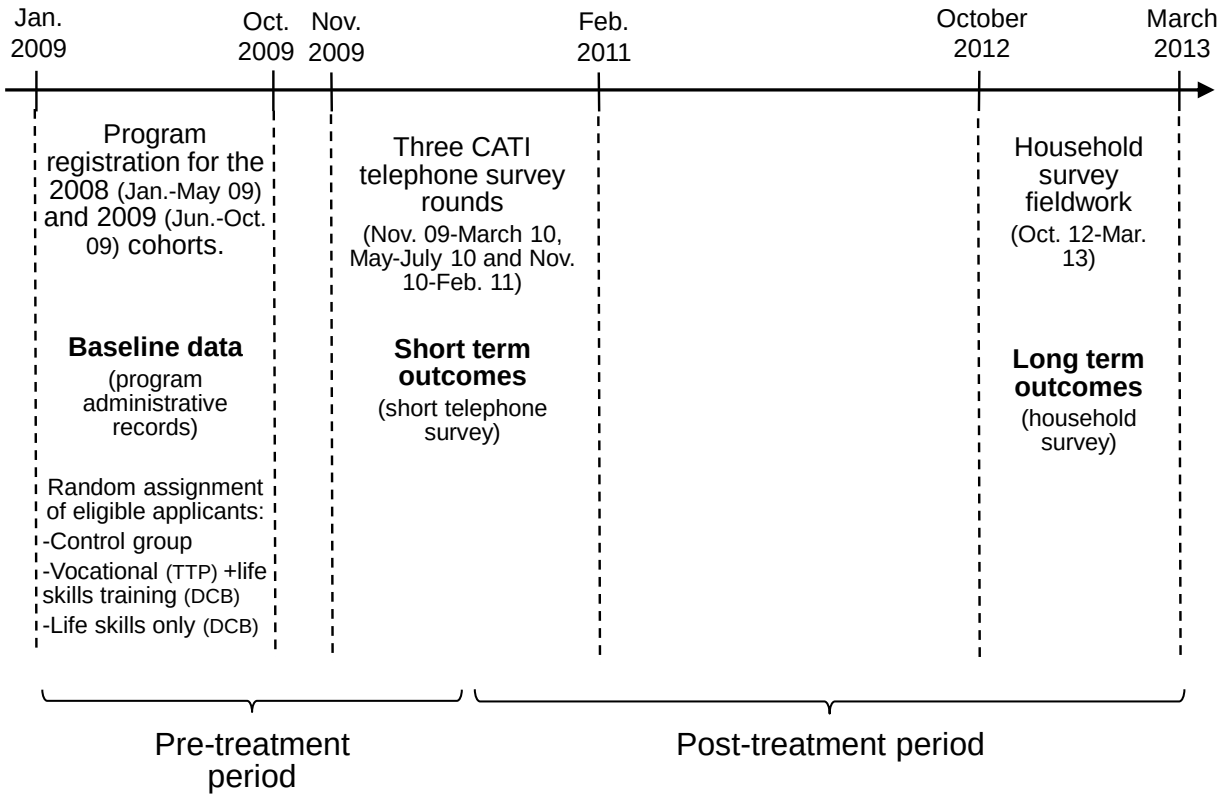


Figure 2: 2008-2009 program cohorts and impact evaluation data-collection timeline



9. Tables

Table 1: Data sources and sample sizes

	Baseline	Short term follow-up			Medium term follow-up
	Application form	CATI 1	CATI 2	CATI 3	Household survey
Observations	**4,700**	**4,115**	**4,238**	**4,221**	**3,873**
Treatment	**3,251**	**2,856**	**2,940**	**2,935**	**2,697**
TTP+DCB	1,638	1,419	1,481	1,470	1,366
DCB	1,613	1,437	1,459	1,465	1,331
Control	**1,449**	**1,259**	**1,298**	**1,286**	**1,176**

Source: Baseline registry data, 2008-2009 cohorts; CATI 1 (2009-10), CATI 2 (2010) and CATI 3 (2011); and household survey for the Impact Evaluation of PJyE (2012-13).

