



What do we now know
about the effectiveness
of business training, and
how can it be done
better?

A re-assessment of the
evidence

David McKenzie



Long-running debate: what makes a successful entrepreneur?



Vs.



Business Training is really popular among governments and international organizations

- ILO's Start and Improve Your Business (SIYB) program - network of over 65,000 trainers & at least 15 million clients have been trained
- CEFE International - more than 20,000 trainers in 140 countries, & trained 20 million
- India's National Institute for Entrepreneurship and Small Business Development - provided 44,035 different training programs to more than 1.1 million people
- Business training is a common component of many World Bank programs

=> My rough estimate is that at least \$1 billion is spent training at least 4-5 million potential and existing entrepreneurs each year

Why is it so popular?

- Many small firms not doing basic business practices, and increasing evidence that better business practices and management matter
- “give a man a fish and you feed him for a day, teach a man to fish and you feed him for a lifetime”
- Political economy view:
 - Training is visible sign of support for small businesses, less politically challenging than handing out cash to businesses
 - May be less susceptible to corruption concerns

But lots of skepticism

- Muhammad Yunus: “We do not need to teach them how to survive: they know this already. Giving the poor credit allows them to put into practice the skills they already know”
- McKenzie and Woodruff (2014) review of early wave of RCTs of business training
 - 13 experiments, only 2 showed statistically significant impacts on profits
- Lack of significance has been interpreted by many readers as showing that traditional business training does not work.
 - Fox and Thomas (2016, p.i33) “what is clear is that projects to graduate household enterprises into small business through entrepreneurship training are expensive and do not seem to pay off”
 - Brooks et al. (2018, p.197) “where formal business classes have been offered to entrepreneurs, they have had limited impact”.

What Are We Learning from Business Training and Entrepreneurship Evaluations around the Developing World?

David McKenzie and Christopher Woodruff

Business training programs are a popular policy option to improve the performance of enterprises around the world, and the number of rigorous impact evaluations of these programs is growing. A critical review reveals that many evaluations suffer from small sample sizes, measure impacts only within a year of training, and experience problems with survey attrition and measurement that limit the conclusions one can draw. Over these short time horizons, there are relatively modest effects of training on the survivorship of existing firms. However, there is stronger evidence that training programs help prospective owners launch new businesses more quickly. Most studies find that existing firm owners implement some of the practices taught in training, but the magnitudes of the improvement to practices is often modest. Few studies find significant impacts on profits or sales, although some studies with greater statistical power have done so. There is little evidence to guide policymakers regarding whether any identified effects are due to trained firms drawing sales from competing businesses rather than through productivity improvements or to guide the development of the provision of training at market prices. We conclude by summarizing some directions and key questions for future studies. JEL codes: O12, J16, L26, M53

Outline

- 1) What does training look like, what should we expect it to do?
- 2) What does the experimental evidence show?
- 3) What alternatives are there to traditional training, and the evidence on their effectiveness.
- 4) Approaches to scaling up business training
- 5) Conclusions and areas for future work



What does a typical business training look like?

- Lots of variation, but a typical program involves:
 - A trainer teaching a group of 15 to 40 participants in a classroom setting, over a period of 3 to 12 days.
 - Courses focused on potential entrepreneurs looking to start a business focus on topics like generating your business idea, developing a business plan, permits, costing, pricing and budgeting.
 - Courses focused on existing firms looking to grow cover record keeping and accounting, marketing, human resources and hiring workers, stock control and inventory management, planning, and operations management.
- Costs:
 - 5-7 day SIYB course in 18 different countries ranges from \$400 to \$12,242 for a class of 20, averaging \$3,537 or \$177 per participant
 - Often higher when governments attempting to provide training at scale – e.g. \$2,000 per firm for GEM project in Nigeria (5 days online + 12 in-person).

What should we expect training to do?

- What should we expect training to do – I offer two benchmarks:
 - *Return on education benchmark:*
 - typical training program lasts 5 days
 - Return on whole year of education is 7.6%
 - 5 days is 1/30th of a school year => should expect 0.5% return if training twice as effective as school, or 5% if training twenty times as effective.
 - *Return on investment benchmark:*
 - Typical training program costs \$177
 - Return on capital grants in de Mel et al. (2008) is 5% per month, so firm earning \$100 profit a month would earn \$8-9 more per month; at market interest rate of 2% per month, earn \$3.5 more per month
 - If think need to recover cost in 2 years, need \$7 per month more
 - So expect return of maybe 4-8% for \$100/month firm, even less for more profitable firm.

What does success look like?

