

Scaling Up Psychological Preparedness for Entrepreneurial Actions

Prof. Dr. Michael Frese

**Asia School of Business, Kuala Lumpur
and Leuphana, Univ. of Lüneburg, Germany**

**Workshop of Innovation for Poverty Action (IPA) on
*Entrepreneurial Mindset and Soft Skills Training for
Business Growth***

November, 9, 2023

I want to argue:

Scaling up implies:

Entrepreneurship training (PI and STEP) can and should be integrated into macro-systems, such as

High school (curriculum)

Technical colleges

Bank providing micro-credits, etc.

Before scaling up, two important questions:
(compare that to business edge program):

1) Does the Training work? Shown with RCT

2) Does it work for all potential subgroups of the target population? (not yet done)

3) All of this requires continuing RCT research

Does Action Oriented Training Work?
Shown with RCT

Preliminary Effects: Personal Initiative
worked well in several countries: Togo,
Mexico, Mocambique

however new research is needed

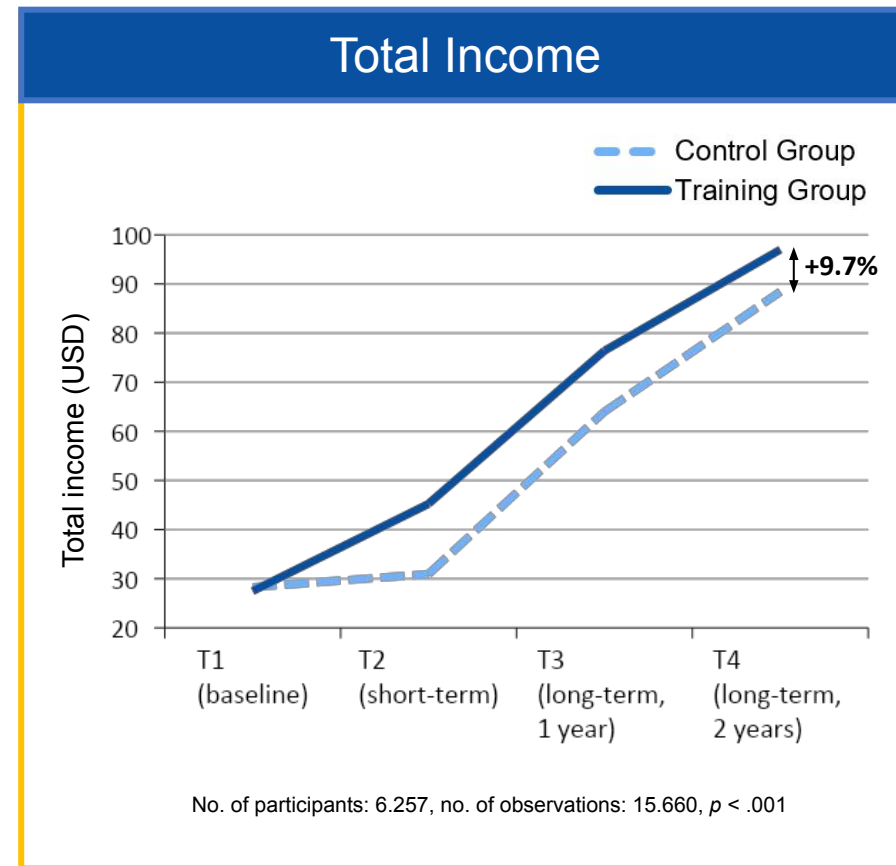
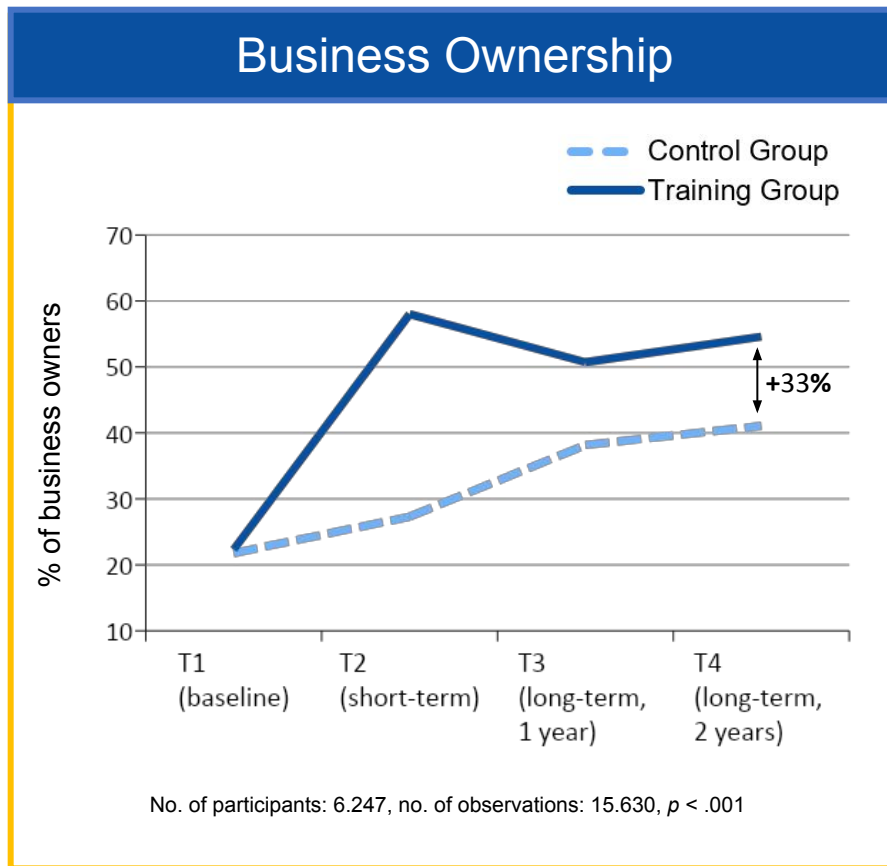
STEP Training (Student Training for Entrepreneurial Promotion)