Table 2: Applicants socio-economic characteristics compared to the general population in the 16-29 age group

	Mean PJyE applicants (16-29 years old)	Mean 16-29 population, ENFT
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%
Terciary	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: PJyE baseline registry data and ENFT 2009.

Note: The sample of baseline data is restricted to individuals who applied to COS who offered DCB only treatment, and to individuals who were found in both, the third round of CATI and in the household survey.

Table 3: Experimental balance: Basic characteristics in the baseline, by treatment and control groups

Females

VARIABLES	Mean at Baseline			P-Values		
	TTP+DCB	DCB	Control	TTP+DCB vs Control	DCB vs Control	TTP+DCB vs DCB
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
Previos 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

VARIABLES	Mean at Baseline			P-Values		
	TTP+DCB	DCB	Control	TTP+DCB vs Control	DCB vs Control	TTP+DCB vs DCB
Age	20.307	20.533	20.857	0.006	0.130	0.234
Family Size	3.699	3.744	3.699	0.979	0.849	0.862
Urban=1	0.786	0.822	0.844	0.181	0.662	0.378
Sto. Domingo=1	0.246	0.285	0.239	0.030	0.186	0.040
Poverty Score	62.950	63.271	61.669	0.027	0.020	0.939
Years of Education	9.629	9.736	9.596	0.413	0.211	0.695
Studying=1	0.259	0.269	0.236	0.183	0.124	0.994
Literacy head of household	0.901	0.919	0.883	0.120	0.016	0.383
Literacy spouse of head household	0.371	0.383	0.372	0.958	0.934	0.972
Working	0.055	0.059	0.061	0.290	0.975	0.244
Related Experience=1	0.136	0.157	0.121	0.817	0.289	0.434
Unemployed=1	0.675	0.683	0.723	0.094	0.076	0.895
Previos Work=1	0.217	0.222	0.182	0.086	0.072	0.983
Receive remittances	0.055	0.077	0.096	0.165	0.688	0.239
Has children=1	0.123	0.121	0.156	0.327	0.091	0.478
Number of children	0.165	0.164	0.217	0.368	0.156	0.709
Single=1	0.913	0.904	0.879	0.098	0.117	0.865

Source: Baseline for the 2008-2009 cohorts.

Note: The sample is restricted to individuals who applied to COS who offered DCB only treatment, and to individuals who were found in both, the third round of CATI and in the household survey.

Table 4: Program impact on expectations, short term (telephone survey)

A. SHORT TERM (1 YEAR)

	(1)	(2)	(3)	(4)	(5)	(6)
	Index of Expectations (a)		Expectation of improving employment conditions=1		Expectation of improving life conditions=1	
	Female	Male	Female	Male	Female	Male
Hard skills and soft skills training	0.127**	0.102*	0.033**	0.045***	0.028**	0.007
	(0.054)	(0.057)	(0.016)	(0.017)	(0.013)	(0.016)
Soft skills training only	0.143***	0.072	0.037**	0.029	0.032***	0.006
	(0.049)	(0.059)	(0.014)	(0.018)	(0.012)	(0.015)
Observations	1,728	1,051	1,728	1,051	1,728	1,051
R-squared	0.038	0.066	0.046	0.078	0.036	0.061
Control Mean	-0.0344	0.00507	0.917	0.924	0.943	0.955
P-value Coefficient 1=Coefficient 2	0.668	0.540	0.753	0.285	0.665	0.993
P-value Coefficient 1=0 & Coefficient 2=0	0.0144	0.205	0.0392	0.0322	0.0250	0.899

