

# In Quest of Methods to Increase Entrepreneurial Activity: Field Experiment in Moldova.

Igor Asanov<sup>a,\*</sup>, Alla Levitskaia<sup>b</sup>

<sup>a</sup>*University of Kassel, Kassel, Germany*

<sup>b</sup>*Comrat State University, Comrat, Moldova*

---

## Abstract

We provide a field experiment to study the effect of entrepreneurial program in Gagauzia region, Moldova. We randomly assign applicants for the entrepreneurship training to three educational tracks: (1) Business and confidence training; (2) Confidence training; (3) No training (control group). To understand underlying behavioral mechanisms of the intervention we elicit in the lab-in-field experiment participants' behavioral characteristics. We find that confidence and ambiguity preference, but not risk preferences or self-efficacy, associated with entrepreneurial behavior. We also find that combination of business and confidence training affect an entrepreneurial related decision.

---

## 1. Introduction

Entrepreneurship is one of the key drivers of economic prosperity (Van Praag and Versloot, 2007). Governments invest heavily in entrepreneurial training hoping to increase entrepreneurial activity (European Commission, 2015). Unfortunately, little is known which entrepreneurial training effectively promotes entrepreneurship and if this training is cost-effective.

Meta-studies that aggregate information over all previous empirical work finds only small positive effects of training on entrepreneurial intentions, entrepreneurship-related human capital, and outcomes (Unger et al., 2011; Martin et al., 2013; Valerio et al., 2014; Bae et al., 2014; Mcconnell and Simonetta, 2009; Fairlie et al., 2015). Moreover, entrepreneurial intentions only weakly translate to actual actions (Kautonen et al., 2015) and entrepreneurship-related human capital is not a good predictor of business

---

\*Corresponding author

*URL:* [igor.asanov@uni-kassel.de](mailto:igor.asanov@uni-kassel.de) (Igor Asanov), [levital@mail.ru](mailto:levital@mail.ru) (Alla Levitskaia)

success (Unger et al., 2011). All this calls for rigorous study and search of training that can foster entrepreneurship.

The meta-analysis of observational studies (Zhao et al., 2010; Hamilton, 2014) provide evidence that personality traits are a strong predictor of entrepreneurial intentions and performance. This observation goes in line with a recent discussion that the character is important for future success (Heckman, James J., John Eric Humphries, and Tim Kautz, 2014; Sampson, 2016) and, specifically, confidence can be relevant for entrepreneurial activity (Åstebro et al., 2014). One can target this personal characteristic to increase the number of entrepreneurs. Nevertheless, it is not clear if the confidence training might, indeed, boost confidence and if it translates to the entrepreneurial activity.

We aim to fill this research gap by providing a randomized control trial and a lab-in-field experiment in Gaugazia region, Moldova (October 2015) that investigates whether the confidence training has a positive impact on confidence and entrepreneurial related outcomes. We also want to understand what are the underlying behavioral mechanisms of this change by using incentivized task to measure confidence level, cognitive abilities, risk and ambiguity attitudes.

We find that confidence level, but not self-efficacy, is associated with entrepreneurial related behavior and effect of the entrepreneurial training. In lines with previous literature (Koudstaal et al., 2015) we do not find that risk attitudes explain entrepreneurial related behavior, but in accordance with laboratory findings (Åstebro and Gutierrez, 2016) we find that ambiguity aversion drives participation in the business competition and start-up activity. We also find that business and confidence training affects the entrepreneurial related decision.

The rest of the paper proceeds as follows: Section two provides a review of the related literature. Section three presents context of the study and study design. Section four provides the results of the experiment. Section five concludes.

## 2. Related Literature

Most studies that examine entrepreneurial training rely on observational, correlation research (Unger et al., 2011; Martin et al., 2013; Bae et al., 2014; Valerio et al., 2014; Grimm and Paffhausen, 2015). Meta-research shows that estimates from these studies can be biased due to various form of endogeneity – selection bias, simultaneity, omitted variable bias. Therefore, various researchers (Martin et al., 2013; Bae et al., 2014; Valerio et al., 2014) call for carrying out randomized control trials, field experiments.

The large scale randomized control trial GATE provided by the U.S. gov-

ernment show that though the entrepreneurial training increases business ownership at a small rate in the short-run, after a year the difference disappears making the program cost-ineffective for society (McConnell and Simonetta, 2009; Fairlie et al., 2015). These results are replicated in several follow-up studies as well as under different circumstances showing that standard business training has low or no impact (McKenzie and Woodruff, 2014; de Mel et al., 2014).