- First thing we want to see is that business training succeeds in teaching firms better business practices
 - Typically leads to some improvement, but often not large: e.g. firms doing 30% of 28 practices before training, treatment effect is 5-6 p.p.
- Ultimately care about whether training enables firms to survive and grow -> focus on impacts on sales and profits
- Several potential channels to increase profits:
 - Produce goods more efficiently, lower expenses
 - Attract more customers, and sell more
 - Identify new products, sell more
 - May be better able to attract finance, and access government contracts
 - May change mindset and effort of entrepreneur
 - May help business better react to shocks (e.g. Covid-19) and survive downturns.
- But also reasons why might not succeed:
 - Even though business practices matter, training might not be very effective at getting firms to use them
 - If the binding constraint to firm growth is lack of finance, lack of customer demand, or lack of another key input, then unless business training can alleviate this constraint, implementing new practices might not help

Revisiting the Experimental Evidence

- One reason that early studies did not find significant effects was lack of statistical power – due to relatively small and heterogeneous samples, and difficulties measuring firm outcomes
- Since initial review, now more studies, some with larger samples and more precision.
- Use random effects meta-analysis
 - Puts more weight on studies with more precision

Figure 1: Estimates of the Impact of Business Training on Firm Profits



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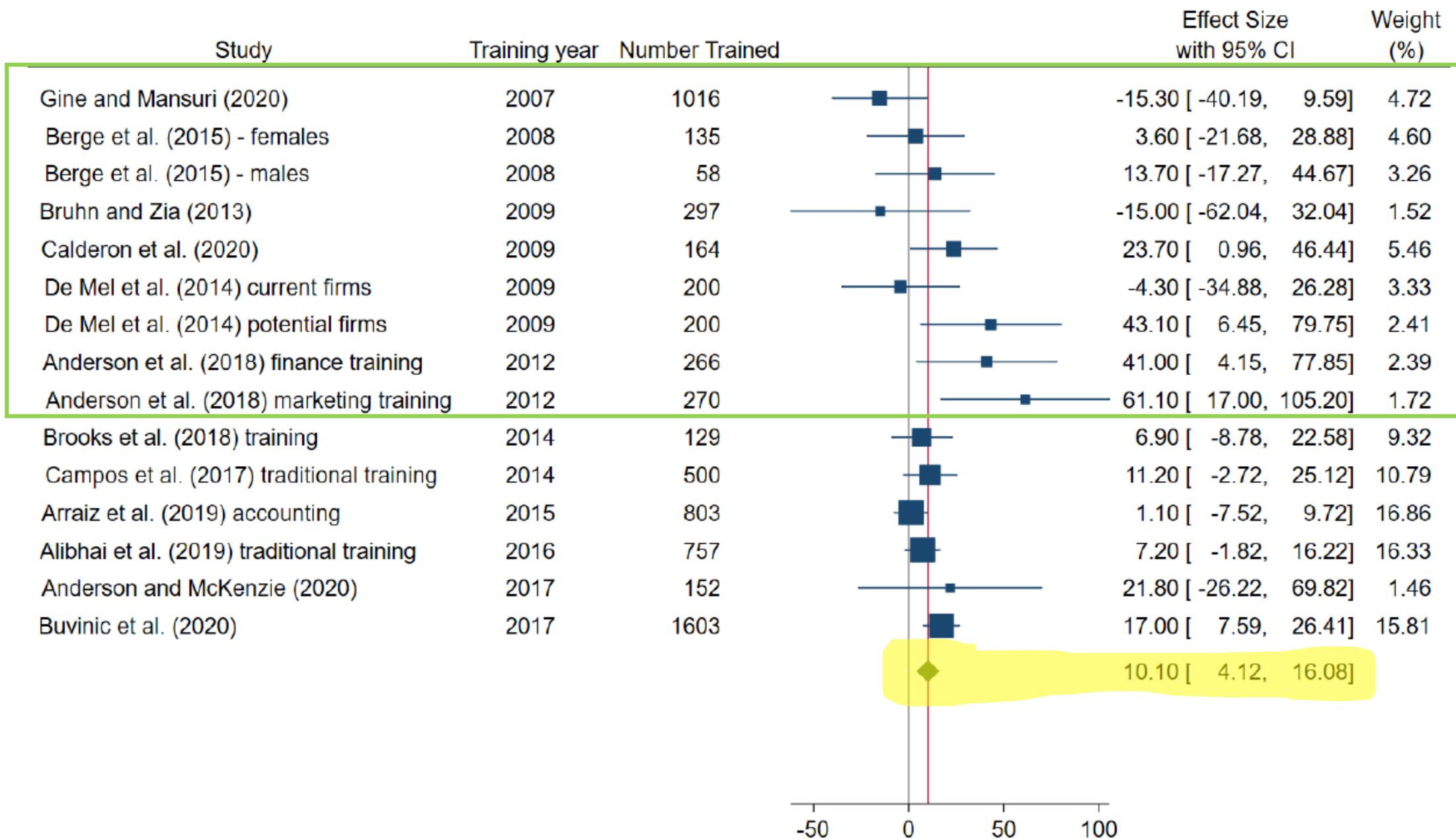
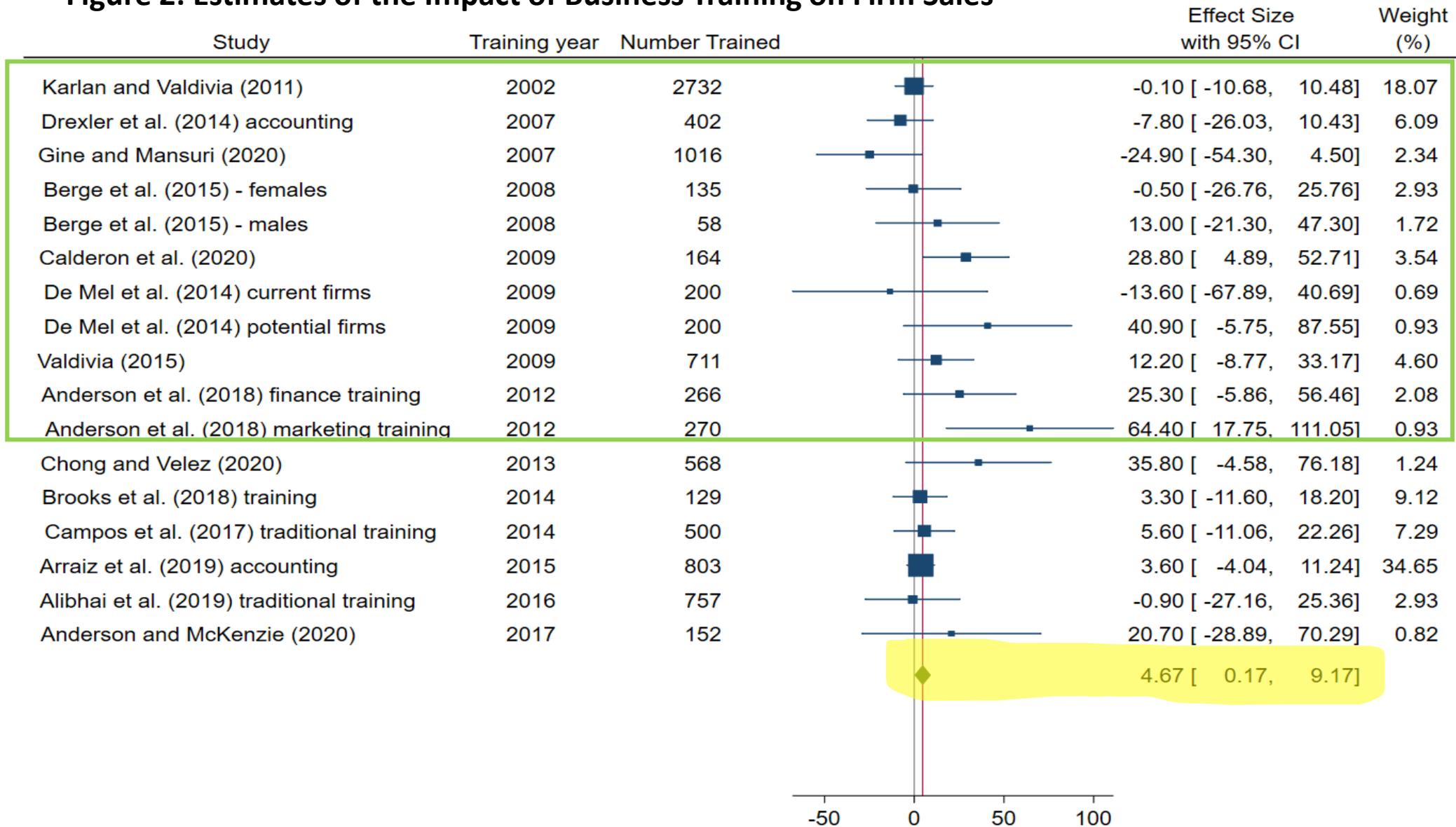


