Current women’s economic empowerment interventions are not enough to overcome all obstacles facing female entrepreneurs. The emerging evidence from psychology and experimental economics on agency; mindset, and leadership show that for successful interventions to be transformative, they need to move beyond basic access to financial and human capital and also tackle central psychological, social, and skills constraints on women entrepreneurs. Emerging evidence from recent studies on different capital-based, training-based, and gender-based interventions, using randomized control trials, present promising interventions to support women entrepreneurs.

An experimental study in Uganda found that providing financial capital (i.e., subsidized microcredit coupled with Start and Improve Your Business training\textsuperscript{1} module), while effective for men, does not have any impact on female-owned enterprise profits.\textsuperscript{2} Similarly, a randomized control trial on Tanzania’s Business Women Connect\textsuperscript{3} program found that while the mobile savings program substantially increased savings, it did not have an effect on female-owned enterprise profits or sales even when combined with hard business skills, such as business management, basic profitability concepts, and record-keeping. Both studies, however, show that loans paired with business trainings as well as improved access to mobile savings accounts paired with business trainings had a positive impact on male-owned microenterprise profits or sales. Thus, a successful women’s economic empowerment intervention needs more than only access to financial capital and hard business skills.


\textsuperscript{2} The study found no impact of grant on profitability of both male and female-led enterprises. This difference in effect can be associated with a lack of self-control (loan recipients have stronger incentives to reinvest capital than grant recipients) or with external pressure to divert finance.

On the other hand, a randomized field experiment on Nicaragua’s Small Business of the Family Economy program found that business trainings significantly increased self-employed men and women’s real income—with a higher impact for women. This impact could be due to the nature of the training’s program itself; the program not only provided production techniques, business organization, and administrative skills but also had talks about creation of business plan, networking, establishment of virtual stores, and access to new markets components.

More importantly, men and women entrepreneurs face inherently different constraints including psychological and cultural factors. Female entrepreneurs are often lacking in access to financial and human capital, which impedes business growth, have different mindset constraints, such as risk-aversion, and have not caught up in soft skills such as leadership. In addition, women have culturally imposed-constraints that psychologically and physically impede their independence, aspiration, and priorities. Thus, the success of female entrepreneurs depends on their personal traits and entrepreneurial skills, and how supportive institutions and stakeholders address or work around these major constraints.

To truly empower women, policymakers needs to address these constraints. As Andrea Cornwall—a leading anthropologist from the University of Sussex—proposes two elements of change: first, consciousness needs to be shifted—overturning internalized constraints and aspirational barriers that keep women in situations of subordination—and second, cultural beliefs about gender and power must be challenged.

**SHIFT IN CONSCIOUSNESS AND MINDSET**

In comparison to men, many disadvantaged female micro-entrepreneurs suffer from mindset constraints. For instance, a study on Tanzania’s PRIDE training program shows that women are more risk-averse than men are. A lab experiment, after financial capital and basic business training intervention, found that women still engage in fewer competitive scenarios than men do. This type of mindset inhibits profits and overall improvement of business performance. The lab experiment looking at mindset constraints found that, with the same intervention (which taught soft skills around entrepreneurial characters such as long-term view and orientation in business, self-confidence, and managing people), men, not constrained in this way, saw a significant increase in sales.

Some business training programs, specifically set out to shift mindsets, found a positive impact on female entrepreneurs. For instance, a personal initiative-training program in Togo, run by World Bank’s Gender Innovation Lab, offered psychology based “mindset” training for both male and female business owners. The soft skills included self-starting behaviors, innovation, identifying and exploiting new opportunities, goal setting, planning, and feedback cycles, and overcoming obstacles. The training program found business performance improvements for both male and female enterprises, and interestingly, the main effect of the training on women seemed to be an increase in women’s personal initiative. In addition, the effect on women’s soft skills post-training held constant regardless of education level (with slight differentiations along training background).

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5. It could also be due to the nature of the experiment itself. The program targeted mostly low-educated self-employed workers, while the Uganda and the Tanzania training programs targeted a greater variety of backgrounds (lower educated entrepreneurs show a higher marginal return from trainings than better educated entrepreneurs). Other considerations when comparing different studies include: cost-effectiveness over longer period; general equilibrium effect and/or placebo effect, and other data and publication considerations.


