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Timeline

2019-

Study Status

Results

Study Type

Randomized Evaluation

Sample Size

1,967 entrepreneurs in Bogotá

Research Implemented by IPA

Yes

Learning to see the world's opportunities: The impact of imagery on entrepreneurial success[§]

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May 4, 2022

Recent work in neuroscience and psychology has underscored the impact of visualizing future scenarios on decision making, via mental simulation, emotional amplification, and consolidation of memory. We show evidence of the path and importance of imagery-based decision making for the vital economic activity of entrepreneurship. We also highlight that the use and impact of this ability is highly heterogeneous depending on people's life experiences, and it has the potential to benefit vulnerable populations the most. First, using a data set of roughly 2,000 would-be entrepreneurs in Colombia, we show that measures of imagery use correlate strongly and positively with economic outcomes. Second, we design a training curriculum to teach visualization skills, and test it using a randomized control trial in which the same entrepreneurs were given access to either the imagery-based entrepreneurial training program, a placebo program of traditional business skills training, or no program at all. In follow-up surveys conducted 8 and 11 months after the intervention, those who participated in the imagery training demonstrated a strengthened capacity for using visualization and significantly improved economic outcomes compared to the placebo. For individuals with high levels of baseline trauma, imagery addresses their deficit in positive imagery. Women in the imagery training improve along all margins compared to men, and are negatively impacted by traditional business training. Improved entrepreneurial outcomes appear to be driven by enhanced ability to obtain credit, build savings, and undertake creative marketing with customers and competitors. Our results suggest that training which ignores the emotional content of economic activity is not as effective as that which leverages the emotions inherent in economic decisions. **JEL** Codes: D91, J24, J26, J53

[§]We thank Innovations for Poverty Action Colombia for their support in data collection and partnership management, and Monick El Khatib, Miguel Fajardo-Schickler, George MacDonald and Mike Song for excellent research assistance. We are grateful to Maria Paula Gómez Páez, Juan David Ángel Castañeda, Cecilia Andrea Hernández Estrada, Mariana Medina and Manuel Pardo for their input in the curriculum design, training and supervision of the implementation team. We thank Shasha Brown, Xosha Gibson, August Kaur, and David Latham for very helpful comments. We gratefully acknowledge the financial support of IPA Peace and Recovery Program, J-PAL Post-Primary Education, J-PAL Jobs and Opportunity Initiative, the Rockefeller Foundation and the Institute of Global Affairs at the IFE. This RCT was registered in the American Economic Association Registry for randomized control trials under Trial number JEA0CTB-0000005. It received official approval by the Innovations for Poverty Action Institutional Review Board USA (IPA IRB Protocol No. 14036) and the London School of Economics Research Ethics Committee (REC Ref No. 02859).

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Working Paper

The Impact of Entrepreneurship Training Using Imagery Techniques in Colombia

Abstract

Entrepreneurship and business skills training has been commonly adopted as an approach for promoting socio-economic inclusion in fragile settings. However, these programs often do not account for internal barriers to learning and decision making, which may be relevant for entrepreneurs from vulnerable backgrounds. For such populations, imagery techniques—which encourage participants to envision future scenarios or adopt the perspectives of others—could be effective. In Bogotá, Colombia, researchers designed and evaluated an entrepreneurship training program that incorporated imagery-based learning with traditional business skills training. The program significantly increased entrepreneurs' capacity to use imagery in their business decisions and significantly improved their economic outcomes. Women and people with high past trauma experienced the strongest effects from the program.

Policy Issue

Business and entrepreneurship training programs are a common approach for promoting socio-economic inclusion and improving well-being for conflict-affected populations. Yet, many of these programs do not address internal barriers to learning and decision-making. Recent evidence suggests that soft skills training—which emphasizes adaptability, creativity, and goal-setting—may be more effective than traditional business training in improving profits and growth in fragile or resource-constrained settings. However, individuals who have experienced conflict and other traumatic experiences often face internal barriers that may make it difficult to imagine and predict future events and opportunities.¹ For such populations, imagery techniques—which encourage individuals to visualize future scenarios or adopt the perspectives of others—may be effective in boosting motivation and improving individuals' abilities to conceptualize the future. However, the impact of imagery techniques on business decisions and economic outcomes have not yet been studied.