Figure 2: Estimates of the Impact of Business Training on Firm Sales



Random-effects REML model

Standard training does have positive impacts on average

- Effect on profits of 10.1 percent (95% C.I.: +4.1, +16.1)
- Effect on sales of 4.7 percent (95% C.I.: +0.2, +9.2).
- Most studies don't have enough power to detect impacts of this size



How can we make training better? Alternatives to Traditional Training

- **Gender-oriented training for women:**
 - Adds content on overcoming gender constraints
 - E.g. helping women enter new male-dominated sectors, teaching them how to better deal with dividing household and business tasks, bargain better, work together with other women, and overcome stereotypes.
 - E.g. ILO's Gender and Enterprise Together (GET Ahead) program

How can we make training better?

Alternatives to Traditional Training

- **Kaizen approach:**
 - focuses on production and quality management, typically tailored to a single manufacturing industry. Several studies have taught the Japanese concept of *kaizen*, or continuous improvement, to firms organized in industry clusters. This includes examining workflow and bottlenecks, the importance of routine machine maintenance, and techniques such as 5S, which seek to reduce waste, and ensure the workspace is clean and uncluttered.
- **Local customization and the use of peers or mentors**
 - curate local best practices, correct common misperceptions about implementing these practices, & provides specific examples of how firms have gone about using a particular practice in the local context
 - Use role models & mentors as either complement or substitute to trainers

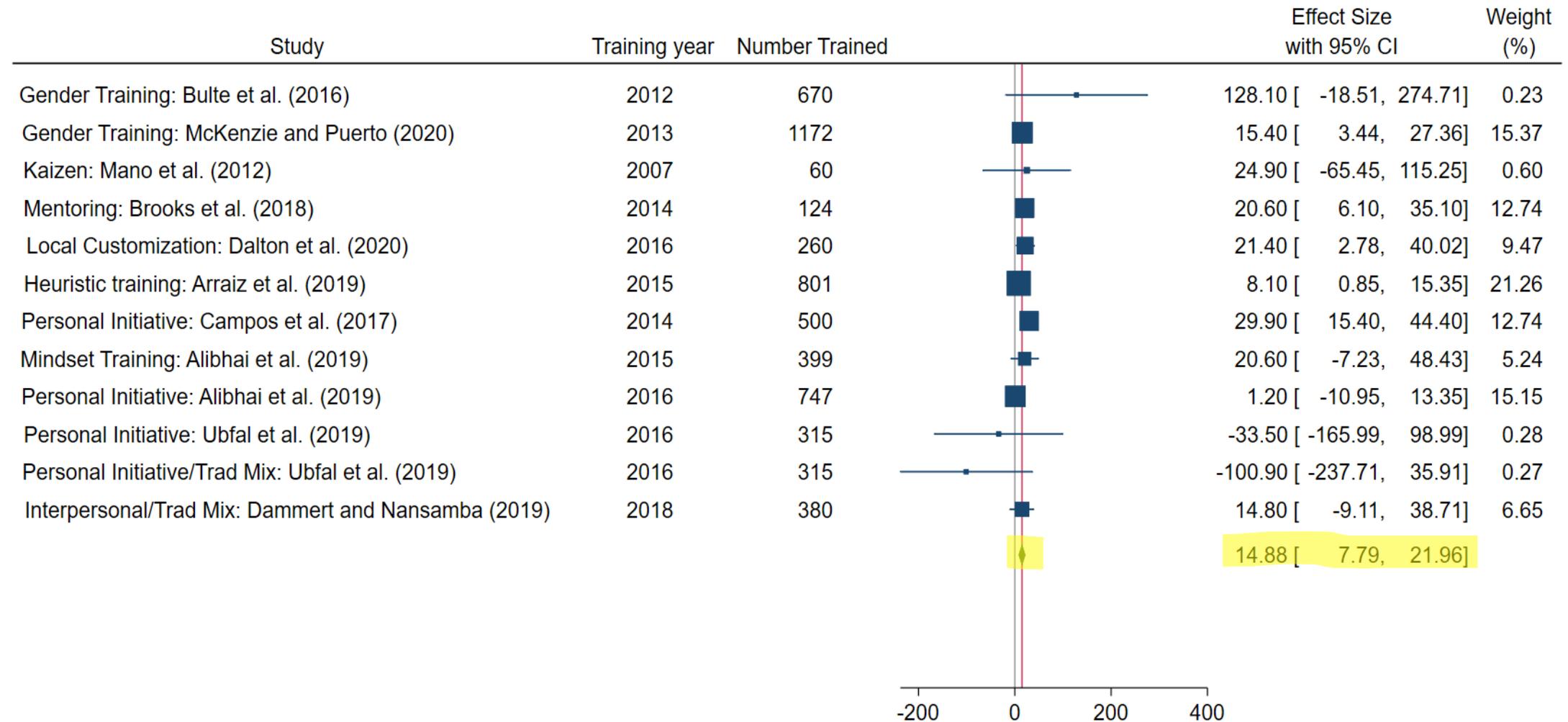
How can we make training better? Alternatives to Traditional Training

