



Global University Entrepreneurial Spirit Students' Survey: Report for Italy 2016

Entrepreneurial Intentions and Behavior of Students attending Italian Universities



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The full international report of the 2016 GUESSS Survey is available at:

<http://www.guesssurvey.org/>

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EXECUTIVE SUMMARY

This report is based on information gathered through the GUESSS – Global University Entrepreneurial Spirit Student’s Survey – project led by St. Gallen University (Switzerland). Since 2003, this project aims to collect and analyze information related to entrepreneurship in university students in different countries. In 2016, 50 countries participated with more than 122,000 completed responses and more than 1,000 universities.

The Italian survey includes to 4,446 respondents from 39 universities. It offers an overview of Italian university students’ predisposition and inclination towards entrepreneurship, their entrepreneurial intentions and actual behavior, as well their social – family and university – background. The report also allows a comparison of Italian students to that of students in other countries reached by the survey.

This information is valuable because it offers a greater understanding of the factors that facilitate and hinder entrepreneurship among Italian students and can potentially contribute to the design of appropriate measures in support of student entrepreneurship. Additionally, the data collected through the GUESSS survey provide scholars opportunities to advance entrepreneurship research.

The key findings that the reader will find in the report are summarized below.

Sample profile

- Most of the respondents are in the under the age 24 (72.1%), with 23.7% respondents between 25 – 30 years old.
- In Italian sample more females (55.5%) than males completed the survey which is similar to the international sample where females are 58.4% and males 41.6%.
- Most of the respondents are studying engineering (32.6%), followed by Law & Economics (26.3%).
- 62.2% of the participants are undergraduate (bachelor) and 34.2% are graduate (master).

University context

- Compared to the international sample, Italian students are less likely to have been exposed to entrepreneurship education. Most of them have never attended a course on entrepreneurship (66.1%), while in the international sample this fraction is lower (44.6%).
- Students of Law & Economics report higher entrepreneurial skills acquired at university compared to students from other fields. A possible explanation is that they have more likely attended compulsory entrepreneurship education courses.

Career aspirations

- Directly after studies more than 80% of the Italian surveyed students aim to be work as employee in a small, medium-sized, or large firm, in line with the international sample.
- Concerning career aspirations five years after finishing studies, the fraction of students aiming at founding a business increases (from 3.8% right after studies to 30.3%), but still remain relatively less in comparison to the international sample in which 38.2% of students want to be entrepreneur 5 years after of completion of studies.

Nascent entrepreneurs

- Only 5.9% of the Italian sample was seriously thinking to start a business for the first time when participating to the survey (i.e., nascent entrepreneurs).
- The university context may have fostered founding intentions. Nascent entrepreneurs showed a particular interest in entrepreneurial courses and reported an increase of entrepreneurial skills due to education. Moreover, they perceived a favorable climate toward entrepreneurship in university.
- The industry sector, where most of the nascent entrepreneurs plan their entrepreneurial activity, is communication and information technology (13.1%), and tourism and leisure (13.0%), followed by architecture/engineering with 10.4%. The strong focus on IT sector and architecture and engineering sectors seems to be a peculiar feature of the Italian sample in an international comparison.
- Only 16.7% of Italian students intended to start a company as solo founder (52.3% with two or more partners), whereas in the international sample this figure increased to 18.6% (53.5% with two or more partners). In the Italian sample the most important motive behind the choice of business partners of future companies was sharing risk and developing the idea with someone else, whereas getting access to financial and physical resources of co-founders were the less relevant factors.
- In the Italian context personal background played a more important role as a mean to find co-founders compared to the international sample. The most common source of business partners in the Italian sample was the circle of friends outside university and university. Nascent entrepreneurs of international sample reported more frequently to have partners with the same study background and were less likely to find partner among relatives and professional network.
- About 15% of intentional founders have never taken a concrete step to found a company. Many intentional founders have never registered a business (4.3%), registered a patent (5.0%) or sold a product (9.4%). On the other hand, the activities that are more likely to be taught in university courses, such analysis of market and writing of business plan, are tackled more frequently.

