



# Implementation and Impact Evaluation

of Entrepreneurship Support Services in Jamaica

**Diego Ubfal**

**Irani Arraiz**

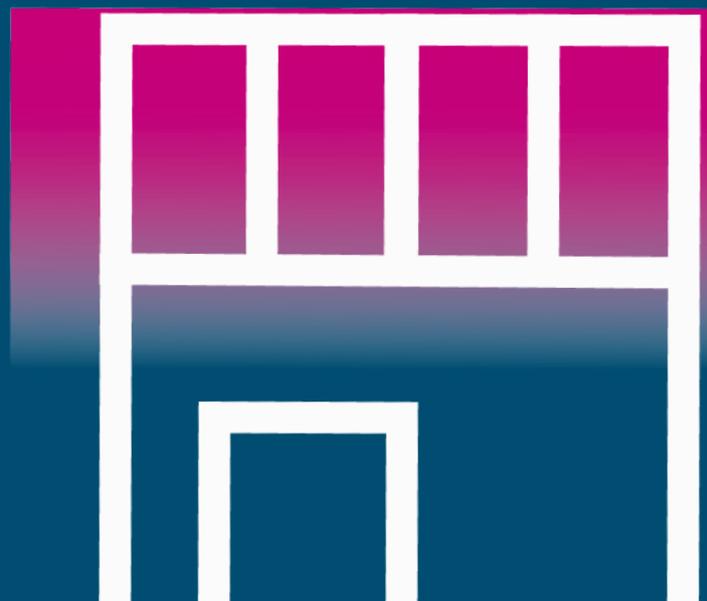
**Diether W. Beuermann**

**Michael Frese**

**Alessandro Maffioli**

**Daniel Verch**

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Inter-American Development Bank  
 1300 New York Avenue, N.W.  
 Washington, D.C. 20577  
[www.iadb.org](http://www.iadb.org)

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## Foreword

There has been growing interest in approaches to business training that incorporate insights from psychology to develop soft skills associated with successful entrepreneurship. The empirical evidence on their causal effects on entrepreneurs' business outcomes is encouraging, but still not substantial enough to be conclusive. This project contributes to this discussion by designing and evaluating two training programs focusing on soft skills, which are adapted to the Jamaican context. To materialize this, a partnership to implement the programs was established with the Jamaica Business Development Corporation (JBDC), an organization with experience in promoting entrepreneurship in Jamaica. JBDC is an agency of the government of Jamaica that facilitates the development of micro, small and medium-sized enterprises (MSMEs). It was assigned in the National MSMEs and Entrepreneurship Policy as the lead agency charged with the execution of training. It provides services across the spectrum, from guiding start-ups to a wide range of consultancy services for more established businesses.

The research team worked with JBDC to review their existing training courses. Their courses already covered material on soft skills and business practices, but they were not offering a standard training package. Therefore, for the purpose of this study, two new training courses were designed. Members from the research team, who have expertise on entrepreneurship, organizational behavior, and work psychology, adapted existing material on personal initiative and traditional training to the Jamaican context. The first program provides soft-skills training on personal initiative, including the development of a proactive mindset and perseverance after setbacks. The second program combines soft-skills training on personal initiative with traditional training on hard skills aimed at changing business practices. As such, the first section of this document describes the content and rationale of these programs.

Both programs are evaluated using a randomized controlled trial design involving 945 entrepreneurs in Jamaica. Indeed, the second section of this document summarizes the design and main results of the evaluation. In this evaluation, entrepreneurs are randomly assigned in equal proportion to one of the two training programs or to a control group. The research develops three survey instruments to collect information from entrepreneurs: a baseline survey, a short-term follow-up survey conducted 3 months after the intervention, and a second follow-up survey conducted 12 months after the intervention. Main findings indicate statistically significant effects of the intensive soft-skills training, but not of the training combining soft and hard skills, on business outcomes (i.e., sales and profits) in the short-term survey. The analysis of the data suggests that the main channel through which the intensive soft-skills training improves short-term business outcomes is an increased adoption of business practices. The positive short-term effects of the soft-skills training are concentrated among men and are not significant for female entrepreneurs. Neither the effects on business practices nor those on business outcomes are statistically different from zero in the second follow-up survey. However, the soft-skills training has persistent positive effects on some targeted soft skills: perseverance, overcoming barriers, and grit. This brings new evidence that it is possible to achieve changes in soft skills even for adults. Nevertheless, within the study context, greater perseverance does not lead to better business outcomes for the majority of entrepreneurs.

## 1. Description of the Training Courses

### 1.1. Introduction

The IDB's Evaluation of Entrepreneurship Support Services Program in Jamaica worked with two different types of trainings. The difference between them was both in the content delivered and the underlying methodology used to deliver them. Other factors that might have affected whether one group experienced stronger benefits than the other were made the same across both types of training.<sup>1</sup> For example, both trainings were of the same length, had about the same number of participants per class, and were delivered in the same venues and by the same trainers. This way, any changes in business success after the training stage could be attributed to the type of training that entrepreneurs had received. Moreover, because one-third of all program applicants did not receive any training (the control group), it was possible to determine if certain changes in business success occurred naturally, for example, as a result of economic development.

The first five weeks of the ten-week programs were identical in both types of training. The training in the first five weeks consisted of a 20-hour action-oriented training of personal initiative. Personal initiative is defined as self-starting and future-oriented work behavior that enables entrepreneurs to overcome barriers in pursuing goals (Frese and Fay, 2001). These behaviors (self-starting, future-thinking, and overcoming barriers) were matched with various tasks that entrepreneurs must perform in their businesses, from identifying an opportunity and gathering information to setting goals, planning, and obtaining feedback. An action-oriented methodology is one in which entrepreneurs are actively improving their own businesses during the training. This is critical to support the transfer of the skills acquired to the business environment. From a didactical point of view, action orientation combines lectures with individual and group exercises, work with case studies, and presentations, including subsequent feedback from peers. This method is designed to improve their ability to develop new ideas and innovations, to think more long term, and to address the many problems that emerge in the pursuit of business goals.