- **Heuristics and Rules of Thumb**
 - Simplify what is taught
e.g. focus on techniques to separate household and business finances; inform firms of importance of not running out of change
- **Using psychology**
 - Personal initiative training

Possible daily routine of the owner of a small grocery store

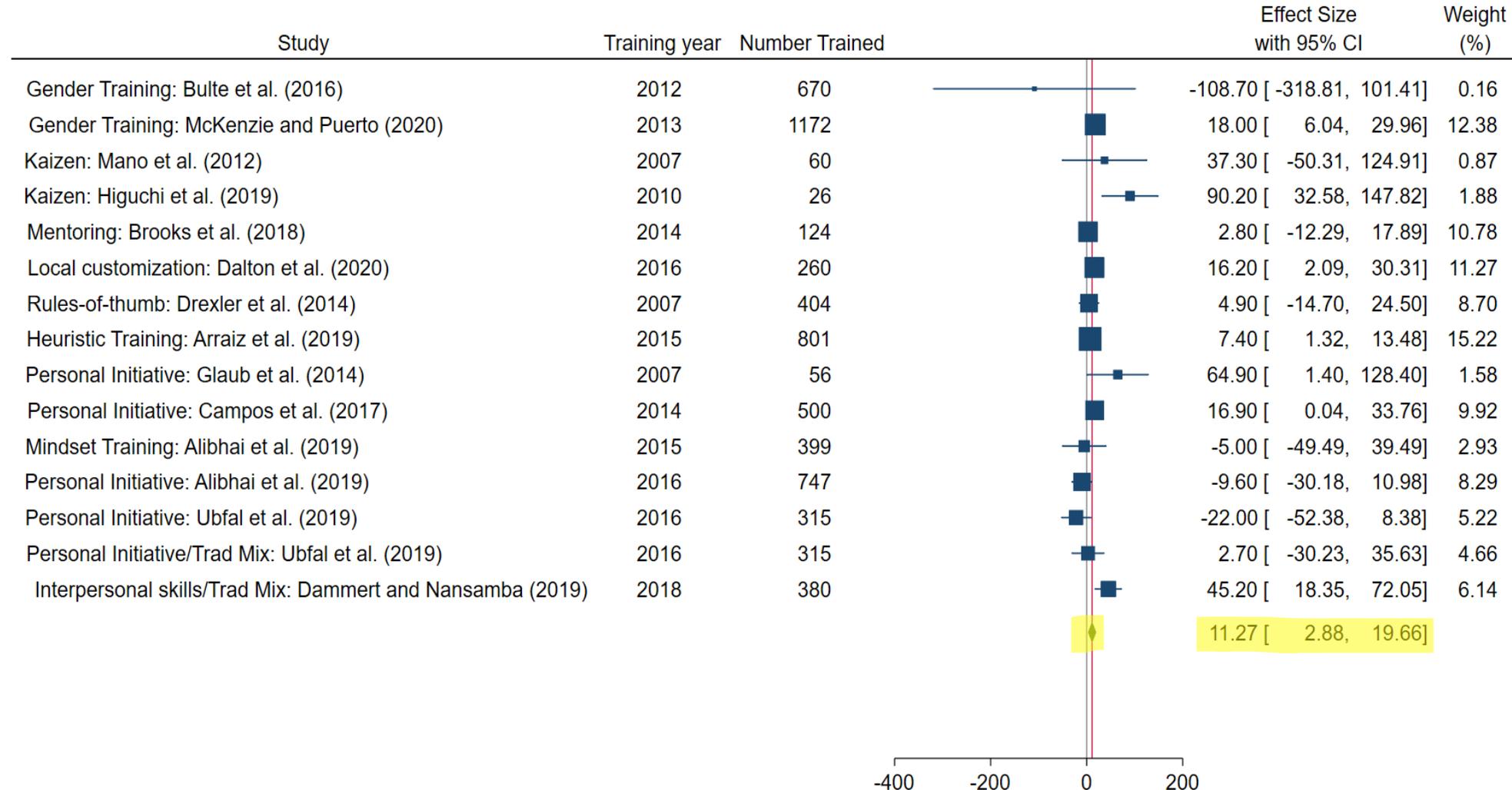
Time	Business activity
8.00	Open store and put up the usual advertisement outside the store.
- 8.45	Waiting for the first customer to come.
9.00	Phone call from supplier: he is not able to deliver fresh fruits today. This happens already the third time within the last two weeks. Hope it will get better soon.
9.30	Serving the customers. Some leave the store without buying anything because they were only looking for fresh fruits. Sending these customers to competitor next street.
11.00	Not many customers today, thus calling some friends by phone to use the time for chatting
13.00	Cleaning the outside-advertisement and the display.
14.30	Serving customers.
20.00	Closing the store.
- 20.20	Counting sales and calculating the turnover for today – not a good day...