The studies that focus on personal characteristics seem to result in changes in several domains of personality relevant for entrepreneurial activity (Premand et al., 2012). However, it is still unclear if those changes lead to changes in the entrepreneurial related outcomes (Mckenzie and Woodruff, 2014) that demands rigorous analysis of effect of training that change personal characteristics on entrepreneurial activity.

Moreover, the studies typically rely on subjective by necessity self-reported data. To have more objective measures one can combine self-reported data with the analysis of incentivized behavior in settings that mirror economic situations e.g. market entry, investment decisions.

Koudstaal et al. (2015) combine surveys and lab-in-field experiments to measure the difference in risk attitudes between entrepreneurs, managers, and employees. Using this methodology they reconcile previous mixed results: Entrepreneurs only perceive themselves as less risk averse, while the experimental measure shows that risk attitudes are similar between groups. Berge et al. (2015) provide additional evidence that risk attitudes do not explain entrepreneurial behavior but they show that willingness to compete measured in experimental games has the positive association with entrepreneurial related outcomes.

### 3. Context and Study Design

#### 3.1. Background

The Comrat State University provide early business competition and entrepreneurship training to promote entrepreneurial activity in the Gagauzia region, Moldova.<sup>1</sup> The typical program consist of standard business courses and business plan competition that result in financial support of winners.

In 2015 the program is expanded. It is advertised to recruit the subjects from the whole region and complemented with confidence training. Applicants submit the online application describing their business idea and providing basic business related information: Required investment, access to the financial

---

<sup>1</sup>Moldova have relatively low GDP per capita – 5047\$ PPP (World Bank, 2016)) and medium level of human capital index – 71st, (Forum World Economic, 2016).

means (bank, friends, own, other), residence (Comrat or not), business experience, gender, students status. All applicants are invited to participate in the business competition. 99 subjects show up on the first day of the training.

### *3.2. Study Design*

#### *3.2.1. Field Experiment*

We randomly assign applicants for the training in 2015 to three educational tracks, treatments: (1) Business and confidence training; (2) Confidence training; (3) No training (control group). To avoid imbalances in small sample, we employ min-max t-statistic method for randomization balancing on the next variables: business experience, city (Comrat or not), required investment, access to the financial means, student status. The descriptive statistics of baseline characteristics by treatment provided in Appendix A.

The duration of the full course (Business and confidence training) is 5 days and confidence training is 2 days. During business training part subjects study basics of management, basics of accounting and finance, taxation, business planning, innovation management. During the confidence training part subjects study leadership, confidence and personal growth courses. The courses were given both by university professors, practitioners, and government administrators.

After the training, we ask about the investment that participants would like to get for their start-ups from third-party and their willingness to take a loan from the bank. These questions are incentivized since the decision about funding their projects and giving the loan is based on the subjects answer. We inform subjects about it by writing on the computer screen: “Important! Please take the next questions seriously, they will be considered by the committee[bank] that decide about financing the business project.” These are the key dependent variables in our study. We also observe if subjects decide to participate in the competition (give a pitch).

After a year (winter, 2016) we provide a phone interview to understand if the applicants started up the business. We double check the results of interview with official statistic.

#### *3.2.2. Lab-in-field experiment*

We implement incentivized computerized lab-in-field experiments to elicit subjects behavioral characteristics before and after the training.<sup>2</sup> Sessions of the experiment before the training consist of three tasks. Sessions after the training consist of only one task. Subjects are payed for one choice in one of

---

<sup>2</sup>We use use z-tree software for the experiments (Fischbacher, 2007).

the sessions chosen at random to avoid income effects. Subject can earn from 30 Leu ( $\approx \text{€}1.4$ ) to 700 Leu ( $\approx \text{€}30$ ). All sessions finalized with a questioner.

**Task 1.** We measure participants’ level of confidence before and after the training using the version of market entry game (Camerer and Lovoal, 1999). In this game subjects have to decide if to enter into the competition. Their payoffs depend on the market capacity and the relative rank of the subject (see table 1). Subjects’ rank are (1) taken at random from a uniform distribution in random condition (treatment) and (2) based on the quiz answers in skill condition (treatment). The rank is unknown to subjects. Subjects make 12 entry decision in each condition and the sequence of market capacity is taken at random but identical in both conditions.

