Part of the Ewing Marion Kauffman Foundation’s Emerging Scholars initiative, the Kauffman Dissertation Fellowship Program recognizes exceptional doctoral students and their universities. The annual program awards up to fifteen Dissertation Fellowship grants of $20,000 each to Ph.D., D.B.A., or other doctoral students at accredited U.S. universities to support dissertations in the area of entrepreneurship.

Since its establishment in 2002, this program has helped to launch world-class scholars into the exciting and emerging field of entrepreneurship research, thus laying a foundation for future scientific advancement. The findings generated by this effort will be translated into knowledge with immediate application for policymakers, educators, service providers, and entrepreneurs as well as high-quality academic research.
Persistent Gender Gaps in Entrepreneurial Attitudes, Intentions, and Actions
The Effects of a Youth Entrepreneurship Education Program in Khorjand, Tajikistan

Vanessa Elizabeth Beary

Committee of Readers
Fernando Reimers (Chair)
Andrew Ho
Monica Higgins

A Thesis Presented to the Faculty of the Graduate School of Education of Harvard University in Partial Fulfillment of the Requirements For the Degree of Doctor of Education

2014
Abstract

This dissertation reports the results of a longitudinal, randomized control trial that examines the impact of a 40-hour youth entrepreneurship education program (EEP), above and beyond a market economics control group, for English speaking-youths aged 18-35 living in Khujand, Tajikistan. Results show that the program has no effect, above and beyond a market economics control group, on any of the outcomes at timing of post-test or follow-up. However, there is a fixed effect of gender, with females have lower average scores on all of the outcomes except perceived behavior control.

Category: Education: Education policy; Education: Pedagogy; Entrepreneurship

Keywords: Youth entrepreneurship; student entrepreneurship; entrepreneurship education; theory of planned behavior; gender; entrepreneurial attitudes; perceived desirability; perceived behavioral control; entrepreneurial intentions; entrepreneurial action; theory of change; Tajikistan; transitioning economy.
Executive Summary

Entrepreneurship education is a popular intervention around the world, supported by private groups, governments, and development organizations as a way to help young people develop skills that allow them to create jobs for themselves and others (World Economic Forum, 2011; Valerio et al., 2013). It has been argued that the earlier students are exposed to entrepreneurship, the more likely they will be to exhibit entrepreneurial traits later in life (Kourilsky & Walstad, 1998). Entrepreneurship education is often cited as a possible antecedent to economic growth as it stimulates innovation and job creation (Hanesmark, 1998). One of the anticipated, but untested, longer-term effects of entrepreneurship education programs (EEP) for youths and young adults is the creation of a new generation of responsible entrepreneurs (McKenzie & Woodruff, 2012; Valerio et al., 2013).

Increasingly, youth entrepreneurship education programs are being funded and developed around the globe as countries adopt strategies to promote and incorporate EEPs in their national education frameworks. Despite the universal surge in popularity of youth EEPs, little evaluative work of their impact has been conducted (Valerio et al., 2013; Henry et al., 2005a; Henry et al., 2005b; Peterman et al., 2003). The evaluations that have been conducted to date are generally of low-methodological rigor (Martin et al., 2012; Unger et al., 2011). Of the 19 programs for secondary school students and university students highlighted in the 2013 World Bank study (Valerio et al., 2013), only one was conducted in a low-income country (Uganda)¹. Furthermore, despite the

¹ The evaluations were conducted in the low-income economy of Uganda; the lower-middle-income economies of Egypt, Morocco, Nigeria, Syria, and Tunisia; the upper-middle-income economies of China, Jordan, Lebanon, Namibia, South Africa; and the high-income economies: Austria, Denmark, France, The Netherlands, Norway, Saudi Arabia, Sweden, United Arab Emirates, and United States. See http://data.worldbank.org/about/country-classifications for information about country classifications. Accessed January 2014.
heterogeneity of cultural contexts, none of the 19 evaluations examine differential effects of an EEP on female participants.

This study seeks to understand the effects of an EEP designed for the non-entrepreneur in a low-income economy with high unemployment and a large youth bulge. I also seek to understand whether women benefit from the EEP differently than men. To do this, I oversaw the implementation and evaluation of a randomized control trial in Khujand, Tajikistan for 208 youths over the course of 2 years (2011-2013). The control group received a placebo program in market economics, while the treatment group received a 40-hour EEP delivered over the course of 4 weeks. This data allows me to examine the relationship between an EEP designed for the non-entrepreneur and students’ entrepreneurial attitudes, entrepreneurial intentions, and entrepreneurial behaviors over the time horizon of one year. I also examine whether the results differ for male and female participants.

This study does not support the assumption that youth entrepreneurship education programs alone have the power to create the next generation of entrepreneurs up to one-year post-EEP. Instead, this study shows that a 40-hour EEP has no overall impact on the entrepreneurial attitudes, intentions, and perhaps most importantly, actions of a group of highly motivated students in the most entrepreneurial region of Tajikistan. However, this study does reveal a fixed effect of gender, with women scoring lower than their male colleagues on five out of six outcomes. In light of this finding, future research should attend carefully to differences in entrepreneurial outcomes for men versus women. In particular, future research should try to understand why women may be less inclined to engage in entrepreneurial activities over time, irrespective of any training they are given, and what if anything can be done to address these persistent gender gaps.