Active entrepreneurs

- 3.8% of the respondents are active entrepreneurs, i.e., they are running their own business or are self-employed.
- Most of these (56.2%) were studying Natural Sciences.
- Data suggest a link between the field of the study and the sector of the founded company. Most of active entrepreneurs studying Natural Science are active in the architecture and engineering sector, followed by Financial services. On the other hand, the most part of active entrepreneurs studying Social Sciences started the company in Tourism and leisure, follow by Financial services.
- Non-economic goals are of paramount importance for active entrepreneurs in the Italian sample. The most important motive for the active entrepreneurships is to do something through which they can express their core values, followed by motive to solve a specific problem faced by a group of people that they strongly identify with.

Potential family successors

- In the Italian sample 36.1% are potential family successors (i.e., they have at least one self-employed and/or majority shareholder parent).
- Of these 27.3%, is planning to succeed parents' family firm right after studies and/or 5 years after finishing studies: we call these students "family successors".
- 1.9% of the potential successors (i.e., students whose parents own a business or are self-employed) aim at succeeding parents' entrepreneurial activity right after studies and maintain the leadership also five years after graduation; 5.6% intended to succeed family only as short term career option; finally, 20.0% had the intention to take over parents' entrepreneurial activity only 5 years after studies, but to do something different right after studies.
- Working in parents' family firm right after studies might be seen as an opportunity for developing entrepreneurial experience before founding an own business.

1. INTRODUCTION

Entrepreneurship, (Shane et al., 2000) the process through which new business opportunities are identified and exploited (Acs et al., 2013), is widely acknowledged to play a central role in our economy: it allows knowledge generated at universities and in incumbent organizations to be commercialized and generate economic growth, jobs and innovation. In our society University has the mandate to offer individual a fertile ground to develop its students' attitudes and predispositions towards entrepreneurship (Audretsch, 2014). This is important not only to stimulate the creation of new ventures by students, a valuable career option in these times of growing youth unemployment; being more entrepreneurial allows also students to be more proactive and creative throughout their careers as employees (Leitch et al., 2012).

In this context, as researchers we can play an important role in understanding to what extents students are prepared and predisposed to think and act entrepreneurially and to what extent preferences for an entrepreneurial career are diffused among them. In this respect, the GUESSS stands for 'Global University Entrepreneurial Spirits Students Survey' and is an international research project that responds to this need focusing on entrepreneurial intentions and activities of students. GUESSS is one of the largest entrepreneurship research projects in the world. With every data collection wave, GUESSS has grown and has become more internationally, culminating in the 7th edition in 2016 with 50 participating countries. On an international level the project is coordinated by the Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen in Switzerland. For each participating country a representative is responsible to coordinate the survey on a national level. For every data collection wave, the GUESSS core team develops a comprehensive survey that meets the highest academic standards. The survey is then sent out to each country team who in turn invites its students to participate. In Italy the survey has been coordinated by the Center of Young and Family Enterprises, University of Bergamo.

The primary goal of the project is to document the entrepreneurial intentions and activity of students. Specifically, the project allows for:

- Systematic and long-term observation of entrepreneurial intentions and activities of students.
- Identification of antecedents and boundary conditions in the context of new venture creation and entrepreneurial careers in general.
- Observation and evaluation of Universities' activities and offerings related to the entrepreneurial education of their students.

The results of GUESSS are of relevance for different target groups:

- Participating countries: to generate insights about their respective basic conditions for entrepreneurship in general, and learn more about the entrepreneurial power of their students.
- Participating universities: to be able to assess the quality and quantity of their offerings in the context of entrepreneurship.

- Politics and the public: to be sensitized to entrepreneurship in general and new venture creation in particular, and hopefully identify a need for action.
- For students: to benefit from the implementation of respective actions in the long run.

This report summarizes the data collected from the Italian sample and offers an overview, among others, on students' entrepreneurial intentions, on the number of students who are in the process of creating a business and on how many of them own a business. The report includes also the student's entrepreneurial intentions and their antecedents, as well their socio-demographic background. The Italian sample includes to 4,446 respondents and was gathered through a non-random process, in which 39 universities participated.

The remainder of the report is organized as follows. Section 2 presents the theoretical rationale behind the design of the survey and the data collection; Section 3 describes the sample main characteristics; Section 4 focuses on university context for entrepreneurship; Section 5 illustrates the career preferences of respondents; Section 6 explores the students' family and entrepreneurship background; Sections 7 and 8 are focused on nascent and active entrepreneurs. Finally, Section 9 concludes with potential successors.