Labor market studies also find that mindset interventions prove effective, by either instilling aspirations or shifting perceptions of labor market opportunities (whether in formal employment or self-employment). A study in Ethiopia\(^{11}\) showed that an hour video to rural farmers showing successful peers was effective in shifting future oriented behaviors. Another study in India\(^{12}\) that provided information to rural women on job opportunities for them in the outsourcing industry, led to more education, lower desired fertility, and higher likelihood of entering the job market.

**CHALLENGING GENDER IDENTITIES**

Another pivotal component to any intervention seeking to make a transformative change is challenging gender identity roles. In Tanzania’s PRIDE study cited above, for instance, women report to spend on average 10 hours less in their businesses per week than men. The component of owner’s time is a critically binding constraint, notably for enterprises with fewer employees.\(^{13}\) Women also report to have lesser say in important household and business decisions and divert business resources to household expenditures, due to either external pressures\(^{14}\) or lack of self-control.\(^{15}\) A randomized control trial experiment in Kenya found that expanding access to savings accounts increased the probability of saving for self-employed women working as market vendors, and increased their productive investment and private expenditures, implying significant barriers to savings and investment.\(^{16}\) Another gender component inhibiting women is crowding out effect, meaning women are stopped from expanding their businesses because capital grant led to a reduction of external financial support from their spouses.\(^{17}\)

Business training interventions emphasizing the need to challenge or work around gender identities, in addition to soft skills and shifting mindsets, have found a small but positive shift in perspective. Liberia’s Economic Empowerment of Adolescent Girls training program\(^{18}\) included hard and technical skills such as office computer skills and accommodated the special needs of female entrepreneurs—safe locations and free childcare. Studied through a randomized control trial, the training program was found to increase earnings of female entrepreneurs and positively affect female self-confidence and self-assessed entrepreneurial ability. The most significant finding is the program saw a small but positive shift in self-reported gender role perspective—meaning survey respondents were more likely to report that both men and women should take care of household responsibilities.

**TEACHING LIFE SKILLS AND PROVIDING TECHNOLOGY SOLUTIONS**

Trainings that go beyond financial capital and basic business skills, and teach necessary life skills have also shown a small, but positive impact on female-owned microenterprises. For instance, a Peruvian training program

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provided to clients of FINCA-Peru, a microfinance institution, taught general business skills such as how to calculate production costs and product pricing in addition to life skills such as separating business and home finances. The result—found through randomized control trials—was a positive, albeit small, impact of the Peruvian training program on female-led enterprise revenues.

Similarly, a randomized control trial on Tanzania’s Business Women Connect program, cited above, found that women save substantially more through a mobile savings account. The same study found that providing women with a business skills training bolstered the effect. Higher proportion of married women who participated in the mobile savings program reported that they were the sole decision makers about their own personal expenditures than those who did not participate in the program. Thus, the mobile savings program has had unexpected empowerment outcomes for women, though it did not influence female-owned enterprise profits or sales.

To summarize, successful interventions, among studies reviewed above, have usually paired basic business skills provision (as well as basic financial capital) with provision of soft skills such as leadership and mindset considerations. Moreover, programs that address or work around socially imposed gender roles increase female understanding of inhibiting normative assumptions.

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IMPLICATIONS FOR POLICY AND PRACTICE

I. Providing business skills trainings is a basic step toward empowering women entrepreneurs, but to truly achieve transformative change, training programs need to address deeper psychological and social constraints facing women. In practice, though, skill-centric interventions are hard to get right—they have high dropout rates, are less cost-effective compared to capital focused programs (grants and assets in particular, though not microcredits), and often need to be complemented by capital injection.\(^{20}\) Three of the common traits of successful skills interventions include demand driven (i.e., provided skills that are missing and binding to enterprise performance), market-centric (i.e., provided trainings which taught identifying new market opportunities or addressed existing market failures)\(^{21}\), and consideration of the entrepreneur (i.e., gender lens) to leverage strength and address specific constraints.

II. Similarly, financial access, while a basic step in women’s economic empowerment, cannot alone help grow subsistence enterprises owned by woman who face multiple binding constraints.\(^{22}\) While advances in technology, in-kind grants, and life skills training programs assist female entrepreneurs in keeping their professional and personal savings accounts safe and separate, and address key saving and investment constraints, there is a widespread concern about microcredits. Notably, the type and the institutional arrangements of the loan (i.e., size, tenor, terms, and type of financial institution) define the success, cost-effectiveness, and attractiveness of microcredits. The conversation needs to shift toward making credit markets work better for women.

