

Experimental Evidence on Entrepreneurship Training and Microgrants

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Abstract

Expenditures on government and philanthropic subsidized entrepreneurship training and assistance programs are growing around the world. Recent experiments providing entrepreneurship training as a reemployment strategy, however, have demonstrated only limited success. Using a novel field experiment that provided access to a microgrant with entrepreneurship training, we find evidence of positive effects on self-employment, formal business registration, and overall employment. To extend our understanding of the influence of microgrants, we contrast the findings to experiments that lacked microgrants, identify impacts for those theoretically likely to be influenced by a microgrant, and implement non-experimental strategies to estimate impacts for those who received the microgrant. We find [**findings currently not released**].

¹ Note: Only findings from the original report are available for release. All new analyses that are the topic of this paper have not been given approval by the U.S. Department of Labor, who is the original funder of the study. Accordingly, new results, including a re-analysis of the main findings, are unavailable. For existing findings from the report, we include copies of relevant table sections. The citation of the published report is:

Hock, Heinrich, Mary Anne Anderson, and Robert Santillano. 2019. *Supporting Self-Employment as a Reemployment Strategy: Impacts of a Pilot Program for Dislocated Workers After 18 Months*. Report submitted to the U.S. Department of Labor, Employment and Training Administration. Washington, DC: Mathematica.

Report appendices containing all original tables can be found here:

https://www.dol.gov/sites/dolgov/files/OASP/evaluation/pdf/SET_Pilot_Program_Final_Impact_Report-Supplemental_Material.pdf.

1 Introduction

Governments, foundations and individual donors currently spend billions of dollars subsidizing entrepreneurship training and assistance programs. In the United States alone, there exist more than 1,000 subsidized Small Business Development Centers (SBDC) and at least 800 other non-profit programs providing self-employment training and other assistance.² Expenditures on subsidizing entrepreneurship training are also large and growing rapidly in many other countries (OECD 2017). Surprisingly, there is little evidence that these programs have positive effects on business creation or employment outcomes. In fact, the few recent RCT evaluations of programs have shown mostly null effects (Benus et al. 2010; Davis et al. 2013; Fairlie et al. 2016).³

The effects of entrepreneurship training on business and employment outcomes, however, might be curtailed if participants cannot purchase the inputs needed to produce the goods and services of the business venture. Financial capital constraints are often noted as a major barrier to business creation especially among disadvantaged groups, and the standard theoretical model of entrepreneurship indicates an important interaction between entrepreneurial ability and financial capital in entrepreneurial choice.⁴ The theoretical model predicts that the effects of an increase in entrepreneurial ability (possibly from training) on the likelihood of self-employment entry are smaller when financial capital constraints are more binding. Also consistent with this concern is the general finding of positive impacts from job training on employment in which financial capital is not needed (Card et al. 2017).

Thus, an explanation for why training generally does not work is that workers need at least some financial capital to get started—especially with purchasing early inputs in production. Participants in subsidized training programs, who are often dislocated, unemployed or

² SBDCs exist in all 50 states, and are administered and funded through partnerships between the SBA and public colleges and non-profits. See <http://www.sba.gov/content/small-business-development-centers-sbdc> for a directory of SBDCs, Aspen Institute (2012) for information on other non-profit programs, and European Commission (2010) for a description of programs in the European Union.

³ One exception in the U.S. is a small demonstration experiment that was conducted in Washington and Massachusetts in 1992 (Benus et al. 1994). The study found positive impacts on self-employment, total earnings, and job creation from a training assistance program that allowed for concurrent U.I. benefit payments and a lump-sum benefit payment.

⁴ See Parker (2018) for a review of the empirical literature providing evidence of financial constraints faced by entrepreneurs, Evans and Jovanovic (1989) for the theoretical model of entrepreneurship, and Schaberg (2019) for recent experimental evidence of positive effects of microfinance on business ownership among low-income women.

disadvantaged workers, might not qualify for business loans, be able to attract equity investors, or have adequate savings to invest. In this case, even if entrepreneurship training programs impart valuable human capital they might not result in improved business outcomes.

In this study, we provide a novel test of whether entrepreneurship training coupled with microgrants has positive impacts on business, employment, and other outcomes. To test the hypothesis, we created the Self-Employment Training (SET) program with the support of the U.S. Department of Labor (DOL). SET is the first DOL-funded entrepreneurship program to offer microgrants in addition to entrepreneurship training and assistance.⁵ The program provided 12 months of entrepreneurship training and microgrants of up to \$1,000 to use on business start-up expenses. Using an experiment, SET was randomly offered to half of roughly 2,000 qualified dislocated workers who proposed a business idea in a field in which they had experience or expertise. Training occurred across 11 SBDCs and non-profit community-based organizations (CBOs) in four cities, which are the predominant providers of entrepreneurship training services in the market. As part of the training program, case management services from experienced business development advisors were provided and included monthly follow-up meetings, in-person quarterly reassessments, and intensive and tailored service delivery. A follow-up survey was conducted 18 months after treatment to measure outcomes.

Our analysis of the SET experiment provides the first evidence on whether entrepreneurship training supplemented with a microgrant has positive impacts on business and employment outcomes and can mitigate credit market frictions in a developed country. To our knowledge, no previous studies have tested the effectiveness of training coupled with microgrants using RCTs in the United States. Specifically, a handful of random experiments have examined the effectiveness of entrepreneurship training alone (Benus et al. 1994; 2010; Davis et al. 2013; Fairlie et al. 2016), and one study has examined the effectiveness of microfinance alone (Schaberg, et al. 2019), but we are unaware of a study that covered both. Our estimates of SET treatment effects suggest that entrepreneurship training supplemented with seed capital has impacts on business ownership and employment. Entrepreneurship training dramatically increases the likelihood of business ownership at the 18-month follow-up (by 11 percentage points in the full sample, on a base of 57

⁵ The creation of the SET program was partly in response to a lack of clear positive impacts of early programs, GATE I and GATE II, evaluated in Benus et al. (2010); Davis et al. (2013); Fairlie et al. (2016). Several years ago, DOL asked a team of researchers (including Fairlie and Hock) to design an ideal entrepreneurship training programs given a limited budget.

percentage points). SET increased the share of program group members who were employed in any type of job at the time of the survey; although this difference was more modest (around 3 percentage points), it was statistically significant. SET also increased the percentage with both self-employment and wage/salary jobs (7 percentage points), which has not been examined carefully before. The growth of the gig economy and contracting out work makes this combination more common (Katz and Krueger 2017).

The positive impacts on business ownership compared to the limited impacts of the GATE I and GATE II programs suggests that entrepreneurship training combined with microgrants might have mitigated credit constraints. We explore this conjecture in four ways. First, we examine how microgrants were used and whether it led to more applications of outside loans (or simply crowded out loans). Second, following Fairlie et al. (2016) we explore heterogeneity in treatment effects by whether participants are pre-disposed to face credit constraints (e.g. bad credit history, non-home owners, or low levels of wealth), thus providing evidence that the program mitigates market frictions in capital markets. Third, we combine data from both SET and GATE to compare estimates of treatment effects using similar definitions of outcomes and subpopulations. Finally, we rely on weighting strategies to create non-experimental impacts of actually receiving a microgrant.