2. RESEARCH, DESIGN AND METHODOLOGY

2.1. Questionnaire Design

The questionnaire design is based on the constructs of the Theory of Planned Behavior (TPB) intention model (Ajzen, 1991; 2002). The framework is designed to explain and predict planned behavior that is not under complete volitional control, such venture creation, which often depends on factors external to the individual (Autio et al., 2001).

According to TPB, the main predictor of the behavior is intention. The survey investigates entrepreneurial intention (EI) by asking students about their career attitudes directly after graduation and five years after graduation. A particular emphasis is devoted to the investigation of entry mode into entrepreneurship, founding or succession. The questionnaire asks also students to assess the strength of their EI intention.

The second predictor of behavior is perceived behavioral control (PBC), which denotes the perceived ease or difficulty of performing the behavior. The greater the confidence about mastering an activity the larger the probability to persevere despite external impediments. The survey collects information about the perceived ability to perform specific entrepreneurial activities and their overall confidence in succeeding in being an entrepreneur.

The survey collects also data on the three determinants of intentions identified by TPB. The first one is attitude towards behavior and refers to the individual's evaluation of the target behavior. To measure attitudes, the survey asks about the expected outcomes and risks linked to entrepreneurial activities. The second determinant of intention are subjective norms that capture the opinions of social reference groups regarding whether

the individual should engage in the behavior. Respondents provide information about their perceptions about the approval of entrepreneurial activity by important referents and about the cultural values of their community. The third predictor of intention is the already mentioned PBC.

The survey collects also data about exogenous factors that the literature has proven to indirectly influence EI. According to TPB the impact of these variables on EI is fully mediated by the antecedents of intention (Kautonen et al., 2013). In particular, students are asked about their personal and family background, motives for career attitudes and university context.

Personal background includes age, gender, education and working experience which literature has shown to affect the decision to become an entrepreneur (Grilo and Thurik, 2006; Minniti and Nardone, 2007; Santarelli and Tran, 2013).

Respondents also report the working status of parents and relatives, given the stylized fact that the decision to become an entrepreneur is correlated positively with having parents who are or were entrepreneurs (Bosma et al., 2012).

The motives for career choice are important determinants of EI antecedents. In addition to financial aspects, there are a number of nonfinancial reasons to become an entrepreneur, including being independent or autonomous, having the opportunity to use one's skills and abilities, and the nature of the work (Block et al., 2013a).

Finally, particular emphasis is assigned to the investigation of the university context, given the potential effect of education on entrepreneurial skills, attitude and intention (Martin et al., 2013). Students were asked about their perception of entrepreneurial education offers of their university.