### 1.2. Differences in Methodology and Content

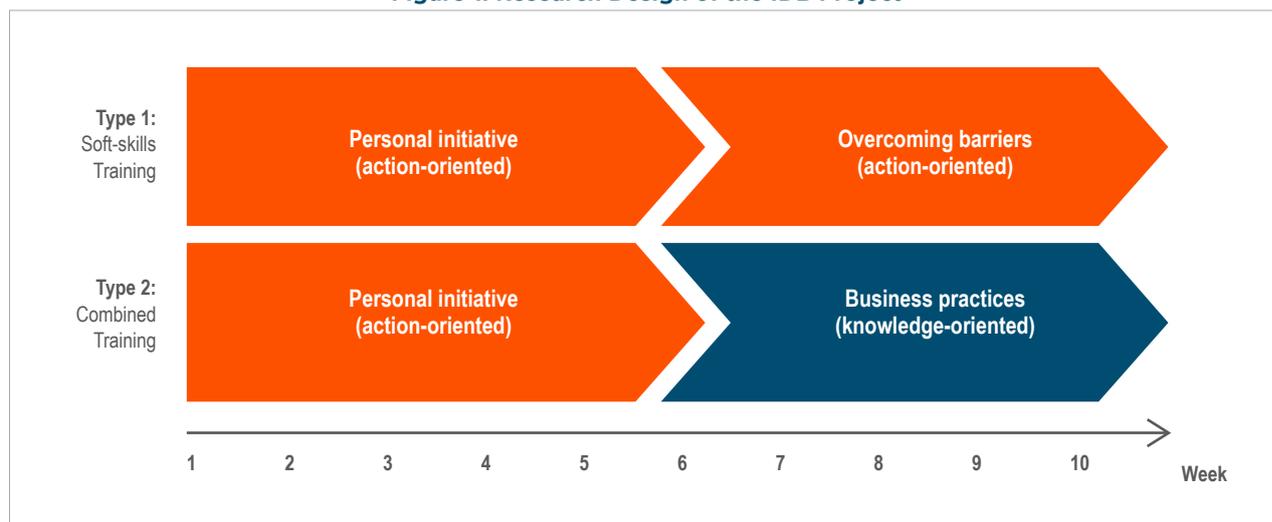
In the second half of the program, the two types of training diverged in terms of content and methodology. With respect to methodology, the first type of training maintained the same action-oriented approach as in the first five weeks, but it supplemented the five weeks of personal initiative training with teaching one of its facets—overcoming barriers—in more detail. The IDB research paper refers to this as “soft-skills” training because it focuses on changing entrepreneurs’ mindset and on teaching behaviors as opposed to imparting technical business knowledge. The second type of training shifted from an action-oriented methodology to one which emphasizes the acquisition of business knowledge. These modules feature lectures and individual work as well as homework exercises which mostly asked entrepreneurs to apply the content that had been taught in class to their individual businesses. Taking the first half of the program into consideration, the soft-skills training used a purely action-oriented methodology, while the second type of training combined elements of an action-oriented training with a knowledge-oriented business course. The IDB’s research paper refers to the latter type as combined training.

In terms of content, the soft-skills training proceeded with teaching soft skills. The topics covered were related to overcoming barriers. Specifically, these modules covered creative problem-solving, learning from mistakes, anticipating problems, dealing with emotional setbacks, and methods that can be used to deliberately practice skills to prevent the impulse to give up. The second part of the combined training, which introduced business practices in addition to the personal initiative training, imparted knowledge in strategic management, buying, stock control, funding, financial management, and marketing. The following pages provide examples of presentation slides that were used in the second half of both trainings. Figure 1 provides an overview of the design of the two trainings used in the IDB’s research project.

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<sup>1</sup> When assigning participants to the two trainings, we also made sure that relevant characteristics such as gender and educational background were similar across the two types of training and the control group.

Figure 1. Research Design of the IDB Project



Source: Author's elaboration.

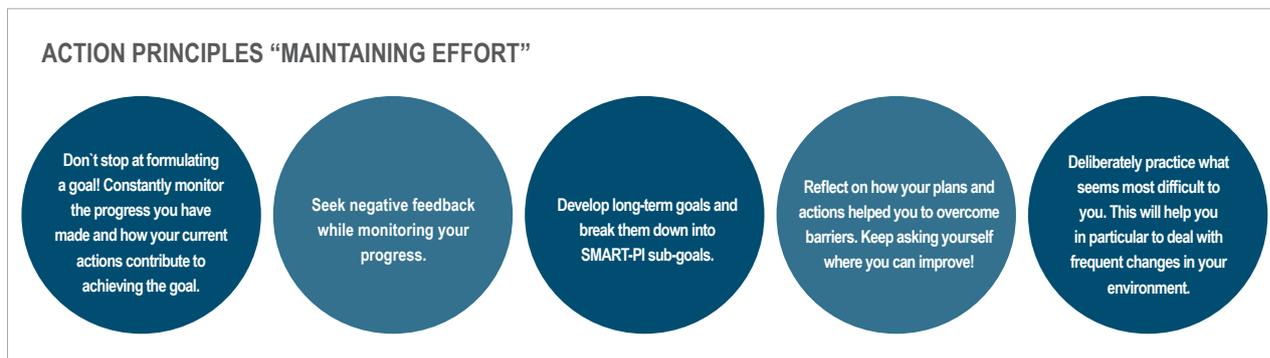
### 1.3. Examples from the Soft-skills Training

An important characteristic of the action-oriented personal initiative training is that it is evidence-based. Evidence-based training material teaches skills in line with established findings from scientific research, in this case from the field of management and entrepreneurship. In the training material, this evidence-based approach is reflected in the use of so-called action principles, which tell entrepreneurs what to do and how to do things in certain areas of running a business. Action principles are rules of thumb derived from scientific research but put in an easy-to-grasp and easy-to-implement manner. For example, teaching entrepreneurs to set specific, measurable, ambitious, but realistic, and time-bound (SMART) goals is based on the vast amount of research, building on Locke's and Latham's famous goal-setting theory (Locke, Latham, and Erez, 1988).

The soft-skills training extended the action-oriented methodology and its evidence-based approach to the second half, and thus it incorporated action principles at the beginning of each module. The screenshot in Figure 2 shows a slide introducing action principles from the module "Maintaining Effort." This module teaches entrepreneurs the importance of monitoring their goal attainment and introduces ways to remove personal deficiencies in certain areas by using methods of deliberate practice. This slide serves as an introduction to the module. The trainers read out the points and present the relevance of each one in an interactive way. They might ask participants to provide examples, give examples themselves, or refer to previous content in the training. For example, the third bullet point ("Develop long-term goals and break them down into SMART-PI sub-goals") refers to the idea of setting SMART goals, including elements of personal initiative mentioned above.

Following the evidence-based approach of the training, each action principle is based on results from scientific research. For example, the first action principle that asks entrepreneurs to constantly monitor their progress toward goal achievement is based on a synthesis of experimental research by Harkin et al. (2016). They found that interventions that supported monitoring activities increased the likelihood of achieving goals. In addition, their study revealed that this effect was even stronger when participants recorded information while monitoring progress. Accordingly, one of the exercises in this module asks entrepreneurs to prepare a timetable with regular milestones and to list sources that they can use to judge whether they are still on track to achieve their goal (see Figure 2).