Table 1: Payoffs of Successful Entrants

Rank	Market Capacity			
	2	4	6	8
1	330	200	140	110
2	170	150	120	100
3		100	100	80
4		50	70	70
5			50	60
6			20	40
7				30
8				20

**Task 2.** We measure cognitive abilities with cognitive reflection test (Frederick, 2005). This test highly correlate with standard measures of cognitive abilities e.g. Scholastic Achievement Test (SAT). It consist of only three questions. Subject can come up easily to the answer, however, the correct answer is “counter-intuitive” and demands additional reflection. In the experiment each correct answer can brings 100 Leu to the subject.

**Task 3.** To measure the subjects’ risk and ambiguity preferences we employ the elicitation procedure as in Cettolin and Riedl (2016). We use 6 lotteries with two outcomes eliciting the subjects certainty equivalents. Table 2 shows the outcomes and the probabilities used. Subjects face the description of the lottery and a list of 20 sure amounts. The sure amounts decrease with equal step from the lottery’s highest to lowest outcome. The probabilities are expressed both in percentages and in form of the pie chart. The subjects are not allowed to switch back and forth between the sure amount and the lottery. Thus, we elicit a unique switching point for each lottery.

Similarly we elicit subjects’ attitudes towards ambiguity. We confront them with 6 decision problems where they make choices between an ambiguous

Table 2: Lotteries,  $p$  is the probability of winning  $r_1$  points.

Lottery	$p$	$r_1$	$r_2$
1	0.20	400	0
2	0.50	160	0
3	0.80	100	0
4	0.50	120	40
5	0.25	160	40
6	0.33	120	0

lottery and a number of risky ones. In the same decision problem both the ambiguous lottery and the risky lotteries have the same pairs of outcome and the outcomes are the same as in the table 2.

## 4. Results

### 4.1. Confidence and Sample Characteristics

We find that despite the high level of self-reported self-efficacy subjects are underconfident on average in the market entry game. Subjects reported self-efficacy level (average across six questions) is 4.7 on the scale from 1 to 6, whereas the difference in frequency between number of entering choice in entry game under skill rank and random rank conditions is negative, -0.04 (SE=0.02). Applying non-parametric Wilcoxon test we can reject the null hypothesis that there is no difference between random and skill rank conditions ( $p = 0.0239$ ).<sup>3</sup>

The distribution of confidence types by treatment is reported in table 3: overconfident type enter in the skill condition more often than in random condition. It shows that (1) most of the subjects non-overconfident and (2) the distribution is balanced across treatments.

Table 3: Distribution of Confidence Types by Treatment (Baseline)

	Control T.	Confid. T.	Full T.	Total
Overconfident	6	6	8	20
Non-overconfident	16	22	21	59

As concerns other characteristics, subjects have relatively low cognitive skills: They answer on average only on 0.08 ( $s.e. = 0.02$ ) out of 3 questions

<sup>3</sup>Throughout the paper the estimations of the exact Wilcoxon test are based on the Shift Algorithm by Streitberg and Röhmel (1986).

in cognitive reflection test and most of subjects answering none of the questions correctly: 0 correct - 79%, 1 correct - 20%, 2 correct - 1%, 3 correct - 0%. Subjects are risk-averse:  $\alpha = 0.53$  (*s.e.* = 0.09).<sup>4</sup> Risk aversion level is consistent with previous studies (see meta-analysis by Filippin and Crosetto, 2016). Subjects are also highly ambiguity averse: the mean prior-belief is 0.26 (*s.e.*=0.02).

#### 4.2. Treatment Effect

In this section we examine the effect of different training. We assess the Intent to Treat (ITT) effect using the next regression specification:

$$Y = \beta_0 + \beta_F T_{Full} + \beta_{Conf} T_{Confidence} + X_i + u_i, \quad (1)$$

, where  $Y$  – is outcome measure,  $T_{Full}$  – dummy variable that equals to 1 if subject is assigned to full training,  $T_{Conf}$  – dummy variable that equals to 1 if subject is assigned to confidence training,  $X_i$  – is a vector of control variables to account for balanced method of randomization (Bruhn and McKenzie, 2009): business experience, a city, required investment, access to the financial means, student status.

We use robust linear regression for outcome variable the requested investment level since it is not normally distributed (Shapiro-Wilk test of normality:  $p = 0$ ). In a case of binary variables (Competition, start-up rate) and in case variable expressed in percentage (requested loan level) we use logistic regression. The results are reported in the table 4.

We observe that full treatment has a positive effect on the requested amount of investment (Full Treat.:  $p = 0.0469$ ). However, one can see that we cannot reject null-hypothesis about no difference between training for the rest of the variables at any conventional level of significance: Neither for behavior in the entry game after the treatment (confidence), share of the loan request, participation in business competition, nor for start-up rate one year after the intervention.