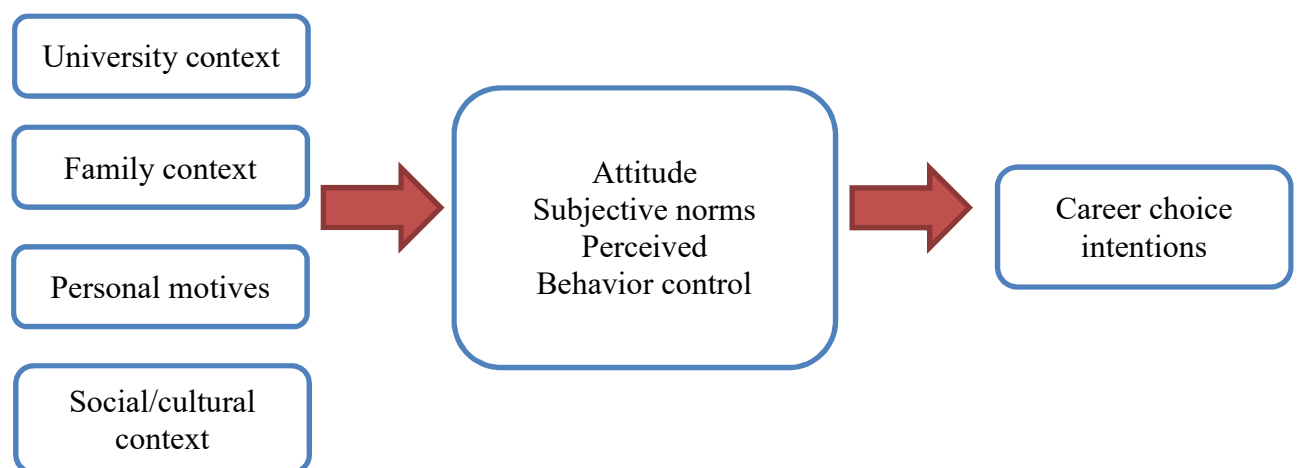


Figure 2.1 Theoretical framework of the GUESSS questionnaire

2.2. Data Collection

Data have been collected among students in higher education of different study fields and at different education levels (e.g., undergraduate, graduate) in the Italy. Surveys were distributed online. In addition, respondents were allowed to skip some questions in order to encourage participation of those hesitating to provide full personal information. The complete GUESSS data set for 2016 includes information from 122,509 respondents across 50 countries, of which 4,667 are from the Italy. Table 2.1 presents the participating universities to the Italian GUESSS survey. Students were reached by the survey through a non-random process in which universities deliberately decided in which classes they would distribute the survey. Therefore, in interpreting the figures of this report, the reader should bear in mind that they might be not representative of the Italian population of university students.

University	Frequency	Percent
Università degli Studi di Torino	950	21.4%
Università degli Studi di Modena e Reggio Emilia	839	18.9%
Università degli Studi di Bergamo	572	12.9%
Politecnico di Torino	559	12.6%
Università degli Studi di Napoli "Federico II"	415	9.3%
Università degli Studi di Udine	309	7.0%
Università della Calabria	232	5.2%
Università Carlo Cattaneo - LIUC	151	3.4%
Università degli Studi di Verona	135	3.0%
Università degli Studi di Padova	118	2.7%
Other	166	3.7%
Total	4,446	100.0%

Table 2.1 Participants universities to the Italian GUESSS survey (N=4,446).

3. SAMPLE PROFILE

3.1. Personal Information

The average age of students who participated in GUESSS Italy is 23.5 years. The figure 3.1 shows that most students (72.1%) can be found in the age category of '<25 years'. Almost 23.7% are aged between 25 and 30 years old; and the remaining 4.3% belongs to the category of '31 years and older'.

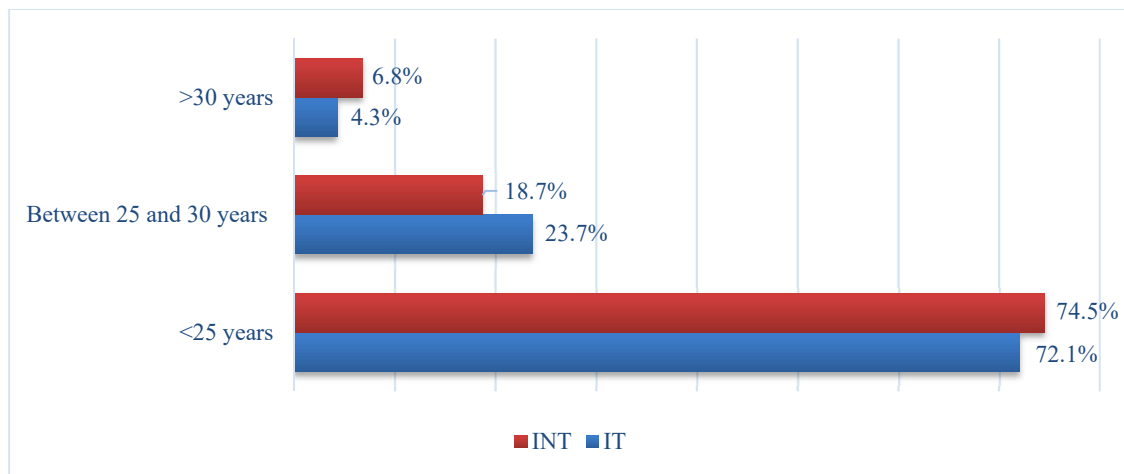


Figure 3.1 Age of the Italian and International GUESSS samples (INT=122,509 IT=4,667).

As shown in Figure 3.2, there were not major differences in terms of gender when comparing the Italian sample (55.5 % female respondents, valid responses=4,667) with the international one (58.4 % female respondents, valid responses=122,509).