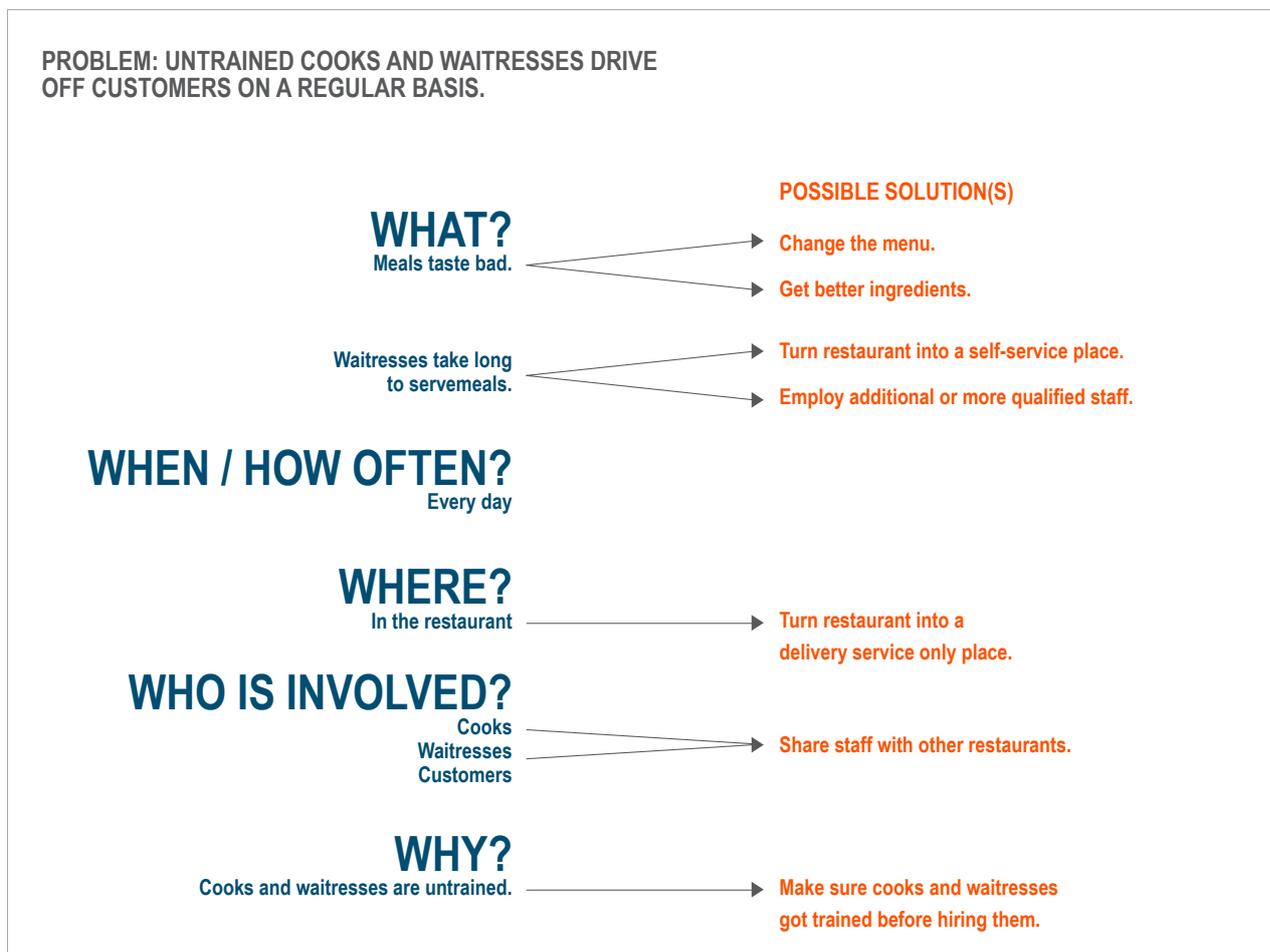
Figure 2. Sample Slide from the Soft-Skills Training Illustrating the Use of Action Principles



Source: Author's elaboration.

A second excerpt from the soft-skills training shows a worksheet that is needed to prepare a case study in the creative problem-solving module. The case study is introduced with explicit permission from the author, Jack V. Matson, who published it in his book *Innovate or Die*. It presents the case of a restaurant owner who struggles to compete with fast food restaurants in his area. He tries out a number of promotional activities that do not seem to work. The exercise asks participants to first identify all of the problems that the restaurant owner faces. Next, they are asked to select one of the problems and to use the method of brainstorming to come up with possible solutions. The worksheet in Figure 3 shows one of the problems specified—untrained cooks and waitresses driving off customers—and some possible solutions. Participants are then asked to work on a personal problem in their own businesses using this technique in a second exercise.

Figure 3. Example of a Worksheet from the Module on Creative Problem-solving



Source: Author's elaboration.

### 1.4. Examples from the Business Practices Modules

In the business practices modules of the combined training, presentation slides either listed a number of options (e.g., for funding or advertising) or demonstrated some kind of calculation (e.g., for income and expenditure budgets or prices). The content for all modules was taken from established sources, such as the International Labour Organisation’s “Improve Your Business” training. First, the content was verified to ensure its applicability to the Jamaican context, and adapted beforehand, if necessary. For example, with respect to funding opportunities, the material listed local lenders who were familiar to the group of trainers.

Figure 4 is a slide from the second module (“Operations, Buying, Stock Control, Funding, Financial Management (1)”). The slide teaches entrepreneurs to differentiate between direct and indirect costs. As one of the trainers said, many entrepreneurs in Jamaica tend to underestimate or even neglect indirect expenses when calculating the price of their products or services. Listing examples for direct and indirect expenses, therefore, was intended to help entrepreneurs improve their financial management skills so that they could set prices more accurately. Trainers were instructed to read each bullet point and relate the message on each slide to participants’ businesses. For example, an entrepreneur who runs a manufacturing business should list “salary and wages” under direct expenses because the number of employees is likely to depend on the number of items manufactured.

**Figure 4. Example of a Slide from the Module on Financial Management (1)**

**FINANCIAL MANAGEMENT**

<p><b>Direct Expenses</b> (attributable to a product):</p> <ul style="list-style-type: none"> <li>• Raw materials</li> <li>• Delivery and Transport</li> <li>• ...</li> </ul>	<p><b>Indirect Expenses</b> (not attributable to a particular product):</p> <ul style="list-style-type: none"> <li>• Rent</li> <li>• Salary and wages</li> <li>• Repairs / maintenance</li> <li>• Loan interests</li> <li>• Bank fees</li> <li>• Power &amp; supplies (electricity, gas, water, heat)</li> <li>• Telephone / mobile / fax</li> <li>• Advertising</li> <li>• License fees / tax</li> <li>• Insurances</li> <li>• Professional fees (e.g. accountant, attorney)</li> <li>• Motor vehicle (insurance, licenses, petrol)</li> <li>• ...</li> </ul>
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Source: Author’s elaboration.

The second excerpt from the business practices component of the combined training shows an activity from the module on financial management (2) (Figure 5). It lists fictional transactions that need to be recorded in a debtor’s book. Additional in-depth interviews conducted by two of the trainers after the project ended<sup>2</sup> revealed that entrepreneurs who attended the business practices component started to record transactions in the form of cash or creditor’s or debtor’s books. Thus, it would appear that the exercises from this module were highly useful to the entrepreneurs.

The activity shown in the screenshot is representative of most of the exercises used in the business practices modules. Unlike in the soft-skills training and the personal initiative component of the combined training, exercises consisted mostly of individual activities (unless participants were illiterate, in which case the trainers would ask the participants to work in teams of two). Because most of these exercises required the participants to immediately apply a certain technique to their personal business (e.g., preparing an income and expenditure budget for homework), working in groups would have been time-consuming.

<sup>2</sup> For additional results of these interviews, see the final section of this document.

Figure 5. Example of an Exercise from the Module on Financial Management (2)

## RECORD KEEPING

**Activity (10 minutes)**

Record the following transactions in a simple debtor's book:

- Your business sells paper cups. A regular customer of yours (Mr. Jackson), who owns a secondary school, buys his cups on credit.
- On 04/07/16, Mr. Jackson buys 2000 cups at JMD 260 each ( $2000 \times 260 = 520,000$ ) on credit
- On 04/15/16, Mr. Jackson makes a part payment of JMD 220,000 and buys another 1000 cups at JMD 260 each, on credit again
- On 04/30/16, Mr. Jackson pays all the remaining debts.

Source: Author's elaboration.

Both the soft-skills and combined training concluded with an integrative exercise to review and apply content from the previous modules. In the case of the soft-skills training, this integrative exercise was called "personal project." It asked participants to develop (or reformulate) a medium-term goal for their personal business and to develop a plan to reach this goal. The training introduced the term medium-term goal to describe a goal that takes more than a week but less than six months to be achieved. For the purpose of the personal project, entrepreneurs were asked to set a goal that would take about three to four months to achieve. This was the approximate amount of time that the first follow-up survey was administered. The planning activities included gathering necessary information on money and other resources as well as detailed timetables for the weeks following the training period. Participants from this training were also asked to find an implementation partner with whom they would follow up on each other's progress.