STEP training to increase the amount of entrepreneurship in a BA student population works well: RCTs in 7 countries and in 18 universities

For BA students, Technical College Students and High School Students

Average effects of several RCTs

- STEP has a significant impact on self-employment and income in the short-term and the long-term. The impact of action-oriented entrepreneurship training on employment, income, and business performance among young adults. By J. Peschmann, M. M. Gielnik, M. Frese and K. M. Bischoff, in preparation



Mistakes made and 2 Learnings from them:

1) We underestimated the importance of trainer characteristics:

Short answer:

- Action oriented knowledge -- good examples
- Being able to challenge trainees to do better
- Good feedback

Mistake 2: Mix and Match

- Mixtures of Business and PI training: Jamaica: no effect at all – negative interference effects of one training with the other one (different, contradictory narratives of realms of training)
- However in Mozambique high effect of mixture of agricultural training and PI training for non-entrepreneurial women farmers – no contradictory arguments
- Or material support (money or investments) and PI: We are testing that in DRC

Processes to Scaling Up

First, better meeting between societal macro-conditions and micro-conditions

Second, schooling for entrepreneurship in High Schools and Colleges – STEP (curriculum)

Third, technical approaches to scaling up

Fourth, Training and coaching entrepreneurs is a viable career option (training institutes, etc.)

I went to Ivory Coast early this year to study how countries can improve the total country's entrepreneurial eco-system: The results of my thinking: MMM

Macro

Meets

Micro

Concentrate on the middle of the next slide: the concept of psychological preparedness for entrepreneurial actions. All other parts are not yet finalized

Figure 1: Theory of Eco-System: Macro – and Micro Processes

Top-down (institutional) macro processes:

- Fostering societal development of talent and human capital
- Entrepreneurial culture, no envy-culture, but celebration of success
- Market (size, magnificence, hostility)
- Transparency of macro-support in region/country
- Funding and resource provision
- Diversity (.e.g. ease of immigration)
- Ease of doing business
- Collaboration

The hinge: psychological preparedness for entrepreneurial actions

Bottom-up: action-oriented mindsets:

- Entrepreneurial action-oriented knowledge
- Personal initiative (self-starting including new opportunities, do-not-wait-act, differentiate from local competitors; future orientation; and overcoming barriers)
- Entrepreneurial orientation as stance (moderate risk-orientation, innovativeness, proactivity, competitiveness, autonomy)
- Entrepreneurial self-efficacy and intentions put into action

Psychological Preparedness

Psychological Preparedness consists of knowledge about entrepreneurial tasks, drive to do the right thing in entrepreneurship, motivation to be an entrepreneur and positive emotions about it (e.g., passion, fun to act under uncertainty)

One Important Part of Preparedness: = Personal Initiative (PI)

Meaning of Self-Starting

- Self-starting is different from the “normal” or obvious approaches (social comparison approach)
- Doing the obvious □ not so self-starting
- If a high-ranking entrepreneur takes up an innovation that is “in the air”, and that other entrepreneurs also talk about, not so self-starting

Meaning of Future Orientation

- Scanning for opportunities and problems that may appear in the future
- Preparation now for dealing with these future problems and exploiting future opportunities

Meaning of Overcoming Barriers

- Protecting one’s goals and adapting one’s plans to overcome problems on the way to a goal
- Active dealing with problems instead of giving up
- Dealing with own anxieties and frustrations – self-regulation

Processes to Scaling Up

First, better meeting between societal macro-conditions and micro-conditions

Second, schooling for entrepreneurship in High Schools and Colleges – STEP (curriculum)

Third, technical approaches to scaling up

Fourth, Training and coaching entrepreneurs is a viable career option (training institutes, etc.)