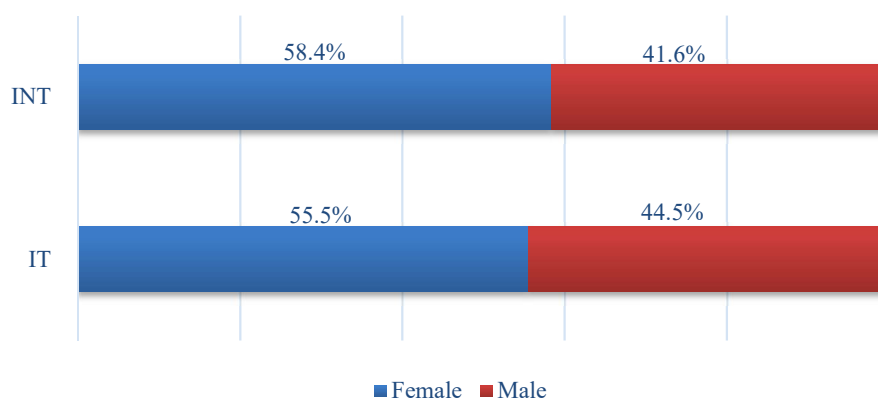


Figure 3.2 Gender distribution of Italian and International GUESSS samples (INT=122,509 IT=4,436).

Most of students of the sample (i.e. 94.2%) are Italian as shown Table 3.1 below.

Nationality	Frequency	Percent
Italy	4,180	94.2%
Romania	44	1.0%
Albania	39	0.9%
Morocco	11	0.3%
China	13	0.3%
Ukraine	13	0.3%
Other	137	3.1%
Total	4,437	100.0%

Table 3.1 Nationality of the responders in the Italian sample (Valid responses N=4,437).

3.2. Student-related Information

Figure 3.3 gives an overview of the study background of students who participated in the GUESSS study. Most of the participating students are in Engineering and Architecture (32.6%), followed by Law and Economics (26.3%).

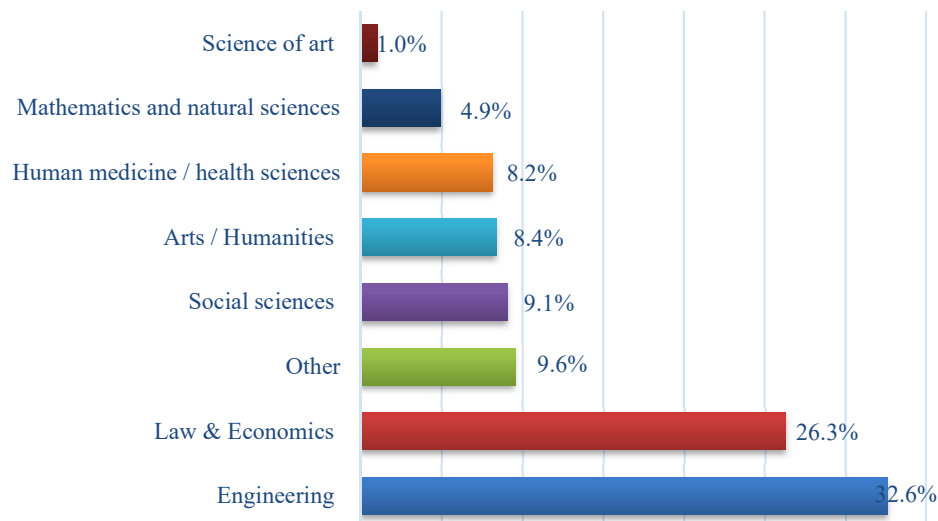


Figure 3.3 Student's' fields of study in the Italian sample (Valid responses N=4,438).

The fields of study of the students were grouped in three general fields. “Business, Law and Economics” includes all areas of law, economics and management. Natural Sciences includes Medicine and Health Sciences, Mathematics, Natural Sciences, Engineering, Architecture, Computer and Information Technology. Lastly, Social Sciences include Linguistics, Cultural Studies, Pedagogy, and other Social Sciences such as Sociology and Political Sciences.