In the case of the combined training, participants worked on a personal project at the end of the first half (i.e., when they were completing the personal initiative component) and developed a business plan in the final session of the second half of the training. This business plan followed the logic of business plans that are typically required to apply for funding. Thus, participants had to review the content from the previous business practice modules. At the end of this session, participants presented their business plans to each other in the form of a pitch competition. Presenting business ideas in the form of pitch competitions is a common element of funding application processes for small businesses all over the world.

### **1.5. Perspectives on Funding**

The two types of trainings differed the most around the issue of raising funds for the business. The business practices module on financial management teaches entrepreneurs about sources of financing, such as banks. By requiring them to engage in a pitch exercise at the end, the training encourages the participants to apply for funding. The personal initiative training, on the other hand, includes the concept of "financial bootstrapping." This concept explicitly excludes bank loans from the spectrum of funding opportunities, so that entrepreneurs do not commit themselves to long-term bank contracts and stay as financially independent as possible.

The two perspectives on funding were the only notable elements of content where the two components of the combined training suggested very different solutions to business problems. Of course, there were other areas where the business practices modules introduced topics that had already been covered explicitly in the personal initiative training. For example, the business practices modules teach entrepreneurs how to make financial forecasts (financial management (1)) and how to manage customer relationships (marketing). Because the personal initiative training is more concerned about changing entrepreneurs' mindset, it stresses the importance of looking ahead in terms of threats and opportunities more generally and of getting feedback from customers to improve their products or services. Yet, it does not provide detailed instructions on how to prepare forecasts or enhance customer satisfaction. These are provided in the business practices modules. Thus, apart from the differences in terms of obtaining funding, no issues with conciliating content were expected (or observed) from the two components for entrepreneurs who attended the combined training.



The shift from the first half of the training program to the second half appeared seamless. This was not only the case for participants who attended the soft-skills training, who did not encounter any shift in methodology. Participation rates did not change among entrepreneurs attending the combined training, and their levels of satisfaction were similar to those in the soft-skills training. Thus, there is no reason to assume that participants of the combined training felt less comfortable after shifting to a different methodology.

The two follow-up surveys did not go into detail to illuminate whether either component of the combined training has more lasting effects (and, if so, which one). In addition, it might be argued that the group exposed to this training took some time to actually spot and process inconsistencies between the two components after completing the training stage. For this reason, it was decided that a case study about a select number of participants from the two trainings would be useful to better understand how participants made use of the training content and what obstacles they might have confronted when implementing the content in their businesses.

### ***1.6. Results of a Case Study on Implementing Training Content***

The case study sought to answer the question of whether participants of the two trainings addressed challenges in their businesses in different ways and why some entrepreneurs were more successful after attending the training than others (regardless of the type of training that they had attended). The case study was prepared about six months after the IDB project's second follow-up survey. Two of the trainers volunteered to conduct interviews with six entrepreneurs who had attended the majority of sessions in their respective classes. To answer the question why some entrepreneurs were more successful than others, both entrepreneurs who had experienced particularly strong growth in sales or profits and entrepreneurs who appeared to have performed rather poorly over time were selected, based on the data collected during the follow-up surveys.

During the interviews, the two trainers asked the six entrepreneurs what they remembered about the training and what they changed about the way they ran their business after attending the classes. They also asked them to describe past and current challenges in their business and how they dealt or deal with them. Of the six entrepreneurs interviewed, four had attended the combined training and two had attended the soft-skills training. Four were female and two were male.

The following two paragraphs introduce two of the six cases: one entrepreneur who had made particularly good use of the training content (Mr. Wilson), and one who had failed to benefit from the training

to date (Mrs. Boyd-Clayton).<sup>3</sup>The cases introduce entrepreneurs who attended the combined training to illustrate how they did (or did not) benefit from the personal initiative and the business practices components of the trainings.

Mr. Wilson owns a grocery store, and he remembered a great deal about the training. Among the topics he remembered particularly well were the action principles that the trainer taught on how to be self-starting, that is, how to show more personal initiative. He followed these action principles (e.g. “start an action yourself instead of waiting for things to happen”) in the way he interacted with customers. For example, when talking to customers in his store, Mr. Wilson put more emphasis on finding out what customers really wanted. After a few weeks, he was able to anticipate their needs and prepared a pre-packaged collection of items they would usually buy so that customers saved a lot of time when buying products at his store. He also optimized his payment system, allowing customers to pay with credit and debit cards in addition to cash, which made his business different from his competitors’. In finding new ways of financing, he also applied action principles on creativity (e.g., “think outside the box”). For instance, he borrowed money from family members instead of seeking bank loans. Mr. Wilson told the trainers that he once faced a challenge of having to pay for a car which did not work by the time that he needed it. To pay for the car, he organized cockfighting events together with other businesspeople to generate additional income. An additional change he introduced was extending his store hours until late in the evening (even until 1:00 a.m.) so that he could reach more customers.

As a result of the business practices component, Mr. Wilson started to keep records, which helped him become more aware of his expenses. The trainers mentioned that his shop was very clean and prices were visibly displayed. Products were even displayed through a mesh so that pedestrians could see them before entering his shop (which is rather uncommon for grocery stores in Jamaica). Recently, he started to arrange his business space in a different way so that he had space to offer hair care products in addition to groceries. Mr. Wilson promotes these items in his shop, but when customers want to buy them, he takes them to the extra space next door. In addition, he changed his product line to offer more ingredients that are needed to prepare lunch rather than dinner, which further distinguished his business from his competitors’. He changed his product line after he took some time to evaluate which products were the most profitable. Both components of the combined training taught entrepreneurs to evaluate the profitability of their products or services, but the business practices component covered this topic more systematically.

Mrs. Boyd-Clayton applied for the training because she was considering opening a loan business. During the training, she developed the idea of starting a business in the area of agricultural products and processing even though she did not have the skills at that time. She even registered a business although she had not made a single sale yet. Mrs. Boyd-Clayton remembered that entrepreneurs need to be proactive instead of sitting and waiting for things to happen. However, it took her a long time to apply the knowledge, although the trainers attested to her knowledge of the training material.

The barriers faced by Mrs. Boyd-Clayton in implementing the content were a lack of technical knowledge of agricultural processing, a lack of financing, and a disadvantageous business location. She attended a number of additional trainings and workshops to acquire the necessary agricultural skills, but she still lacked the confidence to make use of the knowledge she had acquired. With respect to financing, she decided to follow the common approach taught in the business practices component and applied for bank loans, which did not work out until recently. She did not change her business location, because changing the business location would have meant moving to a different area. She reported that she still lacks the motivation and confidence to get things done. During the training, Mrs. Boyd-Clayton experienced a boost in confidence by listening to and exchanging ideas with others. She also appreciated the feedback and encouragement from like-minded people. According to the trainers, she spent a lot of time on her personal development since attending the training and too little on advancing her technical skills.

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<sup>3</sup> To ensure anonymity of the two entrepreneurs, we do not use their real names and do not mention their business location. The two cases presented here were selected based on whether the changes they introduced serve as good examples for someone who shows (or does not show) personal initiative. We furthermore consider the two businesses to be quite representative of businesses run by Jamaican entrepreneurs.



