

Authors

Francisco Campos
World Bank

Michael Frese
Asia School of Businesses

Markus Goldstein
World Bank

Leonardo Iacovone
World Bank

Hillary Johnson
World Bank

David McKenzie
World Bank

Mona Mensmann
University of Cologne

RESEARCH
ECONOMICS

Teaching personal initiative beats traditional training in boosting small business in West Africa

Francisco Campos,^{1,*} Michael Frese,^{2,3} Markus Goldstein,⁴ Leonardo Iacovone,⁵ Hillary C. Johnson,⁶ David McKenzie,^{7,8} Mona Mensmann⁹

Standard business training programs aim to boost the incomes of thousands of self-employed business owners in developing countries by teaching basic financial and marketing practices, yet the impacts of such programs are mixed. We test whether a psychology-based personal initiative training approach, which teaches a proactive mindset and focuses on entrepreneurial behaviors, could have more success. A randomized controlled trial in Togo assigned microentrepreneur owners to a control group ($n = 500$), a leading business training program ($n = 500$), or a personal initiative training program ($n = 500$). Four follow up surveys tracked outcomes for firms over 2 years and showed that personal initiative training increased firm profits by 30%, compared with a statistically insignificant 2% for traditional training. The training is cost-effective, paying for itself within 3 years.

A large share of the labor force in most developing countries is engaged in small-scale entrepreneurship. A literature debate has arisen: are “born” and “nurtured” entrepreneurs? From the many others around them, (2) to ever grow beyond subsistence size. What distinguishes those individuals who end up growing their businesses from those? There has been a longstanding debate about whether such successful entrepreneurs “born” or “made” (3). The “born” view argues that entrepreneurs differ from others in their innate personality traits and traits are passed on, whereas the “made” view argues that traits can be created through education and experience.

The billions of dollars spent by governments, nongovernmental organizations, and nongovernmental organizations providing business training programs indicate a strong belief by many policymakers that entrepreneurship can be taught. Traditional business training programs such as those offered by the U.S. Small Business Administration, the International Labor Organization's Small Enterprise Yearbook, the World Bank, the International Finance Corporation's Business Edge program, and Freescale's program for microfinance clients aim to teach small business owners to use better business practices—for example, record keeping, cash control, and simple marketing. There is increasing evidence in economics that better management and improved business practices matter for productivity in both large (4) and a small (5) firms. However, few evaluations of traditional business training programs offered to existing business have found sustained impacts on profits, particularly for women.

¹The World Bank, Washington, DC 20433 USA; ²National University of Singapore, Singapore; ³Georgia Institute of Technology, Atlanta, GA 30332 USA; ⁴University of Tübingen, Tübingen, Germany; ⁵University of Cologne, Cologne, Germany; ⁶University of California, Berkeley, CA 94720 USA; ⁷Harvard University, Cambridge, MA 02138 USA; ⁸University of Chicago Booth School of Business, Chicago, IL 60637 USA; ⁹University of Cologne, Cologne, Germany

to instill a mindset of greater personal initiative, leading to business improvements within a year. Using a large sample and a more comprehensive training program, we conducted a randomized controlled trial that directly compares personal initiative training with traditional business training and demonstrates the greater effectiveness of personal initiative training over traditional business training between the “born” with an “entrepreneurial personality” and “made” by learning specific entrepreneurial practices” viewpoints by showing that training leads to business technology, a mindset with attributes such as proactiveness that are often assumed to be innate.

We worked with a sample of 1500 microentrepreneurs in Lomé, Togo, selected from applicants to a government program run by the World Bank. Applications had to be for business for at least 12 months, have fewer than 10 employees, operate outside of agriculture, and not be a formally registered company. Section 1 of the supplementary materials provides full details of the selection process and a timeline (17). A baseline survey of these applicants was undertaken between October and December 2010. The business owners were almost equally split by gender (50% female), had an average age of 41 years, and owned an average of 5 years of business (table 1). The sample includes a mix of sectors (25% manufacturing, 40% commerce, and 25% services), with the businesses earning a mean of 64,000 CFA francs (US \$80) and a median of 36,000 CFA francs (US \$50) in monthly profits at baseline (28). Hence had a mean of three employees and a median of two.

The initial state of business practice in these firms suggested considerable scope for improvement. This was particularly true for manufacturing (27% of firms kept no books) and only 47% had a written budget. We also measured marketing, operations management, information working, and human resource practices and found that only one-third of firms used advertising or publicity, 23% compared sales performance with objectives, and 60% visited competitors to compare prices or product offerings. Firms were using a mean of 8 of the 20 different practices that we measured at baseline, and some firms started with a relatively high personal initiative level—4.7 on a five-point Likert scale, with values ranging from 2.3 to 5.0—but still had room for improvement. Section 2 of the supplementary materials describes the scale and its construction in greater detail.

The 1500 firms were stratified by gender and sector, then grouped into triplets according to baseline profile. Within each triplet, firms were randomly assigned to a control group ($n = 300$), a traditional business training treatment group ($n = 300$), and a personal initiative training treatment group ($n = 300$). Table 2 shows the balance of baseline characteristics among the three groups.

The traditional business training treatment group was invited to receive the Business Edge training program, which is an internationally accredited program developed by the International Finance Corporation. The content of the training

is available at <http://businesseg.org> (see supplementary materials for details of implementation).



www.scienmag.org/content/357/6357/1287/suppl/DC1

Supplementary Materials for

Teaching personal initiative beats traditional training in boosting small business in West Africa

Francisco Campos,* Michael Frone,* Markus Goldstein,* Leonardo Iacovone,* Hillary C. Johnson,* David McKenzie,†‡ Mona Mensmann*

*All authors contributed equally to this work.

†Corresponding author. Email: dmckenzie@worldbank.org

Published 22 September 2017, Science 357, 1287 (2017)

DOI: 10.1126/science.aad329

This PDF file includes:

Materials and Methods
Supplementary Text
Figs. S1 and S2
Tables S1 to S16
References

Teaching personal initiative beats traditional training in boosting small business in West Africa

Standard business training programs aim to boost the incomes of the millions of self-employed business owners in developing countries by teaching basic financial and marketing practices, yet the impacts of such programs are mixed. We tested whether a psychology-based personal initiative training approach, which teaches a proactive mindset and focuses on entrepreneurial behaviors, could have more success. A randomized controlled trial in Togo assigned microenterprise owners to a control group ($n = 500$), a leading business training program ($n = 500$), or a personal initiative training program ($n = 500$). Four follow-up surveys tracked outcomes for firms over 2 years and showed that personal initiative training increased firm profits by 30%, compared with a statistically insignificant 11% for traditional training. The training is cost-effective, paying for itself within 1 year.

September 22, 2017