B. LONG TERM (3 YEARS)

	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Index of Expectations (a)		Log of expected salary for next job		Possibility that their children have a better life		Position expected (10 years) in terms of wealth	
	Female	Male	Female	Male	Female	Male	Female	Male
Hard skills and soft skills training	0.070***	-0.026	0.060**	-0.085**	0.075**	-0.094*	0.115**	0.051
	(0.025)	(0.031)	(0.029)	(0.039)	(0.038)	(0.049)	(0.050)	(0.064)
Soft skills training only	0.036	0.014	0.030	-0.017	0.054	-0.067	0.010	0.082
	(0.024)	(0.031)	(0.026)	(0.031)	(0.034)	(0.045)	(0.049)	(0.059)
Observations	1,694	1,032	1,659	1,003	1,693	1,032	1,693	1,032
R-squared	0.072	0.114	0.104	0.114	0.063	0.073	0.060	0.094
Control Mean	4.045	4.050	9.208	9.534	4.532	4.550	3.947	3.903
P-value Coefficient 1=Coefficient 2	0.135	0.191	0.205	0.0557	0.536	0.545	0.0183	0.614
P-value Coefficient 1=0 & Coefficient 2=0	0.0198	0.415	0.125	0.0736	0.126	0.145	0.0262	0.389

Standard errors clustered at the course and treatment group level in parenthesis. 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

(a) Index created following Kling et al (2006). "The summary index Y is defined to be the equally weighted average of zscores of its components, with the sign of each measure oriented (as indicated in the notes to Table II) so that more beneficial outcomes have higher scores. The z-scores are calculated by subtracting the control group mean and dividing by the control group standard deviation. Thus, each component of the index has mean 0 and standard deviation one for the control group." The index in the short term includes the variables: expectations of improving employment conditions and expectation of improving life conditions. The index for the long term includes the variables: Possibility of having a better life than parents, Possibility that their children have a better life, Expected position in terms of wealth, Position expected (10 years) in terms of wealth, Position in terms of respect, Position expected (10 years) in terms of respect, Possibility of completing higher education level, Possibility of living in a better neighborhood, home, car, Possibility of having the desired job, Possibility of acomplish aspirations in professional life, Possibility of acomplish aspirations in family life.

Table 5: Program impact on soft skills, personal characteristics and self-esteem, long term

Personal and Social Skills Scale (CPS)- (NOT standard test in Psycology)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Index for Soft Skills (a)		Personal and Social Skills (CPS)		Grit		Rosemberg	
	Female	Male	Female	Male	Female	Male	Female	Male
Hard and soft skills training	0.109**	-0.058	0.156**	-0.030	0.114*	0.010	0.036	-0.154*
	(0.043)	(0.055)	(0.065)	(0.080)	(0.064)	(0.079)	(0.063)	(0.093)
Soft skills training only	0.058	-0.010	0.102*	0.013	0.066	0.002	-0.000	-0.044
	(0.039)	(0.049)	(0.056)	(0.072)	(0.059)	(0.071)	(0.055)	(0.086)
Observations	1,684	1,029	1,687	1,029	1,684	1,029	1,686	1,029
R-squared	0.053	0.092	0.050	0.082	0.055	0.059	0.058	0.085
Control Mean	-0.0685	0.0740	-0.0942	0.151	-0.0937	0.101	-0.0176	-0.0303
P-value Coefficient 1=Coefficient 2	0.178	0.362	0.350	0.592	0.367	0.912	0.523	0.218
P-value Coefficient 1=0 & Coefficient 2=0	0.0389	0.539	0.0491	0.864	0.200	0.991	0.792	0.239

Standard errors clustered at the course and treatment group level in parenthesis. 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

(a) Index created following Kling et al (2006). "The summary index Y is defined to be the equally weighted average of zscores of its components, with the sign of each measure oriented (as indicated in the notes to Table II) so that more beneficial outcomes have higher scores. The z-scores are calculated by subtracting the control group mean and dividing by the control group standard deviation. Thus, each component of the index has mean 0 and standard deviation one for the control group." The index summarizes CPS, Grit, and Rosember Scales. CPS is an aggregated measure of the CPS test, created ad hoc for the program, that includes measurements for lidership, conflict resolution, self esteem, social skills, order, and empathy. Grit is an aggregated measure of a test that measures consistency of interests, effort, and ambition. Rosemberg is a test that measures selfesteem.