The rest of the paper proceeds as follows. Section 2 provides more details on SET, including its research design and implementation, the nature of the training services received by subjects, and external validity. Section 3 presents proximal results on training use, business practices, and credit use. Section 4 presents impact estimates on business ownership, scale, and performance. Section 5 presents estimates of heterogeneous treatment effects. Section 6 further explores whether the program mitigates credit constraints. Section 7 concludes. **[Note: All extensions on the experiment require approval from DOL, which has yet to be granted. Because of that, many of the planned analyses have not yet been completed, and those that have been completed cannot be released.]**

2 The Self-Employment Training (SET) Experiment

2.1 Evaluation Design

SET was an experiment designed and implemented by the U.S. Department of Labor (DOL) and the authors to provide entrepreneurship training and microgrants to dislocated workers. The goal

of SET is to assist dislocated workers in getting back in the labor force by helping them start businesses in their fields of expertise. SET was launched in summer 2013 in four metropolitan areas—Chicago, Cleveland, Los Angeles, and Portland, Oregon. Randomly selected participants were given access to free, intensive business training and development services for up to 12 months. These training services include training and consultation on self-employment, ongoing guidance and support from experienced business development advisers, and up to \$1,000 in microgrant funds. The treatment phase of the evaluation ran from 2013 to 2017. The follow-up survey was conducted 18 months after random assignment.

The experimental training program was premised on the idea that dislocated workers have distinctive needs when pursuing self-employment and can, therefore, benefit from targeted training and support. Hence, one of the program eligibility criteria was that workers be either unemployed or, in some cases, underemployed when applying to the program. This is consistent with DOL’s approach in funding entrepreneurship training as a reemployment or employment strategy.⁶ Because there are substantial risks in starting a business, training and seed capital were targeted to individuals who were pursuing businesses in a field in which they had experience or expertise. Previous research indicates that aspiring business owners who have substantive knowledge about the product or service they plan to offer are more likely than others to succeed. Conversations with microenterprise service providers also indicated that dislocated workers often had this type of knowledge, even if they lacked specific knowledge about how to run a business. Therefore, SET applicants were required to demonstrate in their application to the program that they had relevant past experience for the type of self-employment venture they intended to pursue. In anticipation that short-term entrepreneurship training programs cannot provide the underlying industry-specific

⁶ Some smaller-scale programs target recipients of social insurance. Demonstration programs in Washington and Massachusetts starting in 1989, and Self-Employment Assistance programs in several states starting in 1993, targeted unemployment insurance recipients and provided concurrent U.I. benefits or lump sum payments (which also exists in Europe, e.g. Baumgartner and Caliendo (2008). Other countries similar approach. A number of countries have established national programs to assist unemployed workers pursue self-employment as part of their Active Labor Market Programs. The British Enterprise Allowance Scheme, for example, provides a weekly allowance to unemployed individuals while they attempt to start a business; the Chomeurs Createurs program in France assists unemployed individuals to start a business by providing them start-up capital through a lump-sum payment in lieu of unemployment benefits (Elias and Whitfield, 1987; Benus, 1994; Meager, 1996). In Germany, the Start-Up Subsidy and Bridging Allowance programs provide periodic payments to unemployed individuals interested in starting their own business (Caliendo and Steiner, 2007; Baumgartner and Caliendo, 2008). Belgium, Denmark, Hungary, Italy, Poland, Spain, and New Zealand have implemented similar programs (Meager, 1996; O’Leary et al., 1998; Cueto and Mato, 2006; Perry, 2006; Wandner, 2008).

skills that are essential to successful business ownership the decision was made to instead condition participation on the possession of these skills.

During the 12-month period after enrollment, participants had free access to experienced business development advisors, called SET advisors. These services included prompt, in-person intake meetings with a SET advisor designated by the service provider within two weeks of the participant being admitted to the program. During intake, the advisor learned about the participant's needs for business development support and devised a service plan to help the participant make progress toward self-employment. SET also provided monthly follow-up meetings by telephone or in person, if possible, to learn about progress, identify new business development needs, and provide additional assistance. In-person quarterly reassessments to provide a more comprehensive assessment of progress since intake, reevaluate the participant's needs, and update the service plan. Intensive and tailored service delivery. Using the service plan developed through case management, SET advisors were expected to connect participants to training, technical assistance, coaching, and other business development supports. They could provide services directly, through referrals resources at their own organizations, or through referrals to other organizations.

The novelty of SET is that, for the first time, entrepreneurship training was coupled with seed capital.⁷ As part of the program, seed capital microgrants of up to \$1,000 were available to the treatment group. Participants who registered their businesses, completed their business plans, and engaged satisfactorily with the program (as determined by their SET advisors) were eligible for these microgrants. Funds could be used for start-up expenses (such as licenses, equipment, or supplies) but not for ongoing operational expenses (such as salaries or rent) or personal expenses.

2.2 Outreach, Intake and Random Assignment

Outreach for SET was conducted through partnerships with workforce development and UI system partners. Potentially interested individuals were identified from the pool of customers seeking

⁷ The program also included a screening mechanism to identify potential participants with expertise or expertise that was related to their proposed businesses, and a range of personalized services to help SET participants navigate the early stages of entrepreneurship. As noted below, however, these components of the program have similar use rates as the previous experimental program, GATE.

workforce services from American Job Centers (AJC), and through mass emails, postcards, and robocalls through state/local workforce programs and the state UI program.⁸

The study enrolled 1,981 applicants, making it one of the largest entrepreneurship training evaluations ever. Intake and application screening occurred through an online system. Of those who registered for an online orientation, about half eventually completed the orientation, and 17 percent applied to the program. The application included an automated dislocated worker screener, a baseline information form, and a description of the applicant's business idea and relevant past experience. Of those who applied, 80 percent were found to be eligible, randomly assigned, and matched to providers based on location and capacity. Ineligible applicants were almost evenly split between (1) those who did not pass the dislocated worker screener, and (2) those who were screened out based on other substantive criteria (see Amin et al. 2017 for more details).

Random assignment was conducted through a balanced lottery. We enrolled all eligible applicants in the study and randomly assigned them to either the SET program group or control group. All study enrollees had an equal chance of being assigned to the program group or the control group, and we conducted random assignment separately by site. The program and control groups were approximately the same size in each site.