This dissertation is organized into four sections. In chapter 2, I review the literature on entrepreneurship and EEPs for youths and describe Icek Ajzen’s Theory of Planned Behavior
(1987), the main theoretical model that has informed the way in which youth EEPs have been evaluated to date. I examine how youth EEPs differ from entrepreneurial training programs for the practicing entrepreneur as well as EEPs for the aspiring entrepreneur (Valerio et al., 2013).

To distinguish between the various categories of entrepreneurship education, I use the classification system developed by Bechard and Toulouse (1991) that differentiates programs from one another based on the program’s teaching objectives, general program objectives, and specific program objectives. Accordingly, the program that I implemented and evaluated in Tajikistan was a blend of Type I and Type II programs (Bechard & Toulouse, 1991) as I administered it to “potential future entrepreneurs” (Valerio et al., 2013, 2013) for the purposes of exposing them to basic concepts of entrepreneurship as well as helping them gain skills to become entrepreneurs.

In this chapter, I also describe specific quasi-experimental studies of EEP impact whose threats to validity are overcome by the randomized control design that I employed in Tajikistan (Souitaris et al., 2007; Von Graevenitz et al., 2010). Finally, I describe important contextual and cultural factors such as the overall business climate in Tajikistan and the role of women in Tajik society. Gender disparity in education is on the rise in Tajikistan (UNICEF, 2013). Females have lower participation rates in secondary school, lower completion rates, and lower levels of achievement than males. According to a recent UNICEF paper on out-of-school girls (2013), the most common reasons for females to be denied their right to education consists of a combination of

---

2 According to Bechard and Toulouse’s three-type classification system, Type I programs are intended to raise participants’ awareness about entrepreneurship and give individuals exposure to entrepreneurship as a career option. Participants are not expected to create or start new businesses in Type I programs. Type II programs are geared towards “new enterprise creation” (Bechard & Toulouse, 1991, p. 324). Entrepreneurship education programs falling under this classification would address the various steps an individual would need to take to establish a new business, such as opportunity recognition, costs associated with doing business, market research, determining a competitive advantage, developing a marketing mix, product promotion, and principles of successful selling. Type III programs are specific education programs for individuals with already existing enterprises (p. 324). Programs for small business owners and emerging entrepreneurs would fall under this category.
the following reasons: 1) societal and religious attitudes, 2) poverty, 3) poor quality of education, and 4) child labor.

Given what we know about the benefits of educating young women (Lloyd, 2009), this study tests whether economic benefits extend to educational programs such as EEPs in settings like Tajikistan. In light of the economic and education disparity along gender lines in Tajikistan (Olcott, 2012), I also present hypotheses for why the impact of an EEP may differ for females and males.

In chapter 3, I describe my data collection methods and present the primary question guiding this research: 

**What are the effects of a 40-hour EEP on students’ entrepreneurial attitudes, entrepreneurial intentions, and entrepreneurial behavior? Do these results vary based on gender of the participant?**

I provide an overview of the sample and describe both the treatment and control programs in detail. I also detail the samples’ attitudes on the business climate in Tajikistan, entrepreneurs, and their assessment of women’s ability to be an entrepreneur and her right to employment. In this chapter, I present the main hypotheses of my study: that a short-term EEP will have a lasting, positive effect on the entrepreneurial attitudes, intentions and actions of both female and male participants.

To get a better sense of some of the contextual and cultural beliefs of these individuals, I include a section on participants’ attitudes towards the business climate in Tajikistan, entrepreneurs, and women. Given the difficulties associated with doing business and rampant corruption in Tajikistan, it is not surprising that this sample of students believes it to be somewhat difficult to start a business in their country. Furthermore, given the additional cultural barriers faced by females, it is not surprising that they believe it is more difficult than males to start a business. Students in this sample report relatively favorable views on entrepreneurs and their role in contributing to the economic development of the country. However, most revealing are the attitudinal differences...
between men and women with regard to their beliefs in female entrepreneurs and women’s rights to equal employment.

In chapter 4, I detail the finding of null effects for each of the outcomes (perceived desirability, perceived behavioral control, intention, and entrepreneurial action) and the lower average scores of women on all of the outcomes except for perceived behavioral control. I also present the statistically insignificant but substantively interesting finding that the treatment interacts with gender, suggesting that women have less entrepreneurial intention than men one year after completion of the EEP, along with performing less entrepreneurial activities than men.