Table 6: Program impact on labor market outcomes, short term and long term

A.SHORT TERM (1 YEAR)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Working=1		Working and looking		Hours per week		Log of monthly salary		Satisfied with job=1	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Hard and soft skills training	0.070**	-0.111***	-0.102	0.040	1.814	1.867	0.174*	0.067	0.197***	0.090
	(0.027)	(0.040)	(0.062)	(0.053)	(2.451)	(2.051)	(0.103)	(0.076)	(0.072)	(0.061)
Soft skills training only	0.052**	-0.031	-0.064	0.071	1.532	-1.228	0.179*	-0.039	0.143**	0.010
	(0.025)	(0.038)	(0.061)	(0.046)	(2.201)	(1.634)	(0.098)	(0.064)	(0.067)	(0.052)
Observations	1,728	1,051	451	522	448	519	445	512	451	522
R-squared	0.055	0.098	0.200	0.140	0.144	0.197	0.204	0.218	0.200	0.163
Control Mean	0.220	0.541	0.307	0.229	39.30	45.46	8.431	8.775	0.416	0.547
P-value Coefficient 1=Coefficient 2	0.487	0.0328	0.426	0.527	0.885	0.137	0.944	0.145	0.345	0.171
P-value Coefficient 1=0 & Coefficient 2=0	0.0250	0.0161	0.261	0.306	0.731	0.326	0.171	0.344	0.0212	0.284

B.LONG TERM (3 YEARS)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Working=1		Working and looking for another job =1		Hours per week (working=1)		Log of monthly salary (working=1)		Formal=1 (working=1)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Hard and soft skills training	0.016	-0.009	-0.042	0.136***	0.600	-1.019	0.012	-0.099	0.012	-0.061
	(0.033)	(0.032)	(0.043)	(0.041)	(1.863)	(1.811)	(0.092)	(0.075)	(0.042)	(0.044)
Soft skills training only	0.013	-0.009	-0.006	0.092***	0.334	0.103	-0.027	-0.039	0.034	-0.096**
	(0.029)	(0.030)	(0.039)	(0.033)	(1.741)	(1.706)	(0.085)	(0.058)	(0.038)	(0.040)
Observations	1,728	1,051	844	848	844	849	747	806	843	849
R-squared	0.060	0.069	0.099	0.107	0.111	0.116	0.176	0.114	0.133	0.100
Control Mean	0.490	0.822	0.306	0.203	35.38	45.22	8.259	8.746	0.320	0.492
P-value Coefficient 1=Coefficient 2	0.928	0.995	0.318	0.258	0.875	0.505	0.634	0.414	0.569	0.400
P-value Coefficient 1=0 & Coefficient 2=0	0.875	0.951	0.529	0.00161	0.949	0.776	0.885	0.414	0.649	0.0570

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

Table 7. Further labor market outcomes, long run.

	(1)	(2)	(3)	(4)	(5)	(6)
	Refused Job		Necessary Salary for your Needs		Reservation Wage	
	Female	Male	Female	Male	Female	Male
Hard and soft skills training	0.036	0.010	0.073**	-0.093***	9.414	-165.002
	(0.027)	(0.039)	(0.031)	(0.036)	(184.716)	(280.381)
Soft skills training only	0.054**	0.032	0.007	-0.052	-42.941	-262.245
	(0.025)	(0.035)	(0.028)	(0.032)	(154.236)	(274.920)
Observations	1,695	1,037	1,685	1,031	488	189
R-squared	0.073	0.073	0.103	0.134	0.183	0.389
Control Mean	0.249	0.271	9.378	9.612	5067	5529
P-value Coefficient 1=Coefficient 2	0.462	0.498	0.0179	0.250	0.730	0.717
P-value Coefficient 1=0 & Coefficient 2=0	0.0991	0.606	0.0287	0.0323	0.925	0.632

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

Table 8. Fertility outcomes, long run.

