Developing-Country Women Not Pushed by Necessity into Entrepreneurship: Looking at Them in Brazilian Universities

Total Early-stage Entrepreneurial Activity (TEA) is much closer for men and women in countries such as Brazil – 17.1% and 17.45%, respectively – and Mexico – 19.74% and 18.31%, respectively (GEM 2014 – Singer, Amorós, and Arreola 2015). Despite the significance of women's entrepreneurship, academic studies in Latin America (LA) have given the theme little attention. As such, the idea of almost a decade that this theme is under-studied is still valid (Greene, Brush, and Gatewood 2007; Bruin, Brush, and Welter 2006) in LA. When it comes to university students, the lack of study is even greater.

Even if entrepreneurship for necessity is one of the explanations for an elevated degree of entrepreneurship among women in LA, a specific category of women in career preparation does not appear to be under this influence: university students. They deviate for having the asset of their studies at higher education institutions (HEIs) – still a rarity for most people in this region. This gives them greater possibilities for job and career choice. So, in entrepreneurship, those women tend to contribute by exploiting opportunities and, hence, generating greater socioeconomic benefits.

LA comprises two large linguistic concentrations: Portuguese and Spanish. Portuguese speakers are concentrated in a single country, Brazil, the largest in LA in population and territory. Therefore, studying women in Brazil is a justified start to a broader examination on women's entrepreneurial interest and activities in LA. Later, with access to more data, it would be recommendable to advance the study preferably by focusing on the major Spanish-speaking countries: Mexico and Argentina.

Given these considerations, our study addresses the following question: How can one characterize Brazilian female university students regarding their entrepreneurial intention and advances made in entrepreneurship with EE? Answering this question is an important

research need also according to Lima et al. (2014). For them, this need has two main reasons: (1) the high percentage of entrepreneurs who are women (as the TEA for Brazil indicates), which suggests a high number of them need entrepreneurship education (EE); (2) the female demand for EE is higher than the male one in Brazilian HEIs (and the pedagogical approaches used in the country do not consider gender differences). Knowledge about particularities of female students would help fulfill this demand, which could benefit a high number of women and the country itself.

To answer the question, the study consists of a survey with two samples: 6,904 female and 5,634 male students – both from 62 HEIs located in various states and cities in Brazil.

Data and Methods

The survey obtained the data in 2013-2014 using the Global University Entrepreneurial Spirit Students' Survey (GUESSS) questionnaire in Brazil. GUESSS is an international panel study, involving 34 countries in its 2013-2014 edition, whose respondents produced 109,026 answers, including those from Brazil. It allows comparisons between countries and universities. The questionnaire contains multiple-choice questions primarily employing scales of five or seven points. Among other elements, it measures entrepreneurship education, university environment (Souitaris, Zerbinati, and Al-Laham 2007 – with some adaptations), entrepreneurial intention and its determinants, including locus of control and self-efficacy (Chen, Greene, and Crick 1998; Liñán and Chen 2009. Students answered it online. We personally contacted professors and directors of programs by email and telephone asking them to solicit student participation opening and responding the online questionnaire.

We conducted a frequency analysis of responses, as the sample was statistically infinite (Levy and Lemesshow 1999), and ANOVA parametrical tests of hypotheses – the independent variables distribution had a normal configuration according to the Kolmogorov-Smirnov test. Homogeneity tests of variance (Levene tests; $p > .05$) for the same independent

variables indicated the possibility of using ANOVA (Everitt 2006).

The following are some of the characteristics from the sample:

• Age for women and men, respectively: 79.2% and 78.7% were in the “under 25” range, 11.7% and 12.6% in the “from 25 to 30” one, and 9.2% and 5.1% in the “above 30” one.

• Level of study for women and men, respectively: 88.8% and 88.9% of them were undergraduates; 5.0% and 5.3%, M.A. students; 3.2% and 2.5%, M.B.A. students; 2.6% and 3.0%, Ph.D./doctorate students; and 0.4% and 0.3%, post doctorate students.

• Marital status for women and men, respectively: 78.7% and 77.8% of them were single, 6.6% and 6.7% lived with a partner, 12.5% and 14.1% were married, and 2.2% and 1.4% were divorced. 52.1% of the female students and 57.4% of male students had **regular jobs**.