Impact on Profits of Alternatives



Random-effects REML model

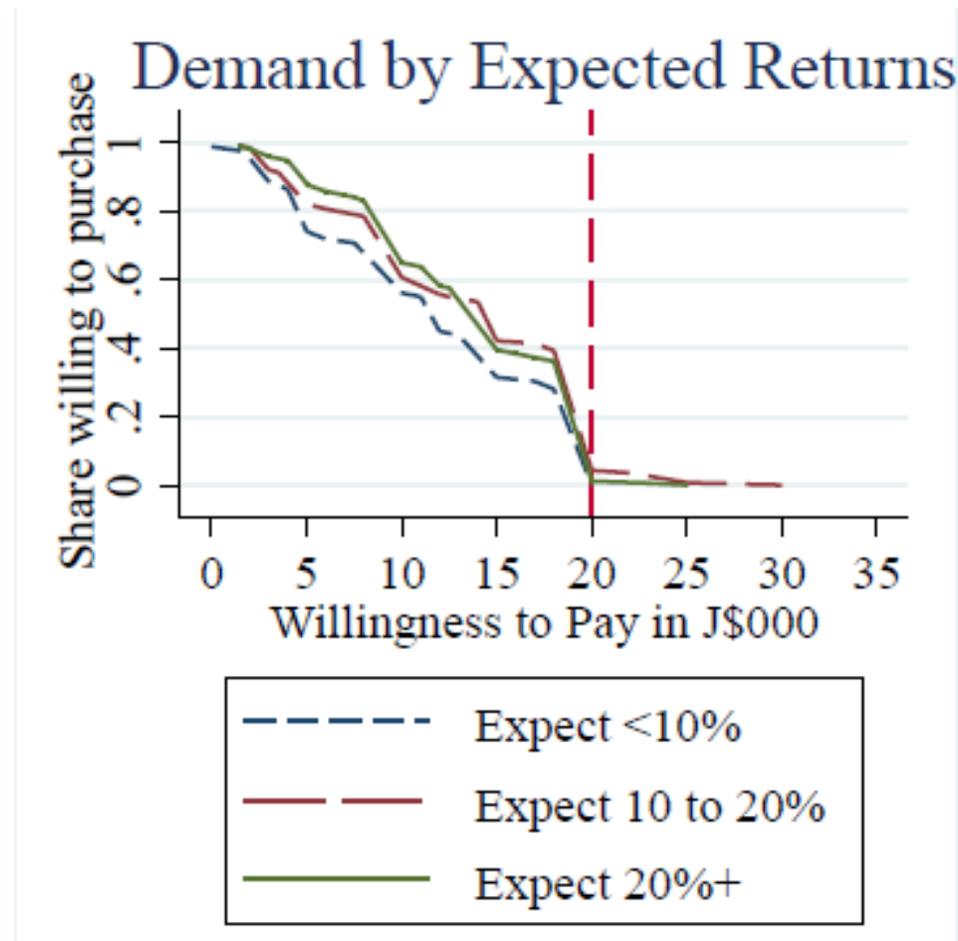
Impact on Sales of Alternative Trainings



Scaling up Business Training

- Classroom-based business training programs typically provide training to 15 to 40 small businesses at a time.
- Developing countries have hundreds of thousands, or millions of such small firms – for example, the Mexican Economic Census enumerated 4.1 million firms with 0 to 10 workers.
- The big challenge for policymakers is then how to provide good quality business training services at a scale that can reach vast numbers of firms while not being prohibitively expensive for the government