The intervention seems to be ineffective. It is especially evident if one looks at the distribution of a number of start-ups by treatment (see table 5). The number of start-ups per treatment is identical suggesting that the

---

<sup>4</sup>To assess  $\alpha$  we estimate subjects'  $i$  certainty equivalents  $ce_{i,n}$  for each risky lottery  $n$  by taking the arithmetic mean of the smallest sure amount preferred to the lottery and the next sure amount in the list. We use CRRA utility function  $U(r) = r^\alpha$ , where  $0 < \alpha < 1$  indicates risk aversion,  $\alpha = 1$  denotes risk neutrality and  $\alpha > 1$  implies risk seeking preferences. We estimate  $\alpha$  by minimizing the sum of squares difference between theoretically predicted certainty equivalent for each lottery  $n$  and the elicited certainty equivalent of subject  $i$  for corresponding lottery. We correct for heteroscedasticity by normalizing the payoffs of lotteries to uniform length. Similarly we assess subjects ambiguity aversion.

Table 4: Training Effect

	<i>Dependent variable:</i>				
	Confidence <i>OLS</i>	Invest. <i>robust linear</i>	Loan (%) <i>logistic</i>	Compet. <i>logistic</i>	Start-up <i>logistic</i>
	(1)	(2)	(3)	(4)	(5)
Full T. (ITT)	0.02 (0.05)	27.92** (13.63)	0.28 (0.75)	0.71 (0.67)	-0.07 (1.20)
Conf. T. (ITT)	0.06 (0.05)	16.95 (13.79)	0.55 (0.73)	0.29 (0.69)	-0.52 (1.44)
Constant	-0.02 (0.07)	-16.95 (20.85)	-2.31* (1.19)	-3.14*** (1.07)	-5.98** (2.71)
Set of Controls	Yes	Yes	Yes	Yes	Yes
Observations	75	75	75	91	91

*Note:*

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

treatments barely had any effect on the key outcome of interest – start-up activity.

Table 5: Distribution of Start-ups by Treatment (One Year After)

	Full T.	Confid. T.	Control T.	Total
No Start-Up	33	33	25	91
Start-Up	2	2	2	6

#### 4.3. Behavioral Characteristics and Enterpreneurial Behavior

Now, we turn to the analysis of behavioral characteristics and entrepreneurial behavior. We assess similar model to regression 1 but include behavioral characteristics measured in the lab-in-field experiment at baseline: Confidence level, self-efficacy, cognitive abilities, risk and ambiguity preferences. The results are reported in table 6.

Intrestingly, we find that confidence level is associated with share of the loan requested (Column 2, confidence:  $p = 0.0138$ ) and propensity to participate in bussines competition (Column 3, confidence:  $p = 0.0176$ ). We also find that ambiguity seeking behavior has positive association with participation in bussines competition (Column 4, Ambiguity:  $p = 0.0676$ ) and starting-up the business (Column 4, Ambiguity:  $p = 0.0673$ ). These finding

Table 6: Subject characteristics and entrepreneurial behavior

	<i>Dependent variable:</i>			
	Invest. <i>robust linear</i>	Loan (%) <i>logistic</i>	Compet. <i>logistic</i>	Start-up <i>logistic</i>
	(1)	(2)	(3)	(4)
Full Treat. (ITT)	45.15** (22.96)	0.55 (0.83)	1.49* (0.78)	0.51 (2.26)
Confidence Treat. (ITT)	32.72 (22.80)	0.53 (0.78)	0.23 (0.73)	-2.88 (2.33)
Confidence Level	-73.43 (62.13)	-5.51** (2.24)	-5.02** (2.11)	-5.49 (8.69)
Self-efficacy	1.58 (9.47)	-0.03 (0.32)	0.01 (0.32)	-0.02 (0.87)
Risk Preferences ( $\alpha$ )	-3.06 (13.87)	-0.18 (0.46)	0.60 (0.40)	1.77 (1.23)
Ambiguity Preferences	-74.22 (54.12)	2.19 (1.82)	3.30* (1.81)	13.60* (7.43)
Cognitive Abilities	-59.87 (62.72)	0.69 (2.04)	0.05 (1.98)	2.79 (6.20)
Constant	-27.19 (48.67)	-2.08 (1.64)	-5.08*** (1.76)	-17.29** (8.04)
Set of Controls	Yes	Yes	Yes	Yes
Observations	75	75	91	91

*Note:*

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

goes in line with laboratory findings (Åstebro and Gutierrez, 2016). In line with previous studies (Praag and Mirjam, 2014) we do not find the relation between risk preferences measured in the laboratory setting and entrepreneurial related behavior.