After the project's second follow-up survey, Mrs. Boyd-Clayton received some non-financial support from an agricultural agency. A few days before the two trainers interviewed Mrs. Boyd-Clayton, she also managed to get a loan from a bank and even received a big order from one of her customers. With this financial support, she said that she would finally be able to produce lotion from her agricultural products.

In summarizing these two and the remaining four cases, entrepreneurs who had attended the combined training particularly remembered action principles from the personal initiative training. As a result of the second five weeks, all of them initiated some kind of record-keeping activities but failed to sustain their efforts in most cases. The participants remembered content from the first two weeks (e.g., being self-starting, thinking outside the box) particularly well. Especially among female entrepreneurs, those who had problems implementing the content mentioned a lack of confidence, laziness, or personal (family-related) issues as the main reasons. The different solutions to financing problems proposed by the two components of the combined training did not seem to confuse participants. They either decided to introduce bootstrapping techniques (as Mr. Wilson did) or they applied for bank loans (as Mrs. Boyd-Clayton did).

The two participants who had attended the soft-skills training stressed that they made particular use of bootstrapping techniques to obtain financing and grow their business. This is not surprising because the soft-skills training promoted bootstrapping (as opposed to applying for bank loans) consistently. Because lack of financing is a common barrier for entrepreneurs, especially in the early stages, supplementing bootstrapping knowledge with additional content on overcoming barriers might have been particularly beneficial to them.

A larger number of cases would be necessary to draw generalizable conclusions. Still, by comparing how training participants dealt with barriers in their businesses, this case study had its merits because it provided a closer look at the individuals "behind the data." Thus, it is recommended that future projects of this kind go into greater detail at the interview stage to identify factors that are critical to the sustained use of the training content.

As of June 2019, personal initiative training has been implemented in a number of large-scale research projects in developing countries around the globe. For project descriptions, success stories, research results, and additional background information on personal initiative training, please visit <https://pi-training.org/>.

## 2. Impact Evaluation

### 2.1. Introduction

One of the key questions in the developing world is whether it is possible to transform self-employed workers into innovative entrepreneurs who can spur a process of creative disruption. The vast amount of resources that have been spent in recent decades on training programs targeted at small business owners proves that policymakers believe that such a transformation is possible. There is a common belief that self-employed individuals can become entrepreneurs if taught the right tools that can be applied to succeed in their business.

To shed light on these issues, we conducted a randomized controlled trial (RCT) involving 945 small-scale business owners in Jamaica. We randomly assigned entrepreneurs to two treatment arms comparing two entrepreneurship training programs with one control group. As explained in the previous section of this note, both courses begin with five sessions that aim to foster participants' personal initiative. One course (intensive soft-skills training, or SS) continues with five additional classes covering the personal initiative material in greater depth, while the other course (combined training, or CT) offers five more sessions following a traditional approach focused on recommended business practices.<sup>4</sup>

The initial hypothesis was that there are complementarities between soft skills and business knowledge. Therefore, entrepreneurs could benefit from learning not only about how to change their mindset (soft skills), but also about tried-and-true practices that can make their business more profitable (traditional training). If such complementarities exist, the CT offered might have stronger effects than the intensive SS training. If, on the other hand, there are larger returns to SS, a more intensive training on these skills would be more beneficial. We focus on the effects of the SS training alone (without further personalized interventions, like mentorship), which provides a unique opportunity for scaling up by interested stakeholders, given its lower cost. In a nutshell, Box 1 summarizes the key findings.

#### Box 1. Key Findings

- The intensive soft skills training is effective in improving business outcomes (i.e., sales and profits) in the short term and mostly for male entrepreneurs.
  - The positive effects are mainly driven by an improvement in business practices.
- No effects were found for the combined training, which added five classes focused on recommending generic business practices for entrepreneurs.
- The only effects that persisted after 12 months were related to some skills targeted by the intensive soft skills program (i.e., perseverance and overcoming barriers). However, there is no direct translation of these soft skills into business outcomes.

### 2.2. The Setting

The intervention took place in Jamaica, a small, open economy highly dependent on inflows from tourism and remittances and with a considerable share (34 percent in 2014, according to STATIN) of firms operating in the informal sector. The costs associated with doing business in Jamaica are high, especially with respect to enforcing contracts, paying taxes, registering property, and getting electricity.

We established a key partnership with the Jamaica Business Development Corporation (JBDC), an organization with experience in promoting entrepreneurship in Jamaica. Team members with expertise in entrepreneurship, organizational behavior, and work psychology worked with JBDC staff on developing the training course material and adapting it to the Jamaican context.

<sup>4</sup> This document presents the main results of this impact evaluation. For the full impact evaluation, see Ubfal et al. (2020).

### 2.2.1. Sampling and Randomization

Recruitment to the intervention was conducted via a telemarketing campaign. The research team placed radio advertisements and promoted the program through flyers and on the JBDC website. JBDC advertised the program as a new business training course developed jointly with international experts. 2,000 entrepreneurs expressed interest in the training. After an initial contact, JBDC re-contacted the entrepreneurs to complete a baseline survey (30 minutes) that included questions on demographics, business outcomes, business practices, and Likert scale-type questions to measure soft skills (i.e., personal initiative, perseverance, and locus of control).

After the initial survey (between August and September 2016), 1,085 entrepreneurs were found to have met the eligibility criteria: (i) providing valid contact information, (ii) having fewer than 5 employees and (iii) reporting monthly sales and costs no higher than 1 million JMD (US\$7,700). Participants who completed the baseline survey were contacted again to confirm their willingness to participate in the lottery for a slot in the training course. Fifty individuals were no longer interested and 90 had provided incorrect contact details, reducing the final sample to 945 entrepreneurs (see Figure 6).

Figure 6. Composition of the Sample



Source: Authors' elaboration.

Randomization was achieved by assigning entrepreneurs in equal proportions to the two treatment arms and the control group (see distribution of final sample in Figure 6). The treatment arms and the control group were then stratified by gender, education, selected location of the course, and having at least one employee. Compliance with treatment allocation was almost perfect. Hence, the results presented in the following section represent the differences between each treatment arm with respect to the control group (after also controlling for a set of baseline characteristics and accounting for the randomization strata).<sup>5</sup>

### 2.2.2. The Training Program

After randomly assigning eligible participants into the two treatment arms and the control group, entrepreneurs from the treatment arms were invited to a 40-hour free business training course over a span of 10 weeks (4-hour sessions) from October to December 2016. The design and implementation of both courses were kept as similar as possible, and their times never overlapped to avoid communication among participants from different treatment groups. Furthermore, participants did not know there were two different courses, and the first five sessions (personal initiative) of each course were identical.