2.3 Study Participant Characteristics

SET was designed to estimate treatment effects on recipients who are representative of those served by subsidized training providers. Most study enrollees had an employment and experience profile that aligned with the pilot program's intended targeting strategy. Most were jobless, with only 12 percent employed in a wage/salary job and 49 percent collecting UI benefits at the time of enrollment. Table C.1 (from Report Appendix) reports baseline characteristics of all study enrollees. Around 86 percent also had work experience that was in the same industry as the business idea they proposed as part of the SET application. In addition, 37 percent had some recent self-employment experience—either at the time of intake or within the past five years.

⁸ American Job Centers are designed by DOL to provide a full range of assistance to job seekers under one roof. Established under the Workforce Investment Act, and reauthorized in the Workforce Innovation and Opportunities Act of 2014, the centers offer training referrals, career counseling, job listings, and similar employment-related services. Customers can visit a center in person or connect to the center's information online or through kiosk remote access.

More than half (57 percent) of SET study enrollees had a bachelor's degree or higher, and nearly all (93 percent) had at least some college education. National data indicate that about one-third of the broader population of individuals starting businesses around the same time had a college degree, and only 45 percent had education beyond high school. The relatively high levels of education among study enrollees could be related to the large share with managerial experience.

In addition, nearly three of five SET study enrollees (59 percent) were female. In contrast, females constituted only one-third of all individuals starting a business around the same time. Over half of study enrollees also self-identified as black (41 percent), Hispanic or Latino (9 percent), or mixed race (7 percent). This diverse makeup was in contrast to the national population of new entrepreneurs—59 percent of whom were non-Hispanic whites.

2.4 Baseline Characteristics, Balance Check and Differential Attrition

Table C.1 (from Report Appendix) checks for treatment vs. control balance on characteristics at baseline and at the 18-month follow-up. As expected, random assignment created similar treatment and control groups. We generally found small to moderate average differences between groups across a range of baseline characteristics, and these differences can be explained by chance.⁹

Table C.2 (from Report Appendix) also compares treatment and control completion rates and baseline characteristics for the 18-month follow-up survey. At 80 percent, overall response rates were high, but this differed by 4.7 percentage points across treatment groups. However, our analysis indicates that the baseline characteristics of respondents to the follow-up survey were similar between the program and control groups, with only 2 of 34 program-control differences being statistically significant at the 5 percent level. Overall, the number of significant differences is about what one would expect to find by chance for both the baseline and respondent samples, and the magnitude of these differences is small. In any case, when estimating treatment effects we present results both without covariates as well as with controls for a large set of detailed baseline characteristics that could relate to response.

2.5 Empirical Strategy

⁹ A few differences were statistically significant for the full population of study enrollees, but this was expected because we were comparing multiple characteristics. For example, less than one-twentieth of the program-control differences were large enough to be deemed statistically significant at the 5 percent level.

We estimated impacts using an “intention-to-treat” (ITT) framework that followed directly from the stratified random assignment design of the evaluation. ITT estimates are based on comparing the average outcomes of those assigned to the program and control groups, irrespective of whether they actually received any self-employment services or supports. The resulting impact estimates measure the effects of being offered access to the SET program in its entirety. We estimate OLS regressions of the form:

$$(2.1) y_{is} = \alpha_s + \beta X_{is} + \gamma T_i + \varepsilon_{is}$$

Where y_{is} is an outcome of interest, measured for individual i in site s , α_s is a set of site fixed effects, X_{is} is a vector of the baseline covariates, and $T_i = 1$ if i was assigned to the treatment group. γ provides an estimate of the ITT effect. When estimating heterogeneous treatment effects we add interactions between baseline covariates and treatment assignment to equation (2.1).

These estimates might understate the effects of the program on those who used it. We would like to include an estimate of treatment-on-the-treated using IV strategies, but these are unavailable to us.¹⁰ In addition, we cannot experimentally estimate impacts of specific program components (such as technical assistance or microgrants) since individual components were not separately randomly assigned.

We respond to these limitations by extending the analysis in two important ways. First, we harmonize experimental data from the GATE study with the SET study so that we can jointly estimate and compare impacts. Recall, entrepreneurship training through GATE did not include microgrants. Second, we use reweighting strategies to provide nonexperimental impacts of different levels of program participation. We consider these estimates exploratory since they deviate from the random assignment approach, but they provide potentially causal results.

¹⁰ We did not estimate treatment-on-treated impacts or complier average causal effects because of limited data on the extent to which the control group received SET-like services and supports. The microenterprise service providers we partnered with tracked only their engagement with the SET program group, and we did not think that respondents to an online survey would be able to differentiate between the unique features of the SET model (for example, case management from a personal advisor) and what might be otherwise available in the community (for example, mentoring through the Small Business Administration’s SCORE network).

3 Treatment Effects on Proximal and Intermediate Outcomes

3.1 Effects on Training Receipt

Before estimating impacts on outcomes, we examine whether and how the SET treatment actually changed the use of training services. We consider both quantitative and qualitative effects of SET's random assignment on the totality of training received by individuals in the study. Starting with the quantity of training received, Table D.2 (from Report Appendix) shows the percentages of the treatment and control groups receiving any training service or support between study enrollment and the 18-month follow-up survey. Given that the control group was not restricted from obtaining training elsewhere, it is important to compare the use of training services between the two groups. We find that 87 percent of the treatment group received any self-employment assistance service, compared to 63 percent in the control group. That is, we found a 24 percentage point impact on the share who attended in-person classes or training, took online courses, participated in peer advice or networking groups, worked with a mentor, met with a self-employment advisor, and/or received individualized technical assistance. These findings suggest that SET resulted in strong connections between service providers and those who needed self-employment assistance, which is confirmed in the process study (Amin et al. (2017)).

Focusing on specific aspects of assistance, SET substantially increased participation in both classes/training and receipt of individualized support. Nearly twice as many treatment group members reported receiving in-person entrepreneurship classes or training since enrolling in the study, compared to the control group: 63 versus 33 percent. SET advisers typically encouraged program group members to take part in these trainings when they first enrolled in SET. Our results also indicate that the SET program produced large increases in the amount of personalized support received. A much higher share of the treatment group (62 percent) had any personalized contact with a service provider than of the control group (24 percent). This measure includes both meetings with a self-employment advisor and individualized technical assistance sessions. SET appears to have also substantially increased the “dosage” of such contact. The average number of personalized contacts with self-employment assistance providers was nearly three times as high for the treatment group (4.7 contacts) as for the control group (1.6 contacts).

Another important finding is that SET did not have spillover or crowd out effects on traditional job services. Between enrolling in the study and the survey date, similar shares of treatment and control group members received job placement services and career counseling from

AJCs or state labor exchanges. Given their interest in self-employment, however, only a small percentage (9 percent) of each group received these services.

In all, the evidence suggests that the treatment group received high levels of training services. The experiment also produced training in substantially greater quantity and quality for treatment relative to control individuals.

