

# Less in More: How Simple Rules Can Help Microentrepreneurs Better Manage their Businesses

- Simple decision making rules requiring low cognitive effort (i.e., heuristics) offer an alternative to traditional business training.
- With support from IDB Lab, Banco Pichincha in Ecuador tested traditional and heuristic training approaches with a sample of 2,408 microentrepreneur clients.
- While the traditional training had no effect, microentrepreneurs offered heuristic training increased sales by 7% and profits by 8%.
- Women were most likely to adopt heuristics, leading to a 10% increase in sales and profits.
- Women reported spending more time on household work than men, but the same amount of time on their businesses.
- The results suggest that women may be more cognitively taxed than men, making simpler heuristic training better suited to their needs.

## HOW EFFECTIVE IS BUSINESS SKILLS TRAINING?

The international development community spends millions of dollars every year on training programs to help microentrepreneurs better manage their businesses. The evidence generated so far shows that while these programs have some effects on business knowledge and adoption of best practices among microentrepreneurs, they have little impact on profits or sales.<sup>1</sup>



Seeing that 99.5% of firms in Latin America and the Caribbean are small and medium-sized enterprises (SMEs), and about 9 out of 10 are considered microenterprises<sup>2</sup>, understanding what training approaches work best for this segment is key. Likewise, building a stronger micro and SME client base could potentially boost financial inclusion by helping financial institutions mitigate the risks of lending to smaller firms while also unlocking the business potential of this segment. Underlining its importance, financial inclusion is included as a target in half of the 17 Sustainable Development Goals (SDGs).



A possible limitation of traditional business training is that the depth of understanding required can be very taxing on entrepreneurs' mental bandwidth, which is already overstretched by the constant demands of running a business -and in the case of many women entrepreneurs- a household. The skills imparted at these trainings, such as calculating cash flows or recordkeeping, require significant cognitive engagement to learn and put into practice.

Instead, development practitioners are increasingly adopting approaches rooted in behavioral science that teach simple, actionable rules of thumb for problem solving that require low cognitive effort, also known as heuristics.<sup>3</sup> For instance, while traditional training teaches entrepreneurs how to calculate their cash flow (a 14-step procedure), heuristic-based training teaches them how to use boxes to organize their money so they can easily calculate daily cash movement.

## TESTING NEW APPROACHES

In partnership with Banco Pichincha in Ecuador, IDB Lab financed training for the bank's microentrepreneur clients. Launched in 2015, the project tested two training approaches (traditional and heuristics-based) led by bank officers that covered the same topics: organizational and financial planning, managing credit, and savings and financial goals.<sup>4</sup>

The traditional training consisted of a 20-minute session every two weeks for 12 weeks carried out during regular client site visits. The heuristic training consisted of one four-hour session and provided materials (cash boxes, financial journals, etc.) and incentives to encourage uptake of best practices. Specifically, a voluntary "30-day challenge" was used to track microentrepreneurs' adoption of rules of thumb for a month after the training.

1. McKenzie, D., and C. Woodruff. 2014. "What are we learning from business training and entrepreneurship evaluations around the developing world?" *World Bank Observer* 29(1), 48-82.
2. OECD/CAF (2019). [Latin America and the Caribbean 2019: Policies for Competitive SMEs in the Pacific Alliance and Participating South American countries, SME Policy Index.](#)
3. For example, the behavioral science-focused organization, [ideas42](#), piloted the first heuristics training in the Dominican Republic in 2006.
4. The heuristic training model was developed by [GRID Impact](#), in consultation with Banco Pichincha and IDB Lab.



A study – led by IDB Invest in coordination with IDB Lab – was carried out to measure the effects of these two different training approaches—in terms of microentrepreneurs' application of best practices, sales, and profits. A sample of 2,408 microentrepreneurs were randomly assigned to three different groups with about 800 people per group: traditional training, heuristic training, and the control group (which did not receive any training). Women represented 68% of the sample.

## KEY FINDINGS

One year after the trainings took place, the entrepreneurs belonging to the traditional training group did not change the number of best practices they used in their businesses and therefore saw no difference in their sales or profits, when compared to entrepreneurs in the control group.

In contrast, entrepreneurs who were offered the heuristic training applied best practices at a greater rate, increasing their sales by 7% and profits by 8%, on average, when compared to the control group. When looking only at those entrepreneurs who actually completed the heuristics training (54% of the 801 who were offered the training), average sales and profits increased by 13% and 14%, respectively. These gains are largely due to the adoption of rules of thumb that encourage more efficient inventory tracking and product selection.



Cash box used in the heuristic training.

Results show that heuristic training is a good investment. If entrepreneurs had to pay for the heuristic training themselves, they would have recovered their investment in about two months, considering average profits generated by these businesses on good, regular, and bad sales days.

## WOMEN DRIVE POSITIVE RESULTS

The promising results of the heuristic approach seem to be driven by women entrepreneurs, who were more likely than men to adopt best practices and conse-



quently experienced larger gains in both sales (10%) and profits (10%) in comparison to women in the control group. Again, when looking only at women who actually completed the heuristic training, both average sales and profits increased by 17%.

These findings may partly be explained by women doing worse at baseline, and then catching up with the men later. But the data also tells another story. Women in the sample reported devoting significantly more time than men to household chores (3 hours vs. 1 hour) and to child and elder care (2.9 hours vs. 1.5 hours). Women also dedicated the same amount of time to their businesses as men (12 hours per day and 6.7 days per week). This evidence suggests that women could be more cognitively taxed than their male counterparts, making the simpler nature of the heuristic training better suited to their needs.

The data collected also supports this interpretation of a gender gap in cognitive bandwidth. During the initial survey conducted before the trainings took place, a digit span recall test was given to all study participants. This test is designed to measure working memory capacity and capture the subject's ability to use attention to avoid distraction. Subjects are shown a string of digits that they need to reproduce immediately in the original order.

Women in the sample recalled fewer digits than men. This does not mean that all women had low recall: 41% of women and 53% of men were classified as high recall. Overall, people with low recall were more likely to have children (presumably because having children places greater cognitive strain on parents) and spend more time doing household and care work (presumably because unpaid work leads to more multitasking and a greater cognitive load at work).

When separating the sample based on results of the digit span recall test, low recall entrepreneurs of both sexes benefited more from the heuristic training than high recall entrepreneurs.

## WHY DOES THIS MATTER?

The results show that simpler training, based on rules of thumb rather than excessive information, is a more effective method for microentrepreneurs, especially women, whose mental bandwidth is already overtaxed by the demands of work, home, and in many cases, the daily struggles of life in low-income communities.

Likewise, as financial institutions increasingly develop strategies to reach women-led SMEs, the evidence generated by this study points to a cost-effective way to build the business skills of women entrepreneurs who can in turn become better clients. And, beyond training, since women may be more cognitively taxed than men due to prevailing social norms, greater awareness about this issue could be key for improving gender mainstreaming efforts across organizations more broadly. ■

### Additional Information

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This brief summarizes the findings of the study by Arraiz, Irani, Syon P. Bhanot, and Carla Calero (2019), [Less is More: Experimental Evidence on Heuristic-Based Business Training in Ecuador](#), which is part of IDB Invest's Development through the Private Sector Series.

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