STEP High School – We have done a study but not yet analysed the results. First results are promising

Processes to Scaling Up

First, better meeting between societal macro-conditions and micro-conditions

Second, schooling for entrepreneurship in High Schools and Colleges – STEP (curriculum)

Third, technical approaches to scaling up

Fourth, Training and coaching entrepreneurs is a viable career option (training institutes, etc.)

Technological Approaches to Scale – Preparatory Work

- Lectures to large groups with interspersed exercises by charismatic speakers (RCT in Ivory Coast; 6 hours divided into 3 hours talk and interspersed 3 of exercises); planned for 2024
- MOOC-type approach Video material ¹⁾ (Mensmann's PhD stud)
- School integrated approaches with mobile phone APP by Mensmann and co-workers ²⁾
- Mobile phone support – PI-APP exists, also booster
- One project we planned was: To provide incentives: the more people used e-based system for training, the more free system time they were given (e.g., for social media)

1) MOOC = massive open online course

2) System-, teacher-, and student-level interventions for improving participation in online learning at scale in high schools

I. Asanov, A.-M. Asanov, T. Åstebro, G. Buenstorf, B. Crépon, D. McKenzie, Mensmann et al Proceedings of the National Academy of Sciences 2023 Vol. 120 Issue 30 Pages e2216686120

Issues of Technological Approaches – Very Low Completion Rate –Scaffolding as Answer (no RCT yet)?

- In MOOCs often just 5 - 10% completion rate
- Scaffolding for keeping up needed: It worked very well in schools where teachers made sure that the students did what was demanded of them Different forms of scaffolding (motivators?):
- (a) conceptual scaffolding, (b) meta-cognitive scaffolding, (c) strategic scaffolding, and (d) procedural scaffolding (Doo, Bonk & Heo (2020). A meta-analysis of scaffolding effects in online learning in higher education. *International Review of Research in Open and Distributed Learning*, 21(3), 60-80.)
- Incentives to keep working on it? Certificates?
- Groupings, natural groupings similar to microcredit groups of women who vouch for one another?

The Problems of Technological Approaches to Scale-Up

- Low effect size
- Plus: the same issues as for face-to-face training; however more crucial in tech-driven approaches:
 - Learners' intentions
 - Learning Motivation (most important)
 - Learning performance
 - Learners' satisfaction
 - Self-regulation (very small)
 - Social networks (small)
 - **(A meta-analysis of eight factors influencing MOOC-based learning outcomes across the world Z. Yu, W. Xu and P. Sukjairungwattana Interactive Learning Environments 2022 Pages 1-20)**

Processes to Scaling Up

First, better meeting between societal macro-conditions and micro-conditions

Second, schooling for entrepreneurship in High Schools and Colleges – STEP (curriculum)

Third, technical approaches to scaling up

Fourth, Training and coaching entrepreneurs is a viable career option (training institutes, etc.)

Training Institutes and Cost of PI Training

- David: cost of training ca 700 \$ per person; Each entrepreneur earns 100 \$ more per month than no-training control group – thus, costs can be recouped within 7 months
- Cheaper alternatives that reduce the training Costs:
- How can we encourage the 300 plus certified trainers of PI worldwide to start viable training institutes in their countries?

General Point: Continuous RCTs Needed to Check Scaling Up Attempts

First, better meeting between societal macro-conditions and micro-conditions

Second, schooling for entrepreneurship in High Schools and Colleges – STEP (curriculum)

Third, technical approaches to scaling up

Fourth, Training and coaching entrepreneurs is a viable career option (training institutes, etc.)

Some Important Publications

- M. M. Gielnik, M. Frese, A. Kahara-Kawuki, I. W. Katono, S. Kyejjusa, J. Munene, et al. **Action and action-regulation in entrepreneurship: Evaluating a student training for promoting entrepreneurship** Academy of Management Learning & Education 2015 Vol. 14 Pages 69–94.
- F. Campos, M. Frese, M. Goldstein, L. Iacovone, H. Johnson, D. McKenzie, et al **Teaching personal initiative beats traditional business training in boosting small business in West Africa** Science 2017 Vol. 357 Pages 1287–1290
- McKenzie, D. **Small business training to improve management practices in developing countries: re-assessing the evidence for ‘training doesn’t work’** Oxford Review of Economic Policy 2021 Vol. 37 Issue 2 Pages 276-301
- Frese, M., & Gielnik, M. M. (2023). **The Psychology of Entrepreneurship: Action and Process.** Annual review of organizational psychology and organizational behavior, 10, 137-164
- Book: Gielnik, Cardon, Frese (Eds) (2021): **New Perspectives on the Psychology of Entrepreneurship.** SIOP Frontier Series, London, UK: Taylor and Francis, Routledge.