3.2 Effects on Business Development Activity

SET affected intermediate outcomes such as business planning and practice outcomes. In particular, SET led to increases in the rate of business plan completion (Table D.3 from Report Appendix). By the follow-up survey, 66 percent of the treatment group had completed a business plan, versus 49 percent of the control group. The 17 percentage point difference at the time of the follow-up survey was highly significant and represents additional attainment of this milestone by the treatment group, relative to the control group.¹¹ Approximately 36 percent of study enrollees already had business plans when enrolling in SET. Conditioning both samples on not having a business plan at baseline, we find that **[unreleased results.]**

3.3 Effects on Microgrants, Nonborrowed Funds, and Borrowed Funds

Takeup of microgrants by the treatment group was 36 percent. Of those receiving microgrants the average amount of \$985 was close to the maximum of \$1,000. Most microgrant recipients used the grants to invest in electronics, supplies, and marketing materials that could help them attract and serve customers. The largest amounts of both average and total funding requested were for electronics and supplies. The most frequently requested items were electronics, supplies, and marketing materials. Almost 40 percent of microgrant recipients proposed starting businesses in professional, scientific, and technical service industries.¹²

Including microgrants, we find that SET more than doubled the share of people who received any nonborrowed funds to start or grow their businesses. Roughly 49 percent of the treatment

¹¹ The impact on business plans might have been partially driven by specific incentives built into the program—business plans were a requirement for microgrant eligibility, and a component of payments to SET providers was tied to the number of participants who completed plans.

¹² In conversations with microenterprise providers and participants, they noted the lower barriers to entry in these industries because they allow people to operate like consultants, using their existing networks, without needing storefronts.

group obtained nonborrowed capital since enrolling in the study, which was much higher than the 21 percent of the control group obtaining nonborrowed capital (Table D.3 from Report Appendix).

There also could be differential crowd out and crowd in effects on borrowed funds. Table C.3 reports estimates of borrowing. SET did not change the rate of borrowing for a business. There was essentially no difference between the treatment group and the control group in the rate of borrowing for a business (through either formal loans or credit cards). About 26 percent of study enrollees in both groups borrowed money for a business between when they enrolled in the study and the 18-month survey. Treatment group members could receive technical assistance in identifying small business lending programs or applying for loans or other sources of funding; some SET providers also offered in-house loans to small businesses. But, these potential advantages had no effects relative to the control group. Although the control group might also have had access to similar assistance from another source, the lack of a treatment-control differential appears to be primarily because of limited use of borrowed capital. In conversations with training providers we found that they tended not to encourage training participants to take out bank loans while in the early stages of business development. Instead, providers typically advised them to draw on personal funds or try to obtain loans or grants from friends and family to fund their businesses.

4 Treatment Effects on More Ultimate Outcomes

We assess the extent to which the entrepreneurship training and microgrants offered through SET increased self-employment, business scale, and other outcomes.

4.1 Effects on Business Ownership

We first examine impacts on self-employment, the key outcome of interest. Substantially more treatment group members than control group members were self-employed at the date of the survey: 68 versus 56 percent (Table D.1 from Report Appendix). The impact of 11 percentage points amounts to an increase of one-fifth over the control group rate. The entrepreneurship training and microgrants provided through SET appear to have helped dislocated workers pursue self-employment. Because all study enrollees initially expressed an interest in trying self-employment, the sizeable impact we found 18-months later suggests that SET led to greater persistence in self-employment.

Drilling down on the underlying causes of differences in self-employment rates, we examine the effects of entrepreneurship training on the dynamics of business entry and exit in **[results unavailable]**. Given that the treatment and control groups start with roughly equal ownership rates, any differences in business ownership rates at the follow-up survey are due to differences in business creation rates, differences in business exit rates, or both.¹³ **[results unavailable]**

Table D.4 (from Report Appendix) reports treatment effects on total hours of self-employment by follow-up.¹⁴ Over the past 12 months prior to the follow-up survey, the treatment group worked an average of 150 more hours in self-employment than the control group. The increase in total hours worked in self-employment among the treatment group follows from higher levels of self-employment. Although only an approximation, the average number of hours worked in self-employment among the treatment group who were self-employed at the follow-up survey was **[results unavailable]** for the control group. These findings imply that the effects on self-employment are at the extensive margin and not the intensive margin.

Overall, the estimates indicate that entrepreneurship training increased average levels of business ownership and total hours working in self-employment. Entrepreneurship training appears to have drawn new people into starting businesses **[results unavailable]** the survival rates of pre-existing businesses.

4.2 Effects on Business Outcomes

To measure training effects on business outcomes we focus on business formalization, earnings drawn from the business, and employment by the business. Business formalization such as incorporation, registration and employer-identification number (EIN) application is an early signal of growth potential (Levine and Rubinstein, 2017). The treatment group is 10 percentage points more likely to have an incorporated, registered or EIN business on a base of 0.55 (Table D.3 from Report Appendix). The differential suggests potential differences in future growth because these types of businesses are associated with larger revenues, higher employment levels, and higher

¹³ See Evans and Leighton (1989), Fairlie (1999), and Carrasco (1999) for more discussion and empirical estimates of the relationships between self-employment entry, exit and steady-state rates.

¹⁴ The results are not due to the influence of side or casual businesses, or disguised unemployment (Carter and Sutch 1994). Defining business ownership with 30 or more hours worked per week, we find lower rates of business ownership, but similar treatment-control differences. We also restrict business ownership to only include businesses reporting positive sales at each survey wave to remove non-serious self-employment activities. Again, we find similar results.

survival rates.¹⁵ Formalizing a business could help solidify its growth by allowing the owner to set up business banking accounts, apply for loans, and hire employees; it also signifies to customers, vendors, and competitors that the business is valid and operational.

During the year before the survey, the treatment group drew \$4,461 in earnings from their small businesses, on average, which is essentially the same as the control group (Table D.4 from Report Appendix). Note that these results do not condition on business ownership, and thus capture the treatment's overall impact on self-employment earnings and not earnings per business formed after random assignment. The treatment-control difference in self-employment earnings is close to zero and not statistically significant. Eighteen months post treatment, however, might be too early to accurately measure whether training affected self-employment earnings. It is commonly recommended that most early revenues, especially in the first year, are reinvested in the small business (Akalp 2015; Davidson 2017). They note that owners are more likely able to draw an income later—sometimes by the second or third year of operations, but perhaps even later than that. In conversations with training providers, many of them noted that they did not expect most participants to be able to draw an income from their business by the end of the first year.

Table D.4 (from Report Appendix) also reports treatment effects on the average number of employees and the percentage of hiring any employees **[results unavailable]**. SET did not lead to additional hiring of employees. Over the study period, there were, on average, two employees for every 10 study participants, with no difference between the treatment and control groups. Similar to our treatment of other business outcomes, this measure captures the average number of employees overall and does not condition on business ownership. This measure also counts the number of employees in enrollees' main small business venture since entering the study, even if that business had closed by the survey date.¹⁶ SET impacts on employment, which takes time, might not have emerged by the 18-month survey. However, there might also simply be no impact, given that SET was designed to support reemployment among the people participating in it, as opposed to seeking to stimulate job creation more broadly. The study did not screen applicants

¹⁵ Part of the impact might be due to program incentives (e.g. business registration was a prerequisite to be eligible for seed capital microgrants). ** this could be problematic **

¹⁶ Although not reported, we also find no difference in the percentages of the treatment and control groups hiring at least one employee. ** need to check this ** Should we try current employees at the survey date???

based on the scale of their business ideas. Several providers noted that participants often tended to pursue one-person businesses or consultancies that did not require additional hiring.