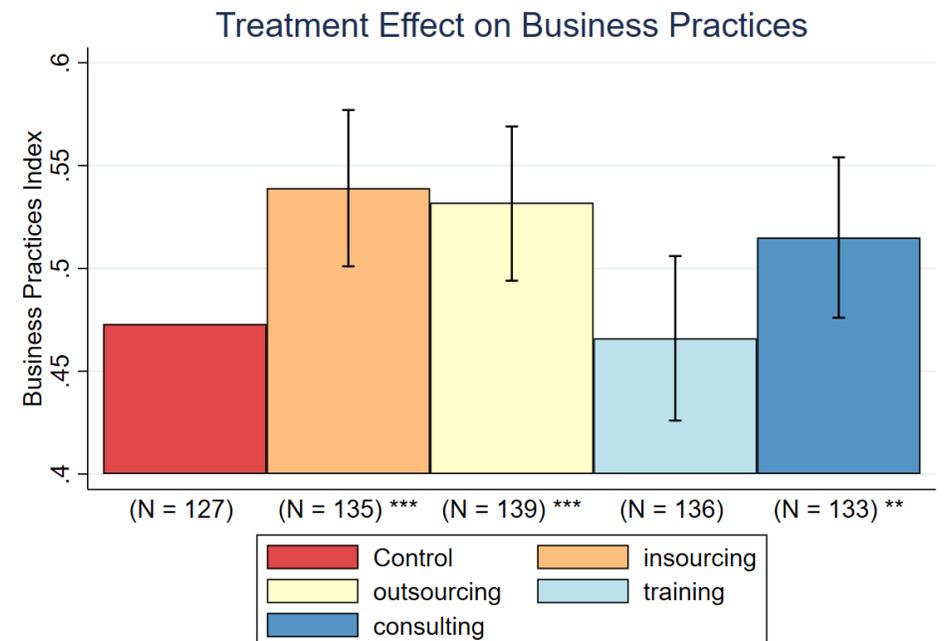
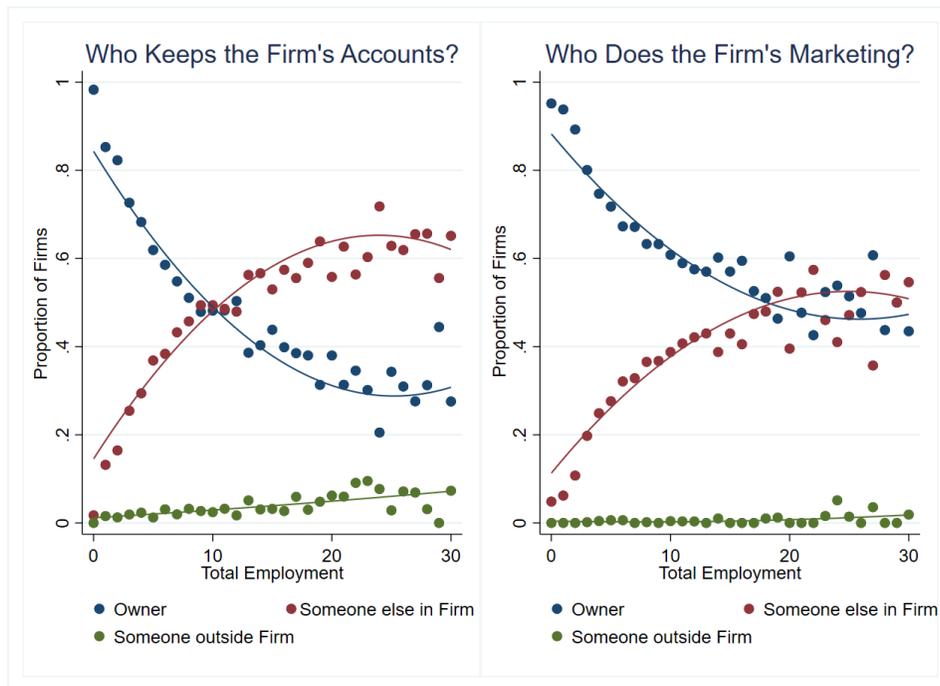
Approach 1: Charge firms for training and use the market for business services



- Demand inelastic
- Charging higher price selects those who expect higher returns from training; richer business owners; and more risk-seeking owners.
- Those who pay higher prices attend more sessions

Approach 1: Charge firms for training and use the market for business services

- The same amount of money that is used for training may be better spent helping firm hire talent on the market