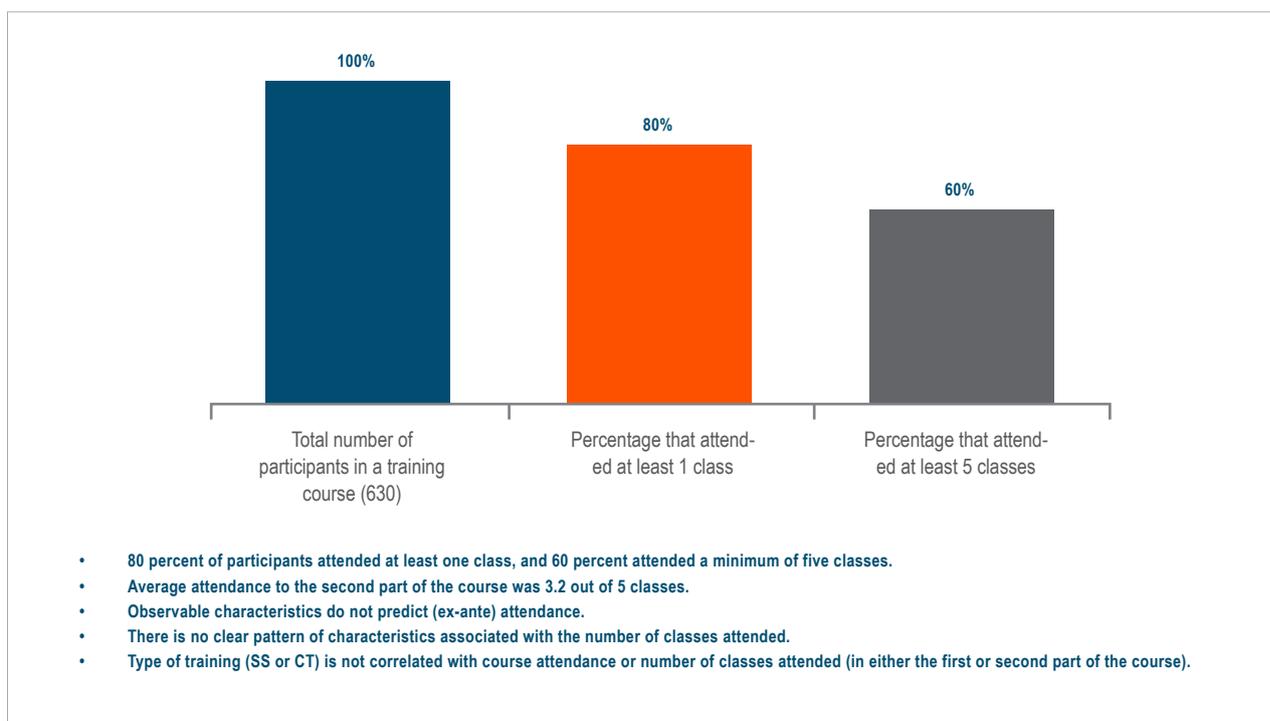
Sessions 6-10 differed between treatment arms. The SS training provided more in-depth material on personal initiative, while the CT training covered subjects usually included in business training courses: strategic management, stocking, financial management, costing, customer care, and business plan formulation. Hence, a comparison of the two training groups will measure the differential effect added to a personal initiative course by teaching typical business training material vis-à-vis continuing with an intensive soft skills approach focused on perseverance.

<sup>5</sup> Results are presented in percentage points or standard deviations, depending on the type of outcome variable that is being analyzed.

## 2.3. Results

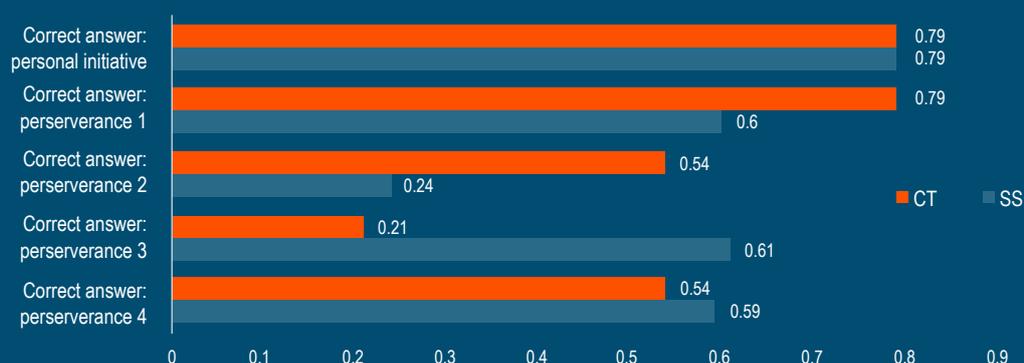
### 2.3.1. Take-up

Figure 7. Percentage of Participants who Attended Classes



### Box 2. Course Satisfaction and Knowledge Test

- Course satisfaction questionnaires were distributed during class 9/10, and 97 percent of participants (who had not dropped out) completed them.
  - Satisfaction index averaged 6.6/7 for both training courses.
  - Likert scales to assess whether entrepreneurs plan to use the acquired skills show close to maximum scores.
  - Amount willing to pay for a similar course averaged JMD 34K.
- Knowledge:
  - Participants learned the material taught in their assigned course.
  - While in both treatment arms 79 percent of participants answered the question on personal initiative correctly, the share of correct answers differed across treatment groups for the other questions.



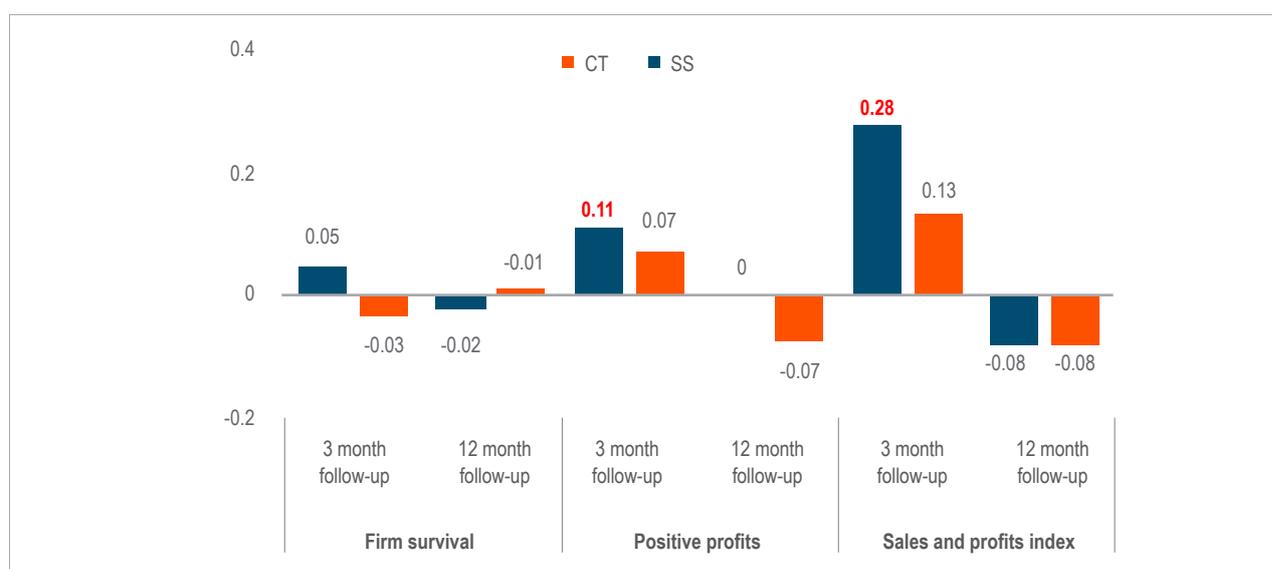
Source: Authors' elaboration.

### 2.3.2. Impact on Business Outcomes

The study focuses on three business outcomes to analyze the effect of receiving the training: survival, sales, and profits. (Figure 8).

- No statistically significant impacts with respect to survival.
- Positive effect for the SS training in the three-month follow-up (significantly different from the CT outcome), which vanishes in the second follow-up (12 months)
  - **Extensive margin:** Effect of **11 percentage points (pp)** on the likelihood of reporting positive profits for the intensive SS training after three months but no effect after 12 months.
  - **Intensive margin:** Index is defined at the mean of standardized z-scores of diverse profit and sales measures. There is an increase of **0.28 standard deviations** for the SS training after three months and no significant effect for the CT course.