A.SHORT TERM (1 YEAR)

	(1)	(2)	(3)	(4)	(5)
	Has Children		Number of children		Pregnant
	Female	Male	Female	Male	Female
Hard and soft skills training	-0.046	-0.014	-0.154**	-0.062	0.004
	(0.031)	(0.032)	(0.068)	(0.052)	(0.016)
Soft skills training only	-0.068**	-0.038	-0.163**	-0.076	-0.008
	(0.028)	(0.032)	(0.067)	(0.052)	(0.013)
Observations	1,728	1,051	1,728	1,051	1,728
P-value Coefficient 1=Coefficient 2	0.061	0.104	0.092	0.104	0.039
Control Mean	0.647	0.242	1.166	0.363	0.0610
P-value Coefficient 1=Coefficient 2	0.431	0.452	0.885	0.768	0.381
P-value Coefficient 1=0 & Coefficient 2=0	0.0539	0.483	0.0303	0.313	0.646

B.LONG TERM (3 YEARS)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Has Children		Number of children		Pregnant	Has Partner	
	Female	Male	Female	Male	Female	Female	Male
Hard and soft skills training	-0.001	-0.086**	-0.068	-0.153**	-0.002	-0.062**	-0.090***
	(0.027)	(0.037)	(0.074)	(0.068)	(0.016)	(0.028)	(0.034)
Soft skills training only	-0.029	-0.111***	-0.135*	-0.185***	0.018	-0.050**	-0.106***
	(0.025)	(0.037)	(0.070)	(0.068)	(0.015)	(0.024)	(0.035)
Observations	1,694	1,033	1,692	1,033	1,671	1,690	1,033
R-squared	0.047	0.091	0.090	0.095	0.054	0.055	0.119
Control Mean	0.726	0.388	1.443	0.602	0.0655	0.779	0.718
P-value Coefficient 1=Coefficient 2	0.273	0.458	0.334	0.598	0.179	0.656	0.652
P-value Coefficient 1=0 & Coefficient 2=0	0.407	0.00947	0.158	0.0185	0.335	-	-

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

Annex 1. Attrition

Table A. 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

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

Annex 2. Robustness Check:

Results for the subsample of males controlling for the unbalanced characteristics at baseline and in the attrition analysis.

Table A. Employment

	SHORT TERM (1 YEAR)					LONG TERM (3 YEARS)				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
VARIABLES	Working=1	Working and looking for another	Hours per week (working=1)	Log of monthly salary	Satisfied with job=1	Working=1	Working and looking for another	Hours per week (working=1)	Log of monthly salary	Formal=1 (working=1)
TTP+DCB=1 (original assignment)	-0.099**	0.055	2.686	0.060	0.124*	0.001	0.169***	-1.618	-0.032	-0.063
	(0.043)	(0.061)	(2.259)	(0.085)	(0.069)	(0.034)	(0.043)	(1.978)	(0.074)	(0.048)
DCB=1 (original assignment)	-0.014	0.076	-1.639	-0.081	0.018	-0.016	0.094***	-0.271	-0.038	-0.093**
	(0.041)	(0.052)	(1.680)	(0.069)	(0.056)	(0.030)	(0.036)	(1.863)	(0.063)	(0.042)
Observations	925	448	445	441	448	925	751	751	715	751
R-squared	0.112	0.151	0.253	0.275	0.188	0.097	0.117	0.122	0.123	0.097
Control Mean:	0.535	0.211	46.41	8.803	0.531	0.836	0.180	45.65	8.742	0.500
P-value Coef.(TTP+DBC)=Coef.(DCB):	0.0355	0.725	0.0594	0.0984	0.0991	0.587	0.0785	0.455	0.933	0.501
P-value Coef.(TTP+DBC)=Coef.(DCB)=0:	0.0410	0.334	0.163	0.219	0.164	0.812	0.000325	0.666	0.823	0.0884