#### 4.4. Heterogeneity of Treatment Effect: Requested Amount of Investment.

Finally, we analyze heterogeneous treatment effect on the requested amount. The left plot on the figure 1 shows the level of requested investment amount by treatment and confidence level. We observe the difference in requested amount between treatments with the largest difference between full and control treatments. More importantly, this disparity is solely driven by non-overconfident subjects.

To check if observed regularity is not an artifact of initial conditions, we plot the difference in requested amount before and after the program (see figure 1, right plot). Indeed, the non-overconfident subjects change the requested amount, whereas overconfident not.

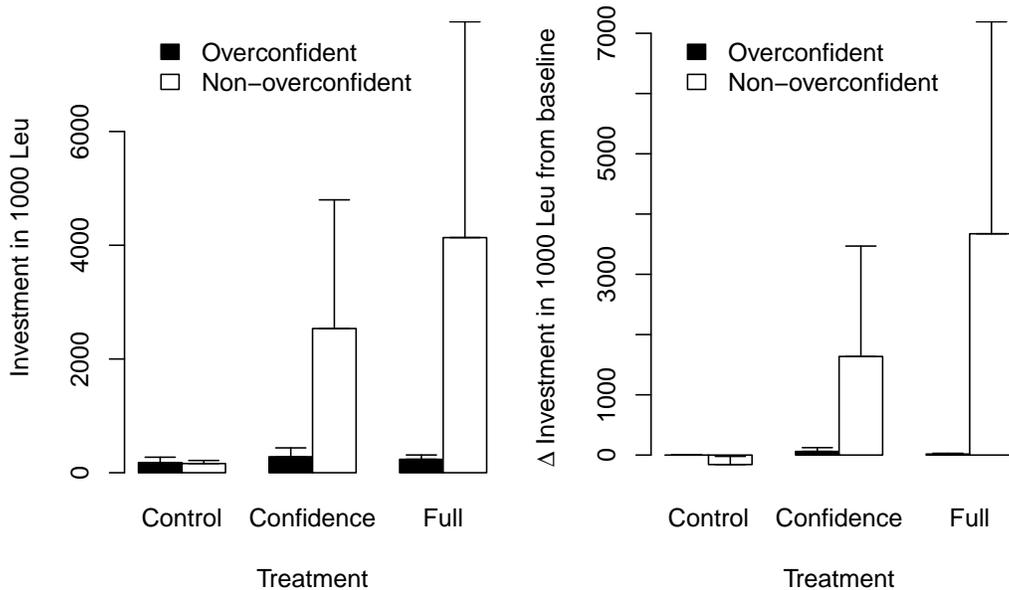


Figure 1: Required investment by treatment and confidence level.

To assess the significance of the observed result we use regression analysis similar to regression 1 but we interact the treatment dummy with the confidence level at the baseline (see table 7). We find that, indeed, less confident subjects are more likely to respond to the full treatment (Column 1, Full T.X Conf. Level:  $p = 0.0373$ ).

Table 7: Determinants of Required Investment Request

	<i>Dependent variable:</i>	
	Investment in 1000 Leu	
	(1)	(2)
Full Treat. (ITT)	76.96*	164.77*
	(41.09)	(98.12)
Full T. (ITT)X Conf. Level	-642.87**	-1,336.21**
	(261.31)	(627.70)
Confidence Treat. (ITT)	50.44	129.62
	(42.05)	(99.15)
Conf. T. (ITT) X Conf. Level	93.36	12.87
	(263.99)	(631.46)
Confidence Level	-48.64	13.12
	(184.67)	(447.83)
Self-efficacy		-25.77
		(40.16)
Risk Preferences ( $\alpha$ )		23.45
		(60.52)
Ambiguity Preferences		-408.96*
		(231.58)
Cognitive Abilities		-180.23
		(273.85)
Constant	-93.65	-63.91
	(62.62)	(206.79)
Set of Controls	Yes	Yes
Observations	75	75

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

We do not observe that other characteristics – risk aversion, ambiguity aversion, cognitive abilities, self-efficacy measure – play a significant role in explaining the requested level of investment. In addition, we test if subjects change in requested amount of investment is mediated by their self-efficacy level. We run similar robust linear regression interacting treatment effect with self-efficacy measure (see table 7 in Appendix B.). However, we can not reject the null-hypothesis that there is no difference between people with high level of self-efficacy in response to treatment (Model 1, Full T.X Self-efficacy Level:  $p = 0.2428$ ; Confidence T.X Self-efficacy Level:  $p = 0.4465$ )

## 5. Conclusion

We provide randomized control trial to assess the effect of different types of entrepreneurial training on entrepreneurial related behavior and to understand what are the underlying behavioral mechanisms of this change. To obtain the more objective measure of subjects characteristics than self-reported information we use lab-in-field experiment measuring confidence, risk, ambiguity attitudes and cognitive abilities.