**Figure 8. Long-term Effects of Receiving the Training on the Two Treatment Groups (after 3 months and 12 months)**



Source: Authors' elaboration.

### Box 3. Addressing Attrition Rate

**Attrition in the control group was large:**

- 31 percent of entrepreneurs didn't answer the three-month follow-up survey.
- 41 percent of entrepreneurs didn't answer the three-month follow-up survey.
- 21 percent didn't provide answers for either of the two follow-up surveys.

**In the three-month follow-up:**

- Attrition was 6 pp lower for both treatment arms, and the characteristics of attritors were not statistically different between the SS and the control group.
- However, these characteristics were statistically different when comparing the CT to the control group (higher attrition rates in CT for those with a higher value of business practices index and a lower reservation wage).

**In the 12-month follow-up:**

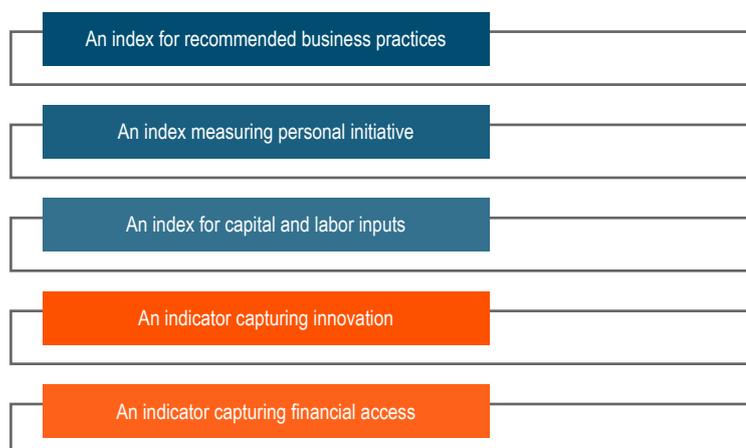
- Survey attrition rates were indistinguishable across the two treatment groups and the control group.
- Characteristics of attritors were not statistically different.

After estimating bounds for testing the robustness of the main results to differential attrition: the main result of 0.28 std deviations (for SS in the three-month follow-up) holds if we impute control observations using the median of the 75th percentile of the observed distribution among the treated.

**The lack of effects after 12-months is quite robust.**

### 2.3.3. Impact on Intermediate Outcomes

To understand how the effects of the training courses on short-run outcomes might have arisen, we focus on a series of potential mechanisms. We consider five mechanisms and compute the following:

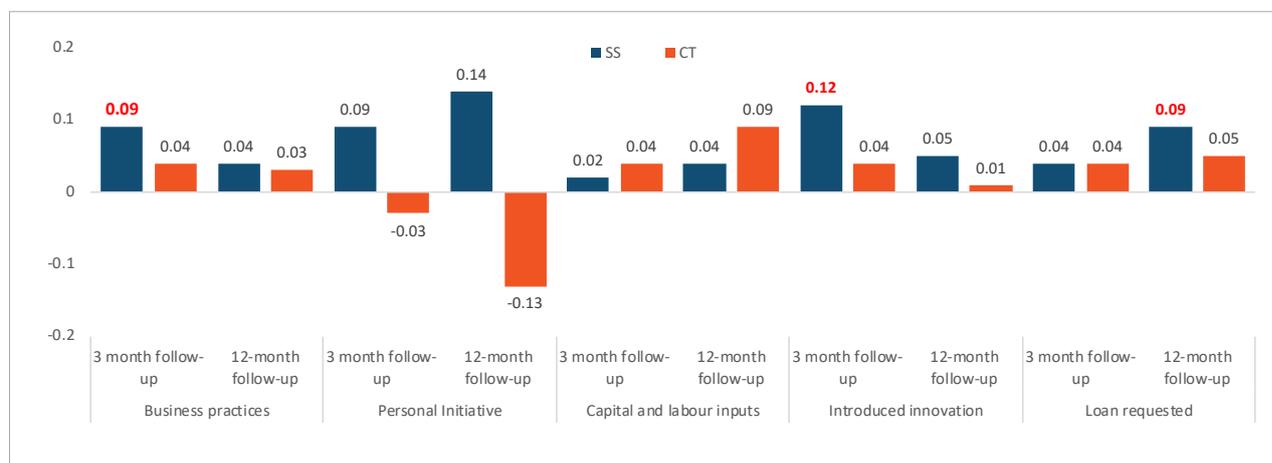


Three months after the training, there are significant treatment effects on the share of recommended business practices adopted by entrepreneurs in their respective businesses and on the introduction of innovations. These effects are statistically significant only for the intensive SS training (highlighted in in Figure 9). The business practices result is surprising, since the CT was the one focusing on business practices. The SS training might have achieved a stronger change in entrepreneurial mindset due to the extra five sessions focusing on perseverance.

While both training programs included five sessions focusing on personal initiative, there are no statistically significant effects on the personal initiative index for any training arm. The levels of personal initiative were already high at baseline, so there was no wide margin for improvement. However, Figure 9 shows ample differences between treatment groups. There were no treatment effects on the capital and labor inputs index for any of the training modalities. There is an important effect (representing 33 percent of the control mean) on introducing new products or production techniques in the short run (for SS training) but no effect after 12 months of the training.

In summary, the main potential mechanism to explain the short-term effects of the SS training on business outcomes is an increase in the adoption of recommended business practices. This is observed only in the short run.

**Figure 9. Long-term Effects of the Trainings by Subject Matter (after 3 months and 12 months)**

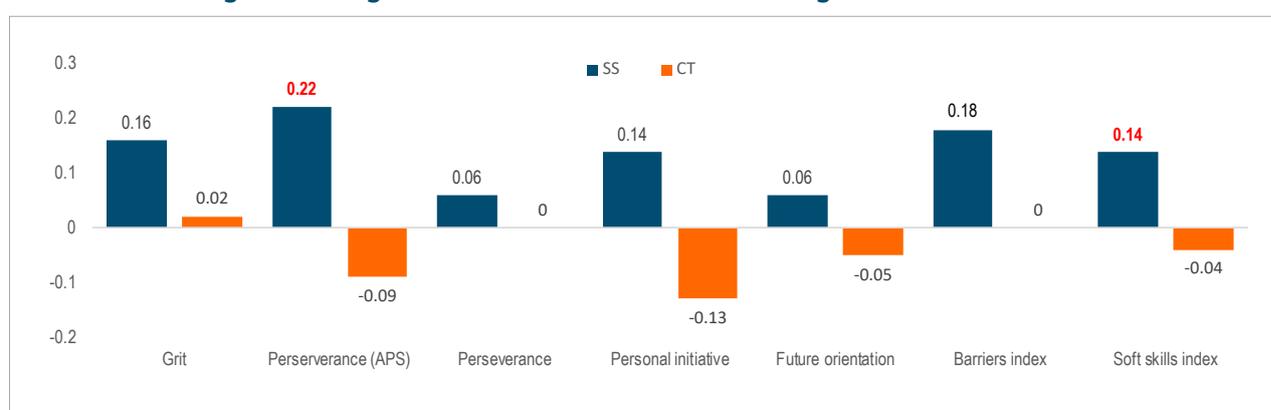


Source: Authors' elaboration.