III. Finally, a clear measure of success is important. Provision of basic technical business training programs, at best, improved business practice of women-owned enterprises, often without any significant progress in business performance or empowerment more broadly. While some interventions have improved both economic and subjective welling of female entrepreneurs, it is generally hard to grow employment in SMEs.\(^{23}\) Conventional micro-interventions providing access to credit and business training for the poor have also proven ineffective in bringing major changes in women’s economic empowerment.\(^{24}\) Sustaining women’s empowerment hinges on the longevity and effectiveness of program interventions and on continuous policy commitment to inclusion and equality.

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### APPENDIX

**Table 1:** Select studies on different capital-based, training-based, and gender-based interventions

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Skills Taught</th>
<th>Duration</th>
<th>Other Services?</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Business of the Family Economy</td>
<td>In Nicaragua, for both men and women.</td>
<td>1. Creation of business plans.</td>
<td>100 hours of training for three months &amp; strengthening talks that are conducted in one day for 4 hours.</td>
<td>No</td>
<td>Increased real income of women and men, with slightly lower effect on men. All in all, the findings suggest that females are likely to benefit from a program that enables them to create their own businesses and improve their productive and administrative techniques.</td>
</tr>
<tr>
<td>Year: 2018.</td>
<td>Goal: To promote SMEs and their growth.</td>
<td>2. Business organization</td>
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<tr>
<td>Dependent variable: self-employed workers’ income.</td>
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<td>3. Networking and access to new markets</td>
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<td>4. Administrative and productive techniques</td>
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<tr>
<td>Business Women Connect</td>
<td>In Tanzania.</td>
<td>1. Business expansion and profitability</td>
<td>12 2.5 hour training sessions; face-to-face plus the mobile training modules.</td>
<td>Coupled with access to mobile savings.</td>
<td>Six-months post-intervention women save substantially more, and business training helps bolster effect. Business training also led to an improvement in the business practices of women. We find no significant evidence that these impacts translate into greater investment, sales, and profits, but we see evidence of increased business expansion through the creation of profitable secondary business as well as improvements in women’s empowerment and subjective well-being.</td>
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<tr>
<td>Year: 2018.</td>
<td>Target: Only female micro entrepreneurs.</td>
<td>2. Finance and record-keeping</td>
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<td></td>
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<tr>
<td></td>
<td>Goal: To improve the business performance of women micro entrepreneurs, designed by Techno Serve, by providing them with improved access to savings through mobile money and business training</td>
<td>3. Entrepreneurship and business planning</td>
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<td></td>
<td></td>
<td>4. Personal and professional efficacy.</td>
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<tr>
<td>Start and Improve Your Business</td>
<td>In Uganda.</td>
<td>“Good business practices” that enables existing entrepreneurs to develop their skills and improvement plans in buying, stock control, marketing, costing, record keeping, business planning and human resources management, and Enables growth-oriented</td>
<td>Three months.</td>
<td>Coupled with either grant or loan.</td>
<td>Significant positive results for effect of loans on male-led businesses but not for women. No effect from cash grants for either men or women because both groups used the money for short-term consumption needs rather than investment. Thus, it is likely that the requirement for repayment induced men use the money for investment.</td>
</tr>
<tr>
<td>Year: 2018.</td>
<td>Target: Male and low-income female business owners who expressed interest in receiving trainings and loans. The businesses under study did not typically fit the lending requirements of the MFI. A loan guarantee was provided by ILO to mitigate risk.</td>
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<tr>
<td></td>
<td>Goal: To enhance business performance through subsidized loan, grant and free business skills training.</td>
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</tbody>
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28. ILO provides the Start and Improve Your Business training program with a focus on starting and improving businesses for women and men in at least 100 countries. The training has four packages that responds to stages of business development. The packages include: 1) Generate Your Business Idea; to enables potential entrepreneurs to develop a concrete business idea; 2) Start Your Business: to...
<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Characteristics</th>
<th>Duration</th>
<th>Coupled with</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIDE (MFI)</td>
<td>Randomized field experiments in Tanzania. Year: 2012. Target: small scale male and female entrepreneurs. Goal: Unleashing entrepreneurship &amp; creating business growth.</td>
<td>1. Entrepreneurship and entrepreneurial character. 2. Improving customer service. 3. Managing people in your business. 4. Marketing strategies. Note: Skills were often illustrated with case studies.</td>
<td>Weekly basis, from Aug. 2008-Jan. 2009. 21 sessions each lasting 45 minutes.</td>
<td>Coupled with financial capital.</td>
<td>Substantial improvement for male entrepreneurs (i.e., increase in sales of 25-30 percent), but not for female entrepreneurs (training has not empowered females), citing differences in effect of training could be due to mindset, external constraints, and crowding out effects. There is, however, positive effect of trainings on both female and male business knowledge. Better business practices among both males and females.</td>
</tr>
<tr>
<td>FINCA</td>
<td>Randomized control trial in Peruvian village banking program for poor female entrepreneurs with little formal education. Target: Female micro entrepreneurs who are FINCA-Peru, MFI, clients. Goal: To build the human capital of micro entrepreneurs in order to improve the livelihood of the MFI clients and help further MFI's mission of poverty alleviation.</td>
<td>1. Savings methods. 2. General business skills and strategy. 3. Separating business and home finances. 4. Calculating production costs and product pricing.</td>
<td>Six months</td>
<td>Coupled with microfinance services.</td>
<td>Training programs themselves with a DID analysis find a positive but small impact of trainings on enterprise revenues. Clients also reported greater engagement in the activities taught by the training program. But, it did not have an impact on registration for formal business licenses, did not increase the number of sales locations, and did not induce entrepreneurs to keep records to payments of workers, start a new business, or increase the number of businesses that reported planning innovations.</td>
</tr>
</tbody>
</table>