We find that despite the high level of self-reported self-efficacy subjects are underconfident on average in the market entry game. They have relatively low cognitive skills, highly risk and ambiguity averse that can be explained by the disadvantageous position of people who stay in Gagauzia region of Moldova.

With regard to the main outcomes of our study, we find that combination of confidence and business training significantly changes the requested amount of investment. Interestingly, we find that the combination of confidence and business training has the higher effect on the people who had a low level of confidence measured in the confidence game. However, we do not find that self-efficacy is mediating this effect.

We do not find that any training impacts on the willingness to take a loan, participate in business competition or start-up activity. However, we observe that initial confidence level is a strong predictor of requested loan amount and participating in business competition(giving a pitch). We do not observe that cognitive abilities or risk attitudes are associated with higher intentions of engaging in entrepreneurial activity, taking a larger loan or willingness to invest more. We also find ambiguity preferences are associated with participation in the business competition and starting up the business.

In a nutshell, we find that confidence training together with business education affects the entrepreneurial related decision and the confidence level plays a significant role in entrepreneurial-related behavior. However, we do not find that training affects the start-up rate, but ambiguity preferences are associated with the choice to start a business. Future research is needed to

assess if this results can be generalized to a different context and if one find a better treatment that changes confidence and ambiguity preferences.

## References

- Ástebro, T. and Gutierrez, C. (2016), ‘The Impact of Overconfidence on Market Entry’, *Working Paper* (HEC Paris), 0–44.
- Astebro, T., Herz, H., Nanda, R. and Weber, R. a. (2014), ‘Seeking the Roots of Entrepreneurship: Insights from Behavioral Economics’, *Journal of Economic Perspectives* **28**(3), 49–70.  
**URL:** <http://pubs.aeaweb.org/doi/abs/10.1257/jep.28.3.49>
- Bae, T. J., Qian, S., Miao, C. and Fiet, J. O. (2014), ‘The Relationship Between Entrepreneurship Education and Entrepreneurial Intentions: A Meta-Analytic Review’, *Entrepreneurship: Theory and Practice* **38**(2), 217–254.
- Berge, L. I. O., Bjorvatn, K., Garcia Pires, A. J. and Tungodden, B. (2015), ‘Competitive in the lab, successful in the field?’, *Journal of Economic Behavior and Organization* **118**, 303–317.
- Bruhn, M. and McKenzie, D. (2009), ‘In Pursuit of Balance: Randomisation in Practice in Development Field Experiments’, *American Economic Journal: Applied Economics* **1**(4), 200–232.
- Camerer, C. and Lovallo, D. (1999), ‘Overconfidence and excess entry: An experimental approach’, *American economic review* **89**(1), 306–318.
- Cettolin, E. and Riedl, A. (2016), ‘Justice under Uncertainty’, *Management Science* **XX**(XX), XX.  
**URL:** <http://hal.archives-ouvertes.fr/halshs-00086032/>
- de Mel, S., McKenzie, D. and Woodruff, C. (2014), ‘Business training and female enterprise start-up, growth, and dynamics: Experimental evidence from Sri Lanka’, *Journal of Development Economics* **106**, 199–210.  
**URL:** <http://dx.doi.org/10.1016/j.jdeveco.2013.09.005>
- European Commission (2015), *Entrepreneurship education: A road to success*.
- Fairlie, R. W., Karlan, D. and Zinman, J. (2015), ‘Behind the GATE experiment: Evidence on effects of and rationales for subsidized entrepreneurship training’, *American Economic Journal: Economic Policy* **7**(2), 125–161.  
**URL:** <http://www.nber.org/papers/w17804>