Context of the Evaluation

More than 6.8 million people in Colombia are displaced as a result of conflict and violence. In addition, approximately 2.5 million Venezuelan migrants have settled in Colombia since 2016. A significant majority of forcibly displaced people in Colombia live in major urban centers, including Bogotá, and many start small enterprises to make a living. However, recent research in the country has shown that more severe episodes of violence not only result in higher levels of psychological trauma and anxiety, but also greater risk aversion, and pessimistic perceptions of social mobility.² Higher trauma symptoms are also associated with poorer performance in non-cognitive skills and job training in local programs.³ Against this backdrop, there is strong interest from local policymakers to invest in entrepreneurship programs that both stimulate economic growth and promote the full economic participation of vulnerable populations.

Details of the Intervention

Researchers partnered with IPA, the Bogotá District Department of Social Integration, and the District Department of Economic Development to conduct a randomized evaluation of an entrepreneurship program that incorporated imagery-based learning with traditional business training.

The program consisted of ten three-hour business training sessions covering entrepreneurship themes such as marketing, savings and access to finance, productivity, and more. In addition, entrepreneurs participated in imagery exercises about these themes to help them think about the future, practice plans, and adopt the perspective of others.

The curriculum's primary outcome was the frequency with which entrepreneurs used imagery to make business decisions and the quality of the images generated when using imagery. Researchers also measured the curriculum's impact on entrepreneurs' resilience in responding to adversity and on economic outcomes such as sales and take-home income.

A total of 1,967 entrepreneurs—primarily women and forcibly displaced individuals—with existing businesses or concrete business ideas participated in the program. To evaluate the program, researchers randomly assigned the entrepreneurs to the following groups:

- **Business training and imagery exercises (956 entrepreneurs):** This group received the combined business training and imagery-based exercises curriculum.
- **Traditional business skills training (558 entrepreneurs):** This group received the traditional business skills training curriculum only.
- **Comparison group (453 entrepreneurs):** This group did not receive any training.

An initial survey was conducted with participants immediately before the training in 2019. The training was delivered in two waves, from July to September 2019 and from September to December 2019. Researchers conducted follow-up surveys in May 2020 and in November 2020, 8 months and 14 months after the training program, respectively.

Results and Policy Lessons

The imagery entrepreneurship training program increased the use of imagery to make business decisions and substantially improved entrepreneurs' earnings. Women and people with high trauma experienced the strongest effects from the program.

Impacts on Business Decisions: Relative to the traditional business skills curriculum, the imagery curriculum increased entrepreneurs' use of imagery to make business decisions by 0.178 standard deviations. This was measured by an index assessing the frequency of imagery use, enhanced vividness (specificity), and emotional intensity of imagined future business scenarios. However, this effect was limited only to entrepreneurs with an existing business. There was no difference in impact among entrepreneurs without businesses.

Economic Outcomes: Relative to the traditional business skills curriculum, the imagery curriculum increased entrepreneurs' earnings by 0.19 standard deviations before the COVID-19 pandemic and 0.14 standard deviations during the pandemic. Businesses in the imagery curriculum were also more likely to survive the pandemic than businesses in the traditional curriculum.

Gender Differences: Women benefited from the imagery curriculum significantly more than men. Relative to women in the traditional business skills curriculum, women in the imagery curriculum increased their use of imagery by 0.14 standard deviations. The effect was driven by a strong 0.34 standard deviation increase in business-specific imagery. Their heightened use of imagery was due to a joint increase in the imagery curriculum and a decline of imagery in the traditional curriculum. There were no significant differences in imagery use between men in the imagery curriculum and the traditional business skills curriculum.

Differences by Trauma Levels: While both high-trauma and low-trauma entrepreneurs in the imagery curriculum increased their use of imagery, the effect for high-trauma entrepreneurs was twice as high. High-trauma entrepreneurs also had higher uses of business-related and non-business-related imagery. In the imagery curriculum, high-trauma

entrepreneurs increased the vividness of positive imagery relative to low-trauma entrepreneurs. Meanwhile, the traditional curriculum significantly decreased the vividness of positive imagery among high-trauma entrepreneurs relative to the comparison group, suggesting that traditional business training further worsened the quality of positive imagery for people with past traumatic experiences.

Altogether, results suggest that imagery training can successfully assist entrepreneurs in making beneficial business decisions and have stronger economic outcomes. This training can be particularly impactful for women and entrepreneurs with high past trauma.

Sources

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November 15, 2019