I begin the final chapter by highlighting the study’s two methodological contributions - the experimental design and the control group’s placebo program. This is the first evaluation of a youth EEP to employ a longitudinal, randomized control trial design (McKenzie & Woodruff, 2012; Valerio et al., 2013). To date, studies evaluating youth EEP impact include pre-post designs (Brown et al., 2011; Cooper et al., 2007; Byabashaija & Katono, 2011; Von Graevenitz et al., 2010), relational design (Klapper, 2004), and quasi-experimental designs (Souitaris et al., 2007; Peterman & Kennedy, 2003; Oosterbeek et al., 2007; Rasheed, 2000; and Kourilsky and Esfandiari, 1997). Many articulate a theory of change, however they are not designed to account for rival explanations of potential differences or demonstrate that an EEP is responsible for certain outcomes in students.

Unlike most evaluations of youth EEPS, I employed a rigorous control group in my study3. Not only did I randomly assign participants to control or treatment condition, but those assigned to the control condition also participated in their own 40-hour “Introduction to Market Economics”

3 To my knowledge, only one of the published EEP evaluations gave the control program its own dedicated program (Kourilsky & Esfandiari, 1997) where the control group actually received an alternative program to the experimental group, instead of being a “do nothing” control group. There was no random assignment of participants to control and treatment groups in the Kourilsky & Esfandiari study (1997).
In doing so, I isolate the impact of entrepreneurship education above and beyond an introductory course on market economics.

In this study, I predicted a positive relationship on all outcomes. Instead, I found no effect of the EEP on participants’ entrepreneurial attitudes (perceived desirability and perceived behavioral control), entrepreneurial intention, or entrepreneurial action, above and beyond a market economics control program. That said, I do find a fixed effect for women on all of these outcome measures except for perceived behavioral control, on which females scored identical to males. In the final chapter I consider the effect of the economic, political and cultural factors that shaped the participants’ experience in the course. This study suggests that the realities of one’s environment ultimately determine whether or not individuals can turn knowledge, skills, and attitudes into action.

Policy makers and educators require clarity on whether short-term EEPs are cost-effective ways of creating a future generation of responsible entrepreneurs. This study suggests that a short-term EEP is not effective at changing attitudes and behaviors of participants in a context such as Tajikistan, where there are many barriers to starting a business. This finding underscores the necessity of recognizing the simple fact that being a woman is not the same thing as being a man in a business setting, and gender must therefore be taken into consideration when (re)designing EEPs. Clearly Tajikistan is one particular context and thus the generalizability of this study’s findings is limited. That said, my aim in conducting this study is to extend the field’s understanding of how an EEP functions in a low-income economy with high unemployment and a growing youth bulge.

The absence of statistically significant immediate or near-term effects of the EEP on students’ entrepreneurial attitudes, entrepreneurial intentions, and entrepreneurial action raise important questions for policy makers and educators about where to invest resources when it comes to the economic empowerment of youth in low-income countries. Micro-finance is viewed as one way of strengthening economic freedom in a country; however the provision of small amounts of capital
does not resolve larger issues of corruption and institutional deficiencies that plague many governments. While most students cited access to capital as one of the most pressing barriers to starting a business in Tajikistan, the reality is that even with access to a small amount of capital, the country’s difficult business climate may ultimately prevent many from being successful.

In the context of Khujand, Tajikistan, I have partially answered one of the field’s perennial questions— Does entrepreneurship education create entrepreneurs? I have shown how in the short-term, for the students who participated in this program, it takes more than education to create entrepreneurs. This study provides a data point on immediate and near-term effects of the program on a group of motivated youths in a transitioning, low-income economy. To fully understand whether entrepreneurship education creates entrepreneurs, policy makers need to understand the longer-term effects of these programs, requiring studies that track participants over the course of many years and the kinds of supports that may enable entrepreneurship to actually emerge from positive attitudes and intentions. Perhaps it takes longer than one year to see the effects of an EEP on participants’ entrepreneurial action.

Furthermore, in contexts with pronounced gender disparity, special attention should be paid to examining whether EEPs have unintended negative effects on women, ultimately discouraging them from engaging in entrepreneurial activities in the near to long-term. It is irresponsible of funders and program designers to continue implementing EEPs in contexts where such programs may in fact be driving a gender gap, instead of supporting the economic freedom of all citizens.

If the primary objective of an entrepreneurship education program is to create the next generation of entrepreneurs, it may be misleading and irresponsible for international and multi-lateral organizations to provide youths and young adults with the tools and encouragement to be entrepreneurs in countries that actively oppose such activity. However, increasingly, there is the
growing belief that EEPs have much broader effects than the narrow objectives that many have traditionally associated with EEPs (Thornhill, 2014).

Future research surrounding the effectiveness of EEPs designed for youths and young adults must start to consider alternative theories of change. There are those who promote the notion that EEPs can develop a broader set of transferable skills and mindsets in participants like leadership, flexibility, creativity, and problem solving (Drucker, 1985; Bygrave & Zacharakis, 2004; Timmons & Spinelli, 2004). In order to equip youth with such 21st century skills, EEPs may need to redesigned. In turn, we would expect such programs to create the next generation of entrepreneurial leaders, of young men and women, who recognize challenges as opportunities, and are empowered with frameworks to identify problems in their community and work collaboratively with their peers to solve them.