Women Nascent Entrepreneurs in Ecosystems: The Importance of University and Family

TATIANA MANOLOVA: BENTLEY UNIVERSITY; ST. PETERSBURG UNIVERSITY
GALINA SHIROKOVA: ST. PETERSBURG UNIVERSITY
TATYANA TSUKANOVA: ST. PETERSBURG UNIVERSITY
LINDA F. EDELMAN: BENTLEY UNIVERSITY; ST. PETERSBURG UNIVERSITY

This study was supported by a Russian Science Foundation grant (project No 14-18-01093).

Entrepreneurship is facilitated by supportive environments

- One approach to creating such environments is through the development of 'entrepreneurial ecosystems'.
  - An ecosystem is defined as an agglomeration of interconnected individuals, entities, and governance bodies in a given geographic area that collectively support entrepreneurial activity (Malecki, 2011)
  - Isenberg (2010) presents the domains of an entrepreneurship ecosystem: conducive culture, enabling policies and leadership, availability of finance, quality human capital, venture-friendly markets for products and a range of institutional and infrastructural supports
- In this paper, we draw attention to two critical, but often overlooked components of the entrepreneurial ecosystem for university students: their **family** (Habbershon, 2006) and their **university** (Fetters, Greene, and Rice, 2010)
  - We further argue that men and women aspiring entrepreneurs may differ in the degree to which they leverage ecosystem support in the pursuit of their entrepreneurial initiatives

RQ: What is the differential effect of family and university support on young men and women's start-up activities?

- **Start-up activities**
  - Long lineage of research on start-up activities mostly using data from the Panel Study of Entrepreneurial Dynamics (PSED)
  - Findings suggest
    - Entrepreneurs who are **actively engaged** in many start-up activities are more likely to end up with a viable new venture (Lichtenstein, *et. al.,* 2007)
    - **Human capital** was important in initiating entrepreneurial start-up activities, however **social capital** remained important throughout the whole start-up process (Davidisson and Honig, 2003)
    - **Timing matters**; firms that organized more slowly were more likely to continue organizing (Brush, Manolova and Edelman, 2008).

Theory and hypotheses (I)

- We use a social embeddedness lens (Granovetter, 1985; Uzzi, 1992; Aldrich and Cliff, 2003; Aldrich and Cliff, 2003).
  - Families are an important source of early stage funding (Bygrave *et. al.*, 2003; Steier, 2003) and information and contacts (Steier, 2007; 2009).
  - University students, who are in the process of starting a new venture, rely on their family's social and financial capital to help them in the start-up process.
    - *H1a and b: The greater the family support, in the form of financial capital (H1a)/social capital (H1b), the greater the scope of start-up activities undertaken by the young nascent entrepreneur.*

Theory and hypotheses (II)

- In addition to their families, students are also embedded in social structures that permeate all universities
  - These structures consist of the different curricular and extracurricular activities related to entrepreneurship, as well as financial and non-financial support offered through centers and other university services
    - *H2: The greater the support for starting a new venture at the university level, the greater the scope of start-up activities undertaken by the young nascent entrepreneur*

Theory and hypotheses (III)

- The effect of embeddedness in the family and university entrepreneurial ecosystem may be influenced by the sex of the young nascent entrepreneur.
  - Men and women are socialized differently, which affects their predisposition to engage in entrepreneurship (de Bruin *et al.*, 2007) and the process of their engagement in entrepreneurial activities (Bandura, 1977; Kourilsky & Waldstad, 1998).
    - *H3a and b: The effect of family financial support (H3a)/social support (H3b) on the scope of start-up activities will be stronger for women nascent entrepreneurs.*
    - *H3c: The effect of university support on the scope of start-up activities will be stronger for men nascent entrepreneurs.*

Method

Sample and Descriptive Statistics

- Data from 2011 Global University Entrepreneurial Spirit Students' Survey (GUESSS), a biannual online survey of university students
- N = 16,744 young nascent entrepreneurs from 246 universities in 17 countries
- Students were, on average, 23.72 years old; just under ½ were female, and about ½ reported that their parents were or had been entrepreneurs.