Standard errors clustered at the course and treatment group level in parenthesis. All regressions include controls for the educational institution, the sector of the course, and the PJyE cohort, as well as those unbalanced at baseline and in the attrition analysis: age, living in Sto. Domingo, poverty score, household size, living in a urban area, years of education, receive remittances, has children, and number of children. *** p<0.01, ** p<0.05, * p<0.1

Table B. Expectations and Soft-Skills

	(1) Index of Expectations (Short Term)	(2) Index of Expectations (Long Term)	(3) Soft Skills (Long Term)
Hard skills and soft skills training	0.079	-0.029	-0.047
	(0.054)	(0.032)	(0.059)
Soft skills training only	0.017	0.006	-0.007
	(0.055)	(0.033)	(0.055)
Observations	925	909	906
R-squared	0.077	0.133	0.110
Control Mean:	0.0532	4.047	0.0818
P-value Coef.(TTP+DBC)=Coef.(DCB):	0.219	0.245	0.473
P-value Coef.(TTP+DBC)=Coef.(DCB)=0:	0.273	0.465	0.691

Standard errors clustered at the course and treatment group level in parenthesis. All regressions include controls for the educational institution, the sector of the course, and the PJyE cohort as well as those unbalanced at baseline and in the attrition analysis: age, living in Sto. Domingo, poverty score, household size, living in a urban area, years of education, receive remittances, has children, and number of children. *** p<0.01, ** p<0.05, * p<0.1

(a) Indexes are created following Kling et al (2006). The index of expectations in the short term includes the variables: expectations of improving employment conditions and expectation of improving life conditions. The index of expectations for the long term includes the variables: Possibility of having a better life than parents, Possibility that their children have a better life, Expected position in terms of wealth, Position expected (10 years) in terms of wealth, Position in terms of respect, Position expected (10 years) in terms of respect, Possibility of completing higher education level, Possibility of living in a better neighborhood, home, car, Possibility of having the desired job, Possibility of acomplish aspirations in professional life, Possibility of acomplish aspirations in the family life. The index of soft skills summarizes CPS, Grit, and Rosember Scales. CPS is an aggregated measure of the CPS test, created ad hoc for the program, that includes measurements for lidership, conflict resolution, self esteem, social skills, order, and empathy. Grit is an aggregated measure of a test that measures consistency of interests, effort, and ambition. Rosemberg is a test that measures selfesteem.

Annex 3. Program impact on labor market outcomes, for the subsample of courses balanced in gender (40%-60% balance).

SHORT TERM (1 YEAR)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Working=1		Working and looking for another job =1		Hours per week (working=1)		Log of monthly salary (working=1)		Satisfied with job=1	
VARIABLES	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Hard skills and soft skills training	0.094**	-0.198***	-0.090	0.093	1.676	2.471	0.109	0.090	0.132	0.077
	(0.040)	(0.048)	(0.101)	(0.077)	(4.426)	(2.892)	(0.137)	(0.097)	(0.122)	(0.082)
Observations	533	450	143	220	141	217	140	215	143	220
R-squared	0.134	0.159	0.401	0.189	0.324	0.353	0.493	0.409	0.405	0.284
Control Mean:	0.228	0.562	0.278	0.237	38.28	46.36	8.523	8.757	0.463	0.550

LONG TERM (3 YEARS)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Working=1		Working and looking for another job =1		Hours per week (working=1)		Log of monthly salary (working=1)		Formal=1 (working=1)	
VARIABLES	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Hard skills and soft skills training	0.009	-0.043	-0.039	0.132**	3.010	1.177	-0.027	-0.085	0.042	-0.016
	(0.046)	(0.040)	(0.062)	(0.052)	(2.596)	(2.243)	(0.143)	(0.098)	(0.065)	(0.056)
Observations	533	450	252	364	252	364	227	346	252	364
R-squared	0.142	0.148	0.242	0.187	0.239	0.178	0.294	0.194	0.298	0.186
Control Mean:	0.481	0.837	0.327	0.202	36.24	45.10	8.410	8.755	0.355	0.497

Standard errors clustered at the course and treatment group level in parenthesis. 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