4.5 Crowding out of Wage/Salary Work or Drawing from Unemployment?

We also examine whether the positive effects of entrepreneurship training and seed capital on self-employment crowded out wage/salary work instead of drawing from unemployment. This is an extremely important question for how we view the gains from training. From a policy perspective gains in self-employment from a simple substitution of self-employment for wage/salary work are clearly less valuable than gains coming from reducing unemployment. Table D.5 (from Report Appendix) reports training impacts on wage/salary work and unemployment **[results unavailable]**. Wage/salary work was not crowded out by the increase in self-employment from entrepreneurship training. The treatment and control groups have essentially the same percentages of having wage/salary jobs at the survey date.

We also examined whether entrepreneurship training impacted overall earnings. SET did not significantly affect total earnings from all jobs (Table D.1, from Report Appendix). The program and control groups earned similar amounts during the year leading up to the survey. Over that period, average total earnings were \$21,118 for the treatment group versus \$21,744 for the control group. The treatment-control difference is small and statistically insignificant. The finding suggests that the treatment group did not lose a significant amount of wage/salary earnings by shifting their work effort towards self-employment. Ultimately, we might need more time to see any effects.

Finally, we studied job satisfaction since self-employment might lead to higher job satisfaction than wage/salary work (Hamilton 2000 and Kawaguchi 2004). Assuming that individuals who are not employed at the survey date are not satisfied with their employment situation, we find **[results unavailable]**¹⁷

¹⁷ The underlying question is worded as “Overall, how satisfied are you with your current employment situation?” The question was posed to those who were employed in any job at the survey date (90 percent of respondents) and (2) those who were not employed at that time but had taken steps to formalize their main small business venture (2 percent of respondents). We define satisfied with current employment situation as those who reported that they were “extremely satisfied” or “somewhat satisfied” with their current employment situation versus those who said they were “neither satisfied nor dissatisfied,” “somewhat dissatisfied,” or “extremely dissatisfied.” Anyone unemployed at the survey date was considered not satisfied with their current employment situation (unless they were the small group asked the question).

4.6 Correlations between Entrepreneurship Training, Seed Capital and Outcomes in the Control Group

[results unavailable]

5 Did Seed Grants Complement Training?

[All remaining sections are not yet available for release.]

7 Conclusion

Understanding more about the effects and mechanisms of entrepreneurship training is important given the continued growth and popularity of these programs around the world. Although substantial resources are devoted to subsidizing entrepreneurship training around the world, we know very little about its effectiveness and whether the combination with seed grants can alleviate financial constraints.

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Note: The following tables were copied from the appendix of the report: Hock et al. (2019).

Table C.1. Baseline characteristics of all study enrollees, by random assignment group

	Mean for SET program group	Mean for control group	Difference in group means	Difference between groups after accounting for site-level design	
				Estimate	Standard error
Site					
Chicago	39.4	38.9	0.5	0.5	(2.2)
Cleveland	22.8	23.2	-0.4	-0.4	(1.9)
Los Angeles	10.4	10.4	0.0	0.0	(1.4)
Portland	27.4	27.5	0.0	0.0	(2.0)
Demographics and relationships					
Age group					
21 to 34	19.9	18.5	1.4	1.4	(1.8)
35 to 44	28.9	29.8	-0.9	-1.0	(2.0)
45 to 54	28.7	27.3	1.4	1.4	(2.0)
55 and older	22.6	24.4	-1.8	-1.8	(1.9)
Gender and parenthood					
Female, no children	34.0	35.2	-1.1	-1.2	(2.1)
Female parent	24.5	24.4	0.1	0.1	(1.9)
Male, no children	27.2	24.6	2.6	2.6	(2.0)
Male parent	14.2	15.8	-1.5	-1.5	(1.6)
Race/ethnicity					
Hispanic	8.5	9.8	-1.3	-1.3	(1.3)
Black, non-Hispanic	42.6	39.1	3.5	3.4*	(2.0)
White, non-Hispanic	39.0	41.2	-2.2	-2.1	(2.0)
Other race, non-Hispanic	9.9	9.9	0.0	0.0	(1.3)
Marital/partnership status					
Married, civil union, or living with partner	39.3	39.0	0.3	0.3	(2.1)
Never married	33.9	34.5	-0.6	-0.7	(2.1)
Separated, divorced, or widowed	26.8	26.5	0.4	0.4	(2.0)
Relative or close friend of small business owner					
No	20.8	22.3	-1.5	-1.5	(1.8)
Yes	79.2	77.7	1.5	1.5	(1.8)
Education, work experience, and employment status					
Highest level of education					
Did not attend college	7.4	7.1	0.3	0.3	(1.2)
Two-year degree or some college without degree	35.2	36.3	-1.0	-1.0	(2.2)
Bachelor's degree	30.7	32.1	-1.4	-1.4	(2.1)
Advanced degree	26.7	24.5	2.2	2.2	(2.0)
Previous managerial experience					
No	19.5	22.4	-2.9	-3.0	(1.8)
Yes	80.5	77.6	2.9	3.0	(1.8)
Previous work in same industry as proposed small business					
No	13.3	14.9	-1.6	-1.6	(1.6)
Yes	86.7	85.1	1.6	1.6	(1.6)

	Mean for SET program group	Mean for control group	Difference in group means	Difference between groups after accounting for site-level design	
				Estimate	Standard error
Self-employment					
Currently self-employed, formal business ^a	13.1	15.1	-1.9	-1.9	(1.6)
Currently self-employed, informal business ^a	7.1	7.1	0.0	0.0	(1.2)
Self-employed in past 5 years, but not at time of enrollment	15.2	16.2	-0.9	-0.9	(1.6)
No self-employment experience in past 5 years	64.6	61.7	2.9	2.9	(2.2)
Working in a wage/salary job					
No	87.5	88.9	-1.4	-1.4	(1.4)
Yes	12.5	11.1	1.4	1.4	(1.4)
Income and finances					
Household income over past 12 months (\$)	43,891	42,941	950	961	(1,652)
Receipt of unemployment insurance (UI) benefits					
Current recipient	49.4	48.2	1.3	1.4	(2.1)
Exhausted UI benefits within the past 24 months	23.1	24.9	-1.8	-1.9	(1.8)
Received UI benefits within the past 24 months but did not exhaust entitlement	5.9	5.7	0.2	0.2	(1.0)
Did not receive any UI benefits during the past 24 months	21.6	21.2	0.4	0.4	(1.8)
Owns residence					
No	64.8	63.5	1.2	1.2	(2.1)
Yes	35.2	36.5	-1.2	-1.2	(2.1)
Cash assets					
\$0	42.7	40.0	2.7	2.7	(2.2)
\$1 to \$1,000	20.8	21.9	-1.1	-1.1	(1.8)
\$1,001 to \$5,000	13.0	16.0	-3.1	-3.0*	(1.6)
More than \$5,000	23.6	22.1	1.5	1.5	(1.8)
Previous bankruptcy, delinquency, or court-ordered repayment to creditor					
No	63.1	64.8	-1.8	-1.8	(2.1)
Yes	36.9	35.2	1.8	1.8	(2.1)

Source: SET study intake forms.