### 2.3.4. Self-reported and Behavioral Measures of Soft Skills

- The psychological components included measures of personal initiative, future orientation, and a situational interview on overcoming business-related barriers.
  - Both training programs (SS and CT) covered these components.
- Measures of perseverance (2 indices) and grit, mainly covered in the intensive SS training, were also introduced in this follow-up survey.
- There is only a significant effect on one of the perseverance indices (constructed following the topics taught in the course) for the entrepreneurs who took the SS training.
- While the effect on personal initiative from the SS training is not statistically different from the control group, it is significantly larger than the effect from the CT training (Figure 10).
- The standardized summary index reveals a significant impact of the SS training on its underlying measures of soft skills.
  - The effect from the SS training is statistically different from that of the CT training.

**Figure 10. Long-term Effects of the Soft-skills Training from the Two Courses**



Source: Authors' elaboration.

### 2.3.5. Behavioral Measures of Soft Skills

#### Box 4. Perseverance Games

Two incentivized real-effort games that measure perseverance and initiative took place during the second follow-up survey:

- In game one, participants chose between an easy and a difficult task, with the latter paying higher monetary rewards. The task was repeated for several rounds, and participants were given the option of playing the easy or the difficult task at each round.
- The second game was similar, but playing only one round, and participants had to choose whether or not they wanted assistance to solve the task.

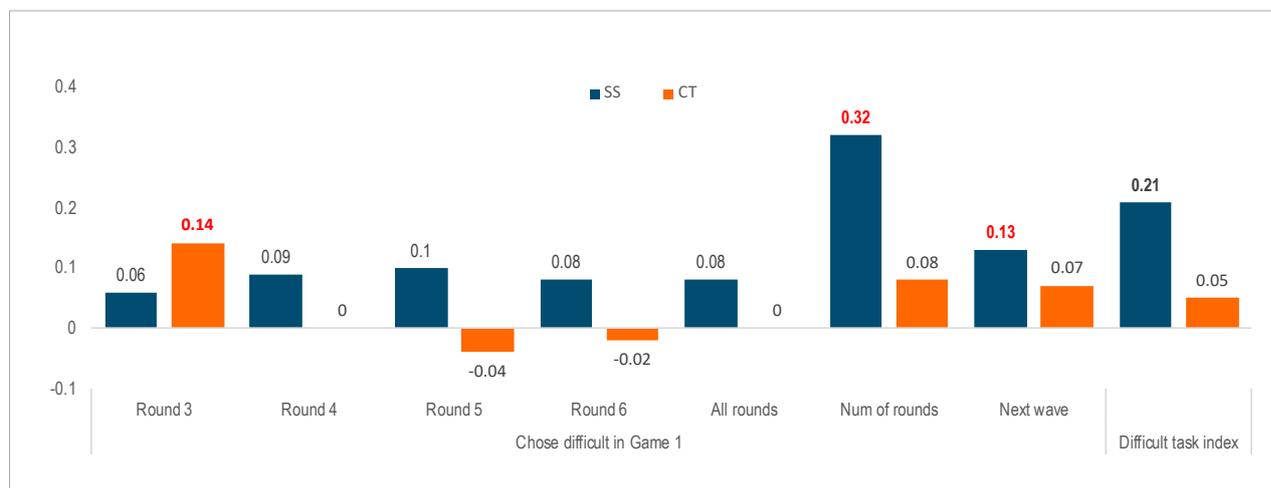
Participants were informed that only one round of one of the two games would count for the monetary reward, and it would be randomly selected at the end of the survey. Respondents were paid if they gave the correct answer on the randomly selected round. Solving the easy task had a reward of JMD 500 while the difficult one resulted in a payoff of JMD 2,000.

Before playing Round 1, participants could choose the type of task to solve in Round 3, and they could change their choice at Round 3. The task at Round 2 was designed to be very difficult, such that just a few participants could solve it. This allowed us to check whether treated participants were more likely to choose the difficult task even after failing (in Round 2), which was the notion of perseverance conveyed in the training.

For game 2, participants chose between solving the task by themselves (JMD 2,000) or getting help (JMD 1,000 reward).

The share of entrepreneurs choosing the difficult task in all rounds (“all rounds” in figure below) is larger for the intensive SS training than for the control group (representing an increase of 8 pp over a control mean of 30 percent) and the CT training, but the effect is not significant. There is a statistically significant impact of the intensive SS training on the number of rounds in which participants choose the difficult task and on choosing the difficult task for a potential next survey round after 6 months (“next wave”). Finally, when combining all outcomes into a standardized index, we observe an effect for the SS training of 0.21 standard deviations (significant at the 10 percent level).

**Figure 11. Choices Made by Participants in Perseverance Games by Type of Training Received**



Source: Authors' elaboration.

None of the training programs had any effect on the choices (performing task by themselves or getting help) made by the participants in game 2. In the control group, 52 percent of the participants decided not to seek assistance before knowing how difficult the task would be, while 67 percent did so after knowing the difficulty of the task. These percentages were only slightly higher for both treatment groups.

In conclusion, game 1 provides evidence that the training that focuses on perseverance actually generated behavioral changes, which persisted 12 months after the training. On the other hand, there is no evidence of trying to solve the task independently (game 2), which may be related to initiative.

#### 2.4. Are There Differences by Gender?

There is an important debate in the business training literature focusing on whether these types of interventions can help women grow their own businesses. Most evidence shows null or at least weaker effects of business training on women-owned businesses. There is evidence that women face additional constraints (demands of family or partner) that lead them to divert resources from their business.

- From the main results presented so far and focusing on gender, there is a clear pattern: all of the positive effects on business outcomes (three-month follow-up) are driven by men, with no effects on women.
  - There are significant and large effects for the SS training on having positive profits and on the sales and profits index for men.
  - There are no significant effects for either gender in the 12-month follow-up, but negative coefficients for the interaction of women and the CT training.
- Most of the effects observed for the average entrepreneur in terms of intermediate outcomes are driven by men.
- Baseline characteristics for female and male entrepreneurs were comparable in terms of education, age, access to internet, having entrepreneurial parents, access to finance, and even soft skills.
  - The differences are that male entrepreneurs are more likely to have employees and be registered, to have larger sales volumes, and to introduce innovations. However, the difference in average profits is not statistically significant.

It is possible that the SS training alone was not sufficient to improve business outcomes for women. When combined with post-training mentorship, the SS training could have desirable positive effects on female entrepreneurs (as evidenced by the Togo experience). This opens up an opportunity for a policy intervention that could benefit female entrepreneurs in Jamaica.

## **2.5. Conclusions**

The results of this study show that the intensive SS training was effective at improving business outcomes. However, this effectiveness was only observed in the short term and mainly among male entrepreneurs. The effect after three months was of the order of US\$107 of unwinsorized profits and US\$75 of winsorized profits. Since the actual cost of the training was around US\$212 per participant and the effects lasted only three months, the program would just pass a cost-benefit analysis.

The main driver behind the positive effects of the intensive SS training is an improvement in business practices. This was not directly targeted in the training, showing that entrepreneurs developed a mindset of strong personal initiative and perseverance that allowed them to introduce changes to their business. By contrast, no effects were found for the CT program, which included five additional classes providing generic recommendations on business practices.

The results of this RCT support the possibility that SS training alone may not be sufficient to generate persistent positive effects on business outcomes. There may be a need for post-training mentorship to obtain lasting effects, as evidenced in Campos et al. (2017). Mentorship could be used as an instrument to boost motivation, transfer knowledge, and facilitate the implementation of ideas developed during the training.

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