Statistical Procedure

- DV = count of number of start-up activities
- Multi-level Poisson regression (STATA)

Our results are mixed:

- **Family Financial Support** was significantly, but negatively related to start-up activities (H1a not supported)
- **Family Social Support** and **University Support** were significantly and positively related to start-up activities (H1b and H2 supported)
- **Differential Effects by Gender:**
  - **Family Financial Support less negative for women (ambivalent support for H3a)**
  - **Family Social Support stronger for women (H3b supported)**
  - **University Support stronger for women (H3c rejected)**

Overall, our findings present a more nuanced picture of family and university support

- While social support, in the form of introductions to family contacts and networks, had a positive effect on the number of start-up activities undertaken by young entrepreneurs, financial support had a negative effect
- Universities can provide student entrepreneurs with the necessary knowledge and skills for starting a new venture as well as establish platforms for building social contacts or create conditions for obtaining seed funding (Guenther and Wagner, 2008; Robinson and Sexton, 1994; Shane, 2000; Zhao et al., 2005)
- Young women appear to benefit more from both family and university support

Boundaries and limitations

- We did not differentiate between types of families, which may hay have different effects on nascent entrepreneurial activity (Aldrich & Cliff, 2003)
- Our sampling procedure was not a truly randomized one
- We did not control for the effect of other components of the entrepreneurial ecosystem in which young nascent entrepreneurs are embedded, such as entrepreneurial community culture, enabling policies and leadership, availability of finance, quality human capital, venture-friendly markets for products and other institutional and infrastructural support

Graduate School of Management
St. Petersburg State University

In conclusion

BENTLEY UNIVERSITY

The effects of family and university embeddedness on youth entrepreneurship are complex

A carefully tailored family and university support infrastructure can significantly advance the entrepreneurial activity of female students

We hope others will join us to enrich this conversation

Thank you!

Questions?

Study methodology

Sample	N = 16744 university students from 246 universities in 17 countries
Dependent Variable	Number of start-up activities (count)
Independent Variables	Family financial support (three items, 1-7 scale; 1 = not at all, 7 = very much, single factor extracted, Alpha = 0.8881); family social support (two items; 1-7 scale; 1 = not at all, 7 = very much, Alpha = 0.9084); university environment (seven items; 1-7 scale; 1 = strongly disagree; 7 = strongly agree, Alpha = 0.8929)
Controls	Individual level: age, level of study, field of study, family background, entrepreneurship courses taken, previous experience, level of commitment (hours worked for the nascent venture), number of partners, family cohesiveness, marital status; industrial sector of the new venture; perceived barriers to founding the company (access to financial capital, legal environment, economic environment). Country level: log GDP p.c., level of nascent entrepreneurial activity, entrepreneurship considered a good career choice.
Statistical Analysis	Multi-level Poisson regression

MULTILEVEL POISSON REGRESSION ESTIMATES OF THE EFFECTS ON NASCENT STUDENT ENTREPRENEURS' START-UP ACTIVITIES (Abridged)

Variables	HL1	HL2	HL3	HL4	HL5	HL6
Gender (female = 1)	-0.246***	-0.244***	-0.235***	-0.234***	-0.238***	-0.241***
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Family financial support	-0.052***	-0.052***	-0.045***	-0.055***	-0.044***	-0.045***
	(0.006)	(0.006)	(0.006)	(0.007)	(0.006)	(0.006)
Family social support	0.035***	0.032***	0.030***	0.030***	0.018***	0.029***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.004)
University support		0.033***	0.032***	0.032***	0.032***	0.020***
		(0.004)	(0.004)	(0.004)	(0.004)	(0.006)
Family financial support x Gender				0.028**		
				(0.009)		
Family social support x Gender					0.028***	
					(0.006)	
University support x Gender						0.032***
						(0.008)
lns1_1_1						
_cons	-2.176***	-2.208***	-2.190***	-2.194***	-2.188***	-2.193***
	(0.226)	(0.229)	(0.225)	(0.226)	(0.226)	(0.226)
lns2_1_1						
_cons	-2.253***	-2.271***	-2.302***	-2.302***	-2.303***	-2.302***
	(0.117)	(0.119)	(0.124)	(0.124)	(0.124)	(0.123)
N	16744	16744	16744	16744	16744	16744