- Filippin, A. and Crosetto, P. (2016), ‘A Reconsideration of Gender Differences in Risk Attitudes’, *Management Science* .
- Fischbacher, U. (2007), ‘z-Tree: Zurich toolbox for ready-made economic experiments’, *Experimental economics* **10**(2), 171–178.  
**URL:** <http://link.springer.com/10.1007/s10683-006-9159-4>
- Forum World Economic (2016), *The human capital report 2016*.
- Frederick, S. (2005), ‘Cognitive Reflection and Decision Making’, *Journal of Economic Perspectives* **19**(4), 25–42.  
**URL:** <http://pubs.aeaweb.org/doi/abs/10.1257/089533005775196732>
- Grimm, M. and Paffhausen, A. L. (2015), ‘Do interventions targeted at micro-entrepreneurs and small and medium-sized firms create jobs? A systematic review of the evidence for low and middle income countries’, *Labour Economics* **32**, 67–85.  
**URL:** <http://dx.doi.org/10.1016/j.labeco.2015.01.003>
- Hamilton, B. (2014), ‘Right Stuff? Personality and Entrepreneurship.’, *Personality and Entrepreneurship* (May, 19, 2014).  
**URL:** [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2438944](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2438944)
- Heckman, James J., John Eric Humphries, and Tim Kautz, E. (2014), *Achievement Tests and the Role of Character in American Life*.  
**URL:** [http://home.uchicago.edu/tkautz/Heckman\\_Kautz\\_2014\\_Achievement\\_Tests.pdf](http://home.uchicago.edu/tkautz/Heckman_Kautz_2014_Achievement_Tests.pdf)
- Kautonen, T., van Gelderen, M. and Fink, M. (2015), ‘Robustness of the theory of planned behavior in predicting entrepreneurial intentions and actions’, *Entrepreneurship: Theory and Practice* **39**(3), 655–674.
- Koudstaal, M., Sloof, R. and van Praag, M. (2015), ‘Risk, Uncertainty, and Entrepreneurship: Evidence from a Lab-in-the-Field Experiment’, *Management Science* (May 2016), mnsoc.2015.2249.  
**URL:** <http://www.forskningsdatabasen.dk/en/catalog/2289394513>
- Martin, B. C., McNally, J. J. and Kay, M. J. (2013), ‘Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes’, *Journal of Business Venturing* **28**(2), 211–224.  
**URL:** <http://dx.doi.org/10.1016/j.jbusvent.2012.03.002>
- McConnell, S. and Simonetta, J. (2009), *Growing America Through Entrepreneurship: Final Evaluation of Project GATE*, Technical Report US Department of Labor, Washington DC.

- McKenzie, D. and Woodruff, C. (2014), ‘What are we learning from business training and entrepreneurship evaluations around the developing world?’, *World Bank Research Observer* **29**(1), 48–82.
- Praag, V. and Mirjam, C. (2014), ‘Risk, Uncertainty and Entrepreneurship: Evidence from a Lab-in-the-Field Experiment’.
- Premand, P., Brodmann, S., Almeida, R. K., Grun, R. and Barouni, M. (2012), ‘Entrepreneurship Training and Self-Employment among University Graduates: Evidence from a Randomized Trial in Tunisia’, *IZA Discussion Papers* (7079).  
**URL:** <http://ftp.iza.org/dp7079.pdf>
- Sampson, R. J. (2016), ‘The Characterological Imperative: On Heckman, Humphries, and Kautz’s The Myth of Achievement Tests: The GED and the Role of Character in American Life’, *Journal of Economic Literature* **54**(2), 493–513.
- Streitberg, B. and Röhmel, J. (1986), ‘Exact distributions for permutations and rank tests: An introduction to some recently published algorithms’, *Statistical Software Newsletter* **12**(1), 10–17.  
**URL:** <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Exact+distributions+f>
- Unger, J. M., Rauch, A., Frese, M. and Rosenbusch, N. (2011), ‘Human capital and entrepreneurial success: A meta-analytical review’, *Journal of Business Venturing* **26**(3), 341–358.
- Valerio, A., Parton, B. and Robb, A. (2014), Entrepreneurship Education and Training Programs around the World, Technical report.
- Van Praag, C. M. and Versloot, P. H. (2007), ‘What is the value of entrepreneurship? A review of recent research’, *Small Business Economics* **29**(4), 351–382.
- World Bank (2016), ‘Gross national income per capita 2015’, (October), 1–4.
- Zhao, H., Seibert, S. E. and Lumpkin, G. T. (2010), ‘The Relationship of Personality to Entrepreneurial Intentions and Performance: A Meta-Analytic Review’, *Journal of Management* **36**(2), 381–404.  
**URL:** <http://jom.sagepub.com/content/36/2/381.abstract>