Note: Unless otherwise noted, all table entries are percentages (means) and percentage points (differences) for baseline characteristics reported at the time of study enrollment. Summary statistics and estimates for each characteristic are based on enrollees who answered the corresponding question(s) on the intake forms. All numbers in the table have been rounded; consequently (1) reported percentages might not sum across categories to exactly 100, and (2) reported differences in group means might not exactly equal the reported program group mean minus the reported control group mean. As discussed in Appendix B, most estimated differences that account for the site-level design are based on regression models with site fixed effects, but estimated differences in the distribution across sites are based on simple regression models that do not include site fixed effects. Standard errors for all these estimates are robust to heteroscedasticity.

^a Formal businesses are those that were incorporated or registered with the enrollee's state, county, or city.

* / ** / *** Denotes an estimated difference between groups that is significantly different from zero at the .10 / .05 / .01 level based on a two-tailed *t*-test.

Table C.2. Baseline characteristics of all study enrollees, by 18-month survey response status

	Mean for survey respondents	Mean for survey non- respondents	Difference in overall group means	Difference between groups after accounting for site-level design	
				Estimate	Standard error
Site					
Chicago	39.3	38.3	1.0	1.0	(2.7)
Cleveland	21.8	27.9	-6.1	-6.1**	(2.5)
Los Angeles	10.8	8.9	1.9	1.9	(1.6)
Portland	28.1	24.9	3.2	3.2	(2.5)
Demographics and relationships					
Age group					
21 to 34	18.5	21.8	-3.3	-3.1	(2.3)
35 to 44	28.9	31.2	-2.4	-2.5	(2.6)
45 to 54	27.9	28.2	-0.3	-0.3	(2.5)
55 and older	24.7	18.8	5.9	5.9***	(2.2)
Gender and parenthood					
Female, no children	36.1	28.4	7.7	7.5***	(2.6)
Female parent	24.2	25.6	-1.4	-0.9	(2.5)
Male, no children	25.5	27.7	-2.1	-2.6	(2.5)
Male parent	14.2	18.3	-4.1	-4.0*	(2.1)
Race/ethnicity					
Hispanic	8.6	11.3	-2.7	-3.1*	(1.7)
Black, non-Hispanic	40.2	43.4	-3.2	-1.8	(2.6)
White, non-Hispanic	41.7	33.7	8.0	7.4***	(2.4)
Other race, non-Hispanic	9.5	11.6	-2.1	-2.4	(1.8)
Marital/partnership status					
Married, civil union, or living with partner	40.1	35.0	5.1	4.8*	(2.7)
Never married	34.2	34.3	0.0	0.1	(2.7)
Separated, divorced, or widowed	25.6	30.7	-5.1	-4.9*	(2.6)
Relative or close friend of small business owner					
No	20.4	26.2	-5.9	-5.6**	(2.4)
Yes	79.6	73.8	5.9	5.6**	(2.4)
Education, work experience, and employment status					
Highest level of education					
Did not attend college	6.0	12.2	-6.2	-6.1***	(1.7)
Two-year degree or some college without degree	33.8	43.7	-9.9	-9.7***	(2.8)
Bachelor's degree	32.8	25.6	7.2	7.1***	(2.5)
Advanced degree	27.4	18.5	8.9	8.7***	(2.3)
Previous managerial experience					
No	20.5	22.6	-2.0	-2.0	(2.3)
Yes	79.5	77.4	2.0	2.0	(2.3)
Previous work in same industry as proposed small business					
No	14.4	12.9	1.5	1.6	(1.9)
Yes	85.6	87.1	-1.5	-1.6	(1.9)
Self-employment					
Currently self-employed, formal business ^a	14.7	11.7	3.0	2.6	(1.8)
Currently self-employed, informal business ^a	7.5	5.3	2.2	2.0	(1.3)
Self-employed in past 5 years, but not at time of enrollment	14.8	19.3	-4.5	-4.4**	(2.2)

	Mean for survey respondents	Mean for survey non- respondents	Difference in overall group means	Difference between groups after accounting for site-level design	
				Estimate	Standard error
No self-employment experience in past 5 years	63.0	63.7	-0.7	-0.2	(2.7)
Working in a wage/salary job					
No	87.5	90.9	-3.3	-3.4**	(1.7)
Yes	12.5	9.1	3.3	3.4**	(1.7)
Income and finances					
Household income over past 12 months (\$)	44,441	39,277	5,164	4,568**	(2,062)
Receipt of unemployment insurance (UI) benefits					
Current recipient	49.0	48.2	0.7	0.8	(2.7)
Exhausted UI benefits within the past 24 months	24.3	22.8	1.5	1.7	(2.3)
Received UI benefits within the past 24 months but did not exhaust entitlement	5.5	6.9	-1.4	-1.2	(1.4)
Did not receive any UI benefits during the past 24 months	21.2	22.1	-0.8	-1.3	(2.3)
Owns residence					
No	62.1	72.6	-10.5	-10.9***	(2.5)
Yes	37.9	27.4	10.5	10.9***	(2.5)
Cash assets					
\$0	38.9	51.2	-12.3	-11.7***	(2.8)
\$1 to \$1,000	21.5	20.7	0.8	1.1	(2.3)
\$1,001 to \$5,000	14.7	13.6	1.2	1.0	(2.0)
More than \$5,000	24.9	14.6	10.3	9.6***	(2.1)
Previous bankruptcy, delinquency, or court-ordered repayment to creditor					
No	64.9	60.2	4.8	4.0	(2.7)
Yes	35.1	39.8	-4.8	-4.0	(2.7)

Source: SET study intake forms.

Note: Unless otherwise noted, all table entries are percentages (means) and percentage points (differences) for baseline characteristics reported at the time of study enrollment. Summary statistics and estimates for each characteristic are based on enrollees who answered the corresponding question(s) on the intake forms. All numbers in the table have been rounded; consequently (1) reported percentages might not sum across categories to exactly 100, and (2) reported differences in group means might not exactly equal the reported program group mean minus the reported control group mean. As discussed in Appendix B, most estimated differences that account for the site-level design are based on regression models with site fixed effects, but estimated differences in the distribution across sites are based on simple regression models that do not include site fixed effects. Standard errors for all these estimates are robust to heteroscedasticity.