• Field of study for women and men, respectively: Business/Management (24.2% and 21.8%); Law (3.7% and 3.8%); Economics (1.7% and 2.4%); other Social Sciences, including Education (8.9% and 4.6%); Engineering and Architecture (11.9% and 26.5%); Mathematics and Natural Sciences (5.8% and 5.5%); Information Science / IT (2.2% and 8.5%); Medicine and Health Sciences (10.9% and 5.2%); Agricultural Sciences, Forestry, and Nutrition Science (3.8% and 4.1%); Linguistics and Cultural Studies, including Psychology, Philosophy, and Religion (3.7% and 1.5%); Art and Science of Art (2.7% and 1.9%); Other (20.5% and 14.1%).

We conducted Student's t-tests to compare the data for men and women. They all resulted in $p < 0.001$ for the variables compared in the following section.

Results and discussion

The results obtained reaffirm the gender gap in entrepreneurship as they present the female students with less strength of entrepreneurial intention, more often wanting a job for

immediately after graduation and for five years after graduation, and with lower percentages for those beginning a business and those that already have a business. When they have a business, they more often invest less, have fewer employees, possess a lesser share of the business, and project less growth over five years.

However, female students surpass male students in the level that they evaluate the climate propitious to entrepreneurial learning and behavior in HEIs (mean = 4.35 and 4.28, respectively), the level of learning occurring in the courses and activities in entrepreneurship (mean = 4.67 and 4.59, respectively), and perception of entrepreneurship as something slightly less risky (mean = 4.30 and 4.32, respectively). They are closer to male students in the frequency of stating having taken at least one required course in entrepreneurship (28.5% and 29.7%, respectively).

The fact that the majority (55%) of respondents were women suggests they are particularly interested in questions related to career and entrepreneurship. This converges with the superiority (55.4%) of women's responses in the work by Lima et al. (2014), which used the same methods as this research to study a sample of 25,751 students at 37 Brazilian HEIs. In their results, women were the majority (54.8%) of those wanting more EE.

One result that seems particularly promising regarding its potential for future developments is that the gender gap concerning entrepreneurial intention (Liñán and Chen 2009) tends to decrease in line with students' social class (not to be confused simply with the level of family income). This intention, for women, becomes clearly and systematically greater as the education level of the parents drops (an indicator used for determining the social class of a student's family). For men, there is no clear statistically negative relationship between these variables. However, the majority of their highest values for entrepreneurial intention also occur in the lower social classes. Lima, Nelson, and Nassif (2014) also identified a smaller gender gap for lower social class in Brazil. The authors obtained their

results from comparisons among four samples: 7,690 female and 5,720 male students from lower middle class and 782 female and 615 male students from upper middle class.

The most elevated evaluations of improvement in self-efficacy as an effect of EE (Souitaris, Zerbinati and Al-Laham 2007) occurred for male and female students whose parents had the lowest education (did not complete secondary education). For women, such evaluations were even more elevated. One possible explanation for this is that the students had less opportunity to learn about and develop skills in entrepreneurship in the family environment, in contact with parents, particularly the women. A male-oriented national and familial culture may also be influencing women and, thus, presenting its effects in this result. In addition, as one might intuit, for men and women the lowest averages of the evaluations for support from parents in entrepreneurship (relating to the items "knowledge and advice," "idea generation / evaluation," and "financial support") occurred for the lowest social class – once more in accordance with parents' education and family income.

Thus, the relationship between entrepreneurship and social class – which includes economic, cultural, social, and symbolic family capital characteristics, according to Bourdieu (1984) – and its combinations with EE seem important in explaining entrepreneurship preparation and levels of entrepreneurial intention and self-efficacy for university students. These relationships/combinations are particularly more intense for women, indicating the need for more detailed studies about them. As such, interactions among entrepreneurship, social class, and EE seem to constitute a central dynamic for understanding the recurrent fact highlighted in international studies (in GEM and in GUESSS, for example) that one observes more frequently higher levels of entrepreneurial indicators (TEA, entrepreneurial intention, self-efficacy, etc.) in developing countries. These have a significant portion of the population in the lowest social classes, as seen in Brazil. Clearly, in relation to participation of university students, the high indicators tend to be propelled by opportunity entrepreneurship.

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