على **النهار**
١٤ ديسمبر الساعة ١١ مساءً



Approach 2: use online technologies, SMS, tv

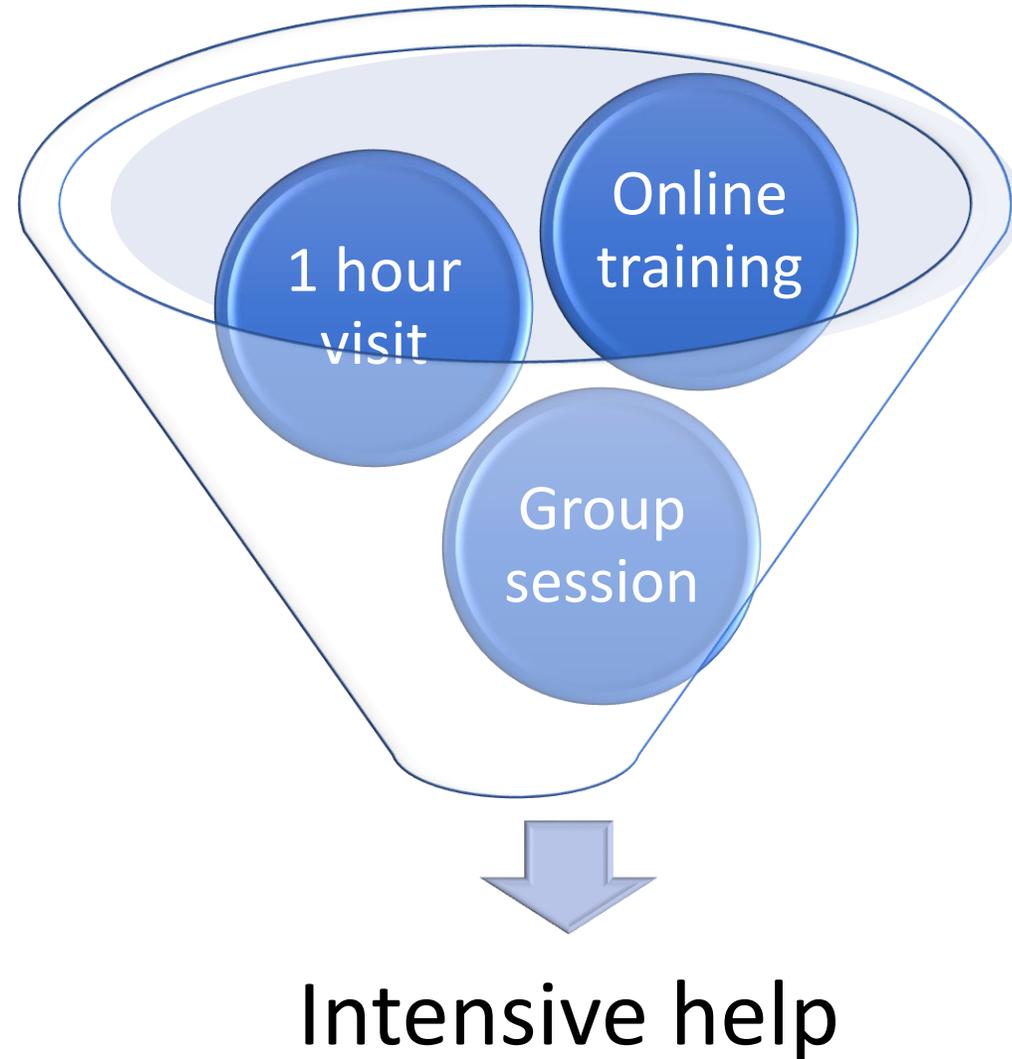
- **TV edutainment** – reaches large numbers, but average effects small
 - But may have impact on small number that can't detect
- **SMS or mobile apps**
 - Improvements modest to date
 - E.g. customized advice from mobile money operator to agents in Tanzania on inventory levels and rebalancing had very small effects
- **Interactive online training**
 - Especially relevant now with COVID-19
 - But no evidence to date

Approach 3: Funnel and Filter

- Rather than trying to train everyone, better target programs towards firms that will benefit most from it
- Pre-screen firms/Target on treatment effects – limited evidence on how to do

Funnel approach:

- Start with basic and cheap services to lots
- Firms who show interest and undertake effort get selected for some more intensive help



Conclusions: from over-optimism to over-pessimism, but still lots to learn

- 1) the practices that business training tries to teach are important for businesses, but training typically does not lead to businesses adopting many of these practices;
- 2) a typical training program is likely to have an average impact on firm profits and sales of approximately 5 to 10 percent. This may be enough for training to pay for itself, but will be very hard for many studies to detect;
- 3) the range of alternatives to traditional training do appear to offer some gains over the standard training approach alone, but we should also be realistic about how much larger these gains will be.
- 4) optimal training program is unlikely to be one-size-fits-all, and different variants of training will be useful for different types of firms