## Appendix A. Baseline characteristics

Table A.8: Baseline Characteristics of Treated and Control groups (Showed-up)

	Control	Confidence	Full	p-value
N	27	35	35	
Share of Females	0.58 (0.50)	0.60 (0.50)	0.48 (0.51)	0.617
Share of Students	0.73 (0.45)	0.82 (0.39)	0.76 (0.44)	0.676
Business Experience	0.27 (0.45)	0.18 (0.39)	0.21 (0.42)	0.693
Comrat	0.60 (0.50)	0.47 (0.51)	0.55 (0.51)	0.614
Own Inv.(%)	17.60 (22.04)	13.82 (15.77)	16.36 (22.05)	0.755
Friends Inv.(%)	17.20 (18.38)	16.18 (13.93)	14.24 (15.01)	0.761
Bank Inv.(%)	13.20 (19.30)	15.88 (23.37)	16.36 (25.35)	0.862
Investment (1000 Leu)	279.63 (450.81)	364.49 (1046.10)	669.41 (1842.51)	0.448
Cognitive Abilities	0.11 (0.21)	0.05 (0.12)	0.10 (0.17)	0.285
Self-efficacy	3.81 (0.96)	3.80 (0.98)	3.75 (0.94)	0.968
Confidence	-0.01 (0.20)	-0.00 (0.16)	-0.03 (0.18)	0.858
Risk preferences	0.59 (0.86)	0.41 (0.72)	0.66 (0.81)	0.395
Ambiguity Preferences	0.26 (0.25)	0.23 (0.19)	0.31 (0.19)	0.271

Table A.9: Baseline Characteristics of Treated and Control groups (Participated)

	Control	Confidence	Full	p-value
N	22	29	28	
Share of Females	0.57 (0.51)	0.59 (0.50)	0.48 (0.51)	0.714
Share of Students	0.71 (0.46)	0.82 (0.39)	0.78 (0.42)	0.682
Business Experience	0.29 (0.46)	0.14 (0.36)	0.19 (0.40)	0.463
Comrat	0.62 (0.50)	0.50 (0.51)	0.63 (0.49)	0.576
Own Inv.(%)	18.00 (21.67)	15.00 (16.44)	14.81 (21.55)	0.837
Friends Inv.(%)	18.00 (19.36)	15.71 (14.51)	12.22 (15.02)	0.464
Bank Inv.(%)	13.00 (20.80)	16.43 (24.98)	15.93 (27.21)	0.884
Investment (1000 Leu)	280.23 (468.82)	394.38 (1145.04)	753.91 (2054.07)	0.462
Loan (1000 Leu)	29.00 (45.27)	33.73 (91.95)	109.14 (377.83)	0.373
Cognitive Abilities	0.09 (0.18)	0.06 (0.13)	0.08 (0.15)	0.702
Self-efficacy	3.76 (0.94)	3.79 (1.00)	3.62 (0.97)	0.791
Confidence	-0.03 (0.17)	-0.03 (0.15)	-0.04 (0.15)	0.946
Risk preferences	0.59 (0.89)	0.33 (0.53)	0.72 (0.88)	0.169
Ambiguity Preferences	0.23 (0.24)	0.23 (0.20)	0.33 (0.18)	0.107

Table A.10: Laboratory Experiment Perception

Statistic	N	Mean	St. Dev.	Min	Max
Exp. Interesting	100	3.49	1.18	1	5
Exp. Length	100	2.78	0.93	1	5
Exp. Understandable	100	3.49	1.05	1	5
Task difficulty	100	5.31	2.21	1	10

## Appendix B. Additional Estimations

Table B.11: Determinants of Required Investment Request.

	<i>Dependent variable:</i>	
	Investment in 1000 Leu	
	(1)	(2)
Full Treat. (ITT)	-1.85 (104.19)	-328.32 (463.96)
Full T. (ITT)X Self-efficacy	13.72 (26.83)	143.26 (120.14)
Confidence Treat. (ITT)	127.40 (106.95)	493.40 (478.28)
Conf. T. (ITT) X Self-efficacy	-27.51 (28.01)	-95.28 (124.87)
Confidence Level		-283.11 (297.92)
Self-efficacy	8.83 (20.99)	-59.43 (93.87)
Risk Preferences ( $\alpha$ )		70.78 (68.43)
Ambiguity Preferences		-663.92** (266.71)
Cognitive Abilities		-164.42 (301.15)
Constant	-76.66 (90.28)	41.40 (408.99)
Set of Controls	Yes	Yes
Observations	75	75

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01