^a Formal businesses are those that were incorporated or registered with the enrollee's state, county, or city.

* / ** / *** Denotes an estimated difference between groups that is significantly different from zero at the .10 / .05 / .01 level based on a two-tailed *t*-test.

Table D.1. Primary work outcomes at the time of the 18-month survey

	SET program group		Control group		Regression estimates		
	Sample size	Mean of outcome	Sample size	Mean of outcome	Adjusted control group outcome mean	Impact	Standard error
Self-employed at survey date (%)^a							
Overall	818	67.5	769	56.7	56.2	11.3***	(2.4)
Employed in any job at survey date (%)^b							
Overall	818	91.7	769	88.5	88.4	3.3**	(1.5)
Total earnings over past 12 months (\$) ^c							
Overall	797	21,118	746	21,533	21,744	-626	(1,158)

Source: SET study intake forms and 18-month follow-up survey data.

Note: Summary statistics and regression estimates for each outcome are based only on survey respondents who answered the corresponding question(s). As discussed in Appendix B, regression estimates are based on a model that accounts for the characteristics of study enrollees at intake, includes site fixed effects, uses weights to adjust for survey nonresponse, and produces heteroscedasticity-robust standard errors. The adjusted control group mean is the mean of the SET program group minus the estimated impact.

^a Self-employment is based on the question: “Are you currently self-employed in your own business, professional practice, farm, or some other business venture?”

^b Employment in any job includes both self-employment and “working for a company or someone else in a job [that pays] a salary, hourly wage, or commissions.”

^c Total earnings are the sum of (1) reported earnings from all self-employment ventures undertaken or pursued over the past 12 months, as defined in Appendix Table D.4; and (2) reported earnings from all wage/salary jobs held over the past 12 months, as defined in Appendix Table D.5.

* / ** / *** Denotes an impact estimate that is significantly different from zero at the .10 / .05 / .01 level based on a two-tailed *t*-test.

† / †† / ††† Denotes a difference in impact estimates for the given site and the other three sites combined that is statistically significant at the .10 / .05 / .01 level based on a chi-squared test.

Table D.2. Receipt of self-employment services, training, and other job placement services between study enrollment and the 18-month survey

	SET program group		Control group		Regression estimates		
	Sample size	Mean of outcome	Sample size	Mean of outcome	Adjusted control group outcome mean	Impact	Standard error
Received any self-employment service or support (%)^a							
Overall	818	87.0	769	62.4	62.8	24.2***	(2.1)
Received any personalized self-employment support (%)^b							
Overall	814	61.9	768	23.6	23.7	38.2***	(2.3)
Number of times received personalized self-employment support^b							
Overall	814	4.7	767	1.6	1.6	3.1***	(0.2)
Attended any in-person self-employment classes/training (%)							
Overall	816	63.0	767	33.1	33.2	29.8***	(2.4)
Accessed any online courses on starting, operating, or growing a business (%)							
Overall	814	41.8	767	34.0	34.5	7.3***	(2.4)

	SET program group		Control group		Regression estimates		
	Sample size	Mean of outcome	Sample size	Mean of outcome	Adjusted control group outcome mean	Impact	Standard error
Attended any in-person peer advice or networking meetings for self-employment (%)							
Overall	813	56.6	765	38.2	38.8	17.8***	(2.5)
Received any job placement services/career counseling from American Job Center or state labor exchange (%)							
Overall	803	9.1	746	9.2	9.3	-0.2	(1.5)

Source: SET study intake forms and 18-month follow-up survey data.

Note: All outcomes are measured over the time between random assignment and the 18-month survey. Summary statistics and regression estimates for each outcome are based only on survey respondents who answered the corresponding question(s). As discussed in Appendix B, regression estimates are based on a model that accounts for the characteristics of study enrollees at intake, includes site fixed effects, uses weights to adjust for survey nonresponse, and produces heteroscedasticity-robust standard errors. The adjusted control group mean is the mean of the SET program group minus the estimated impact.

^a This measure includes the following self-employment services and supports: attendance of in-person classes or training, completion of online courses, participation in peer advice or networking groups, work with a mentor, and/or receipt of personalized self-employment support (as defined below).

^b Personalized self-employment support includes regular, one-on-one meetings with self-employment advisors and/or "individualized support ... tailored to the needs or specific issues [encountered] in starting or developing [a] business" (that is, technical assistance). This measure excludes meetings with an experienced business owner mentor, unless survey respondents also indicated that the mentor acted as an advisor or provided individualized technical assistance.

* / ** / *** Denotes an impact estimate that is significantly different from zero at the .10 / .05 / .01 level based on a two-tailed *t*-test.

† / †† / ††† Denotes a difference in impact estimates for the given site and the other three sites combined that is statistically significant at the .10 / .05 / .01 level based on a chi-squared test.

Table D.3. Business development activity between study enrollment and the 18-month survey

	SET program group		Control group		Regression estimates		
	Sample size	Mean of outcome	Sample size	Mean of outcome	Adjusted control group outcome mean	Impact	Standard error
Wrote or completed business plan (%)							
Overall	814	66.4	763	47.9	48.9	17.5***	(2.5)
Took active steps to formalize main business venture (%)^a							
Overall	818	64.5	765	54.6	54.2	10.3***	(2.4)
Received nonborrowed funds from any source to start/grow business (%)^b							
Overall	818	48.6	765	20.5	20.7	27.9***	(2.3)
Borrowed money from any source to start/grow business (%)							
Overall	816	26.8	769	25.8	25.6	1.2	(2.2)

Source: SET study intake forms and 18-month follow-up survey data.

Note: All outcomes are measured over the time between random assignment and the 18-month survey. Summary statistics and regression estimates for each outcome are based only on survey respondents who answered the corresponding question(s). As discussed in Appendix B, regression estimates are based on a model that accounts for the characteristics of study enrollees at intake, includes site fixed effects, uses weights to adjust for survey nonresponse, and produces heteroscedasticity-robust standard errors. The adjusted control group mean is the mean of the SET program group minus the estimated impact.

^a Business formalization steps include having registered the business with the state, country, and/or municipality; having incorporated the business; and/or having obtained an employer identification number or tax identification number. This question was asked of survey respondents who had been self-employed at any point since random assignment (see Appendix Table D.4). Among those who worked on more than one business venture since random assignment, the question was asked only for what they identified as their “main” venture over that timeframe.

^b Nonborrowed funds include any SET seed capital microgrants reported by the program group.

* / ** / *** Denotes an impact estimate that is significantly different from zero at the .10 / .05 / .01 level based on a two-tailed *t*-test.

† / †† / ††† Denotes a difference in impact estimates for the given site and the other three sites combined that is statistically significant at the .10 / .05 / .01 level based on a chi-squared test.

