

Less is More: Experimental Evidence on Heuristic-Based Business Training in Ecuador

"While some recent studies have found positive impacts of business training on knowledge and practices, the evidence of the impacts on business outcomes has been both limited and mixed. This has led people to question the standard approaches to business training and adopt new techniques informed by research in psychology and behavioral economics." (Arraiz et al., 2019)

Arraiz et al. conducted a randomized control trial in Ecuador to "test and compare the effectiveness of two types of business training program for small business owners: a traditional training program and a program focusing on easily-digestible, rule of thumb-style business practices (which we call "heuristic training")."

Quick facts

Barriers addressed



Social Norms

[Women's disproportionate time burden >](#)

Segment focus

1 2 3 4

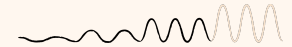
Geography

Guayas and Pichincha provinces, Ecuador

Sources

[Arraiz et al., 2019.](#)

Customer Journey Relevance



Key stakeholders involved

Inter-American Development Banks
IDB Lab
Banco Pichincha
GRID Impact
Fundacion CRISFE
2,408 sample of entrepreneurs

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Key activities

- “Collect individual-level data on the digit span recall test—a measure correlated with the ability to use attention to avoid distractions—which allows to explore why these training programs may be more effective, and for whom.”
- “The Inter-American Development Bank’s IDB Lab partnered with Banco Pichincha, the largest financial institution in Ecuador, to design and test two types of business training programs for small business owners: a traditional training program and a new training program focusing on easily-digestible, rule of thumb-style business practices, which the researchers call ‘heuristic training.’”
- Development of the heuristic training, in consultation with Banco Pichincha and IDB Lab staff; development of the traditional training based on its “more than 20 years of experience providing financial and entrepreneurship training programs.” Banco Pichincha oversaw the implementation of both trainings.
- “The 2,408 entrepreneurs were randomly assigned to three—

—different groups: 803 were assigned to the traditional training (12 bank officers), 801 were assigned to the heuristic training (11 bank officers), and 804 were assigned to the control group (12 bank officers).”

Outcomes/results

- “The results show statistically significant and economically meaningful impacts on indexes of sales and profits for the heuristic training relative to the control of no training (0.06 and 0.08 standard deviation effect sizes, respectively; equivalent to increases of 7.3 and 8.2 percent, respectively).”
- “The study also allows to identify one of the main channels through which the heuristic training affects outcomes: inventory control and management.”
- “The heuristic training is also cost-effective; specifically, it has an internal rate of return of at least 37 percent, assuming conservatively that the effect completely disappears after one year, and including the cost of the design of the training.”

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- “The researchers also find larger effects of the heuristic training for female entrepreneurs than for male entrepreneurs, mainly because women adopt the rules of thumb at a greater rate than their male counterparts. The analysis also shows that results are stronger for entrepreneurs with low recall (in the digit span recall test), a measure correlated with the ability to use attention to avoid distractions.”
- “Promising results for the heuristic training seem driven by women entrepreneurs, who were more likely to adopt the best practices from the training than men, and consequently experienced larger gains in sales and profits.”
- “The results suggest that cognitive load may “tax” entrepreneurs and influence the effectiveness of business training programs, both in general and across gender lines.”

Key enabling environment factors for the intervention

“The delivery of the traditional training took advantage of the—

—existing organizational structure of Banco Pichincha. Specifically, it was integrated into the regular, in-person field visits by bank officers to the entrepreneurs. Thus, bank officers were trained by Fundacion CRISFE to deliver the training program, which they did during their regular visits.”

Key design elements and principles that led to successful outcomes

- “The study sample includes more men than previous work does, which allows us to explore the gender dynamics at play.”
- “Our training was tailored to the needs of the entrepreneurs identified during the design phase using a positive deviance approach.”
- “The heuristic training differed from the traditional training in both content and methods, though both approaches covered similar topics.”

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Potential for scale/replicability

Design of training programs tailored to entrepreneurs' needs, constraints and bandwidth – especially for women.

Recommendations from the research

“Development organizations need to look at the complexity and breadth of the material covered by training programs aimed at microentrepreneurs. For many entrepreneurs, daily life can impose serious constraints on attention and cognitive bandwidth. Training programs that use a one-size-fits-all approach and prioritize the provision of extensive information may not be ideal in such environments, since they require entrepreneurs to spend a great deal of cognitive effort to understand and adapt the training content to their unique business environment. By simply accepting these attention constraints among entrepreneurs as a given, and building training programs that take them into account, development organizations and policy-makers can more cost-effectively help business owners achieve their goals throughout the developing world.”

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