enable potential entrepreneurs with a business idea to develop a bankable business plan; 3. Improve Your Business: to enable existing entrepreneurs to develop their skills and improvement plans in buying, stock control, marketing, costing, record keeping, business planning and human resources management, and 4) Expand Your Business: to enable growth-oriented.


30. Mindset determinants as well as having self-confidence were included in the entrepreneurial character the training sought to implement. Mindset also refers to having a long-term view and orientation in the business. These mindset determinants were studied in a lab context.

| Economic Empowerment of Adolescent Girls<sup>32</sup> | Randomized control trial. Part of a larger initiative administered by World Bank.  
Target: women of age 16-27, possessing basic literacy and numeracy skills, not enrolled in school for several months prior to program initiation.  
Goal: Increasing the employment and income of 2500 young Liberian women by providing livelihood and life skills training and facilitating their transition to productive work. | Assigned to a Job Skills track or a Business Development track.  
Job skills:  
1. Hospitality.  
2. Professional cleaning  
3. Office/computer skills  
4. Professional house/office painting  
5. Security guard service.  
6. Professional driving.  
Business Development:  
1. Identify micro-enterprise opportunities based on an assessment of market needs  
2. How to grow and manage businesses. | Six months of classroom-based trainings followed by six months of job placement support for either self or wage employment.  
Performances bonuses were awarded to training providers that successfully place their graduates in jobs, contests and competitions were held.  
Program designed around girls’ needs: held both morning and afternoon sessions, to accommodate participants’ busy schedules, every site offered free childcare. | Program’s business skills track had higher impacts on employment and earnings than the job skills track, which focused on wage employment. Improvement in a wide range of subjective outcomes including: worry, life satisfaction, self-regulation, self-confidence, and self-perceptions of social abilities. Household shift in gender norms perspective: respondents were asked i.e. who should be responsible for a series of five household tasks. |
| Personal Initiative Training Program<sup>33</sup> | Training program in Togo financed by the World Bank.  
Target: 789 female-owned microenterprises. The average owner is 42.7 years old, has 7 years of schooling, and has been running her firm for a mean of 13.6 years.  
Goal: To develop key behaviors associated with a proactive entrepreneurial mindset | 1. Mindset of self-starting behaviors, innovation, identifying and exploring new opportunities  
2. Goal-setting, planning, and feedback cycle  
3. Overcoming obstacles. | 12 three-hour sessions taught three times a week in April 2014, followed by a trainer visiting the business for the next four months. | No. | Personal initiative training increased business sales and business profits for women (although not statistically significant). These treatment effects are different from training that only focuses on hard skills (also studied in this paper). Finds that the training program is successful for those with all levels of schooling and does not show significant changes with a range of human capital measures. |

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