Table D.4. Self-employment activity based on the 18-month survey

	SET program group		Control group		Regression estimates		
	Sample size	Mean of outcome	Sample size	Mean of outcome	Adjusted control group outcome mean	Impact	Standard error
Was self-employed at any point since study enrollment (%)^a							
Overall	818	77.2	769	71.2	70.6	6.6***	(2.2)
Total hours worked in self-employment over the past 12 months^b							
Overall	811	1,079	767	929	929	150***	(55)
Worked in self-employment for at least 20 hours per week in every week of the past 12 months (%)^c							
Overall	812	30.9	767	24.5	24.6	6.3***	(2.2)
Earnings from self-employment over the past 12 months (\$) ^d							
Overall	807	4,870	759	4,819	4,787	83	(598)
Number of employees in main business venture since study enrollment^e							
Overall	816	0.2	765	0.4	0.3	-0.1	(0.1)

Source: SET study intake forms and 18-month follow-up survey data.

Note: Summary statistics and regression estimates for each outcome are based only on survey respondents who answered the corresponding question(s). As discussed in Appendix B, regression estimates are based on a model that accounts for the characteristics of study enrollees at intake, includes site fixed effects, uses weights to adjust for survey nonresponse, and produces heteroscedasticity-robust standard errors. The adjusted control group mean is the mean of the SET program group minus the estimated impact.

^a This measure includes those who were either (1) currently self-employed, as define in Appendix Table D.1; or (2) had “owned [a] business or been self-employed in [their] own business, professional practice, farm, or some other business venture” since the random assignment date.

^b Respondents were asked to provide the following information, aggregated across all businesses operated or self-employment ventures undertaken over the past 12 months: (1) the reported average number of hours worked per week, and (2) the reported total number of weeks worked. We calculated total hours worked as the product of these two components.

^c We calculated this measure based on the two measures used to calculate total hours worked and current employment status. We set the measure to one only for people who reported that they had: (1) worked at least 20 hours per week, on average, in self-employment over the past 12 months, (2) had worked on a self-employment venture for all 52 weeks of the past year, and (3) were self-employed as of the survey date.

^d Respondents were asked how much they earned or paid themselves in total over the past 12 months from all businesses operated or self-employment ventures undertaken over that period.

^e Respondents who had worked on more than one business venture since the random assignment date were asked to report how many employees they had in their main venture. This information was recorded both for business ventures still operating at the time of the survey and business ventures that had ended.

* / ** / *** Denotes an impact estimate that is significantly different from zero at the .10 / .05 / .01 level based on a two-tailed *t*-test.

† / †† / ††† Denotes a difference in impact estimates for the given site and the other three sites combined that is statistically significant at the .10 / .05 / .01 level based on a chi-squared test.

Table D.5. Work in wage/salary jobs based on the 18-month survey

	SET program group		Control group		Regression estimates		
	Sample size	Mean of outcome	Sample size	Mean of outcome	Adjusted control group outcome mean	Impact	Standard error
Employed in wage/salary job at the survey date (%)^a							
Overall	818	59.4	769	60.1	60.2	-0.8	(2.5)
Total hours worked in wage/salary jobs over the past 12 months^b							
Overall	804	922	755	949	962	-40	(46)
Earnings from wage/salary jobs over the past 12 months (\$) ^c							
Overall	805	15,914	752	16,462	16,649	-735	(1,052)

Source: SET study intake forms and 18-month follow-up survey data.

Note: Summary statistics and regression estimates for each outcome are based only on survey respondents who answered the corresponding question(s). As discussed in Appendix B, regression estimates are based on a model that accounts for the characteristics of study enrollees at intake, includes site fixed effects, uses weights to adjust for survey nonresponse, and produces heteroscedasticity-robust standard errors. The adjusted control group mean is the mean of the SET program group minus the estimated impact.

^a Wage/salary employment is based on the question: “Are you currently working for a company or someone else in a job where you are paid a salary, hourly wage, or commissions?”

^b Respondents were asked to provide the following information, aggregated across all wage/salary jobs over the past 12 months: (1) the reported average number of hours worked per week, and (2) the reported total number of weeks worked. We calculated total hours worked as the product of these two components.

^c Respondents were asked how much they earned in wages, salaries, commissions, bonuses, or tips over the past 12 months from all jobs in which they “worked for a company or someone else.”

* / ** / *** Denotes an impact estimate that is significantly different from zero at the .10 / .05 / .01 level based on a two-tailed t-test.

† / †† / ††† Denotes a difference in impact estimates for the given site and the other three sites combined that is statistically significant at the .10 / .05 / .01 level based on a chi-squared test.

Table D.6. Other measures of work and wellbeing based on the 18-month survey

	SET program group		Control group		Regression estimates		
	Sample size	Mean of outcome	Sample size	Mean of outcome	Adjusted control group outcome mean	Impact	Standard error
Dually employed in both self-employment and wage/salary employment at survey date (%)^a							
Overall	818	35.3	769	28.4	28.1	7.2***	(2.4)
Satisfied with employment situation, among those employed at survey date (%)^b							
Overall	757	49.3	690	48.6	47.4	1.9	(2.6)
Received unemployment insurance benefits during past 12 months (%)							
Overall	811	16.1	762	15.8	16.1	-0.0	(1.9)

Source: SET study intake forms and 18-month follow-up survey data.

Note: Summary statistics and regression estimates for each outcome are based only on survey respondents who answered the corresponding question(s). As discussed in Appendix B, regression estimates are based on a model that accounts for the characteristics of study enrollees at intake, includes site fixed effects, uses weights to adjust for survey nonresponse, and produces heteroscedasticity-robust standard errors. The adjusted control group mean is the mean of the SET program group minus the estimated impact.

^a This measure includes those who were both (1) currently self-employed, as defined in Appendix Table D.1; and (2) currently working in a wage/salary job, as defined in Appendix Table D.5.

^b Job satisfaction questions were posed to two groups of survey respondents: (1) those who were employed in any job at the survey date, as defined in Appendix Table D.1 (90 percent of respondents); and (2) those who were not employed at that time but had taken steps to formalize their main small business venture, as defined in Appendix Table D.3 (2 percent of respondents). Hence, this measure applies primarily to survey respondents who were working, and the estimated differences between the program and control groups may not correspond to impacts for all study enrollees responding to the survey. The measure in the table indicates those who said that they were “extremely satisfied” or “somewhat satisfied” with their current employment situation versus those who said they were “neither satisfied nor dissatisfied,” “somewhat dissatisfied,” or “extremely dissatisfied.”

* / ** / *** Denotes an impact estimate that is significantly different from zero at the .10 / .05 / .01 level based on a two-tailed *t*-test.

† / †† / ††† Denotes a difference in impact estimates for the given site and the other three sites combined that is statistically significant at the .10 / .05 / .01 level based on a chi-squared test.