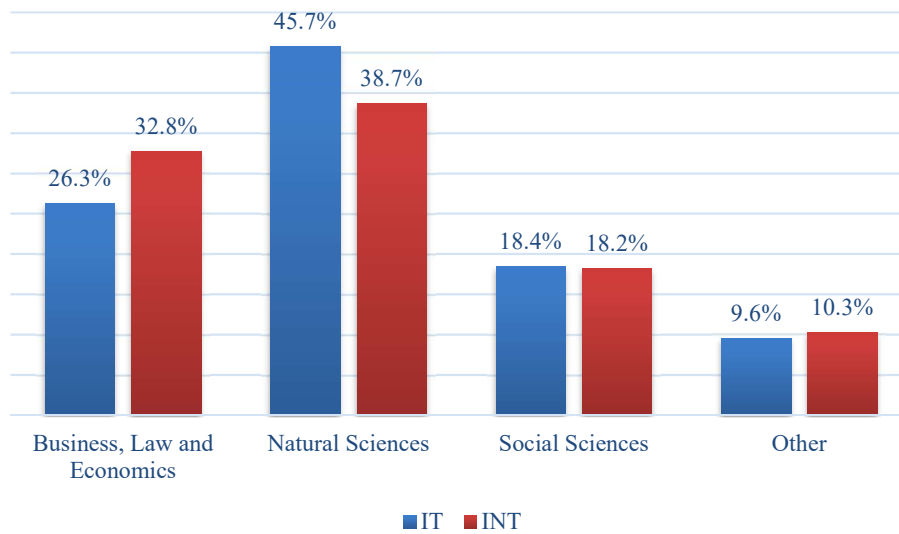


Figure 3.4 Students' field of study in the Italian and International GUESSS samples (INT=122,509 IT=4,438).

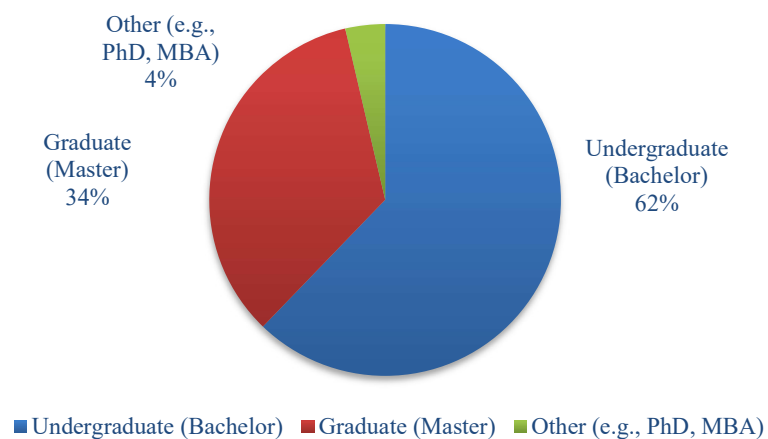


Figure 3.5 Students' level of studies in the Italian sample (Valid responses N=4,434).

Most of the survey participants are undergraduates and enrolled in a bachelor program (62.2%), followed by students studying on a master level (34.1%); only 3.6% study at higher levels, such PhD students.

4. UNIVERSITY CONTEXT AND ENTREPRENEURSHIP EDUCATION

4.1. University Climate for Entrepreneurship

University climate for entrepreneurship describes the extent to which student perceive that entrepreneurship is supported and encouraged at their university and is believed to play an important role in fostering students' entrepreneurship (Bergmann et al., 2018). A supportive climate towards entrepreneurship encourages innovation and the implementation of creative ideas to assess the entrepreneurial climate at their university, respondents rated the three items displayed in Table 4.1 on a 7-points Likert scale (1=not at all;7=very much).

Question	Average
The atmosphere at my university inspires me to develop ideas for new businesses.	3.9
There is a favorable climate for becoming an entrepreneur at my university.	3.6
At my university, students are encouraged to engage in entrepreneurial activities.	3.5

Table 4.1 University climate for entrepreneurship in Italian sample (Valid responses N=4,435).

Responses show that, on average, that Italian students do not evaluate positively their university climate for entrepreneurship. Evaluation seems to be slightly better in the Business, Law and Economics area, where students are more likely to be exposed to some forms of encouragements to enter act on business opportunities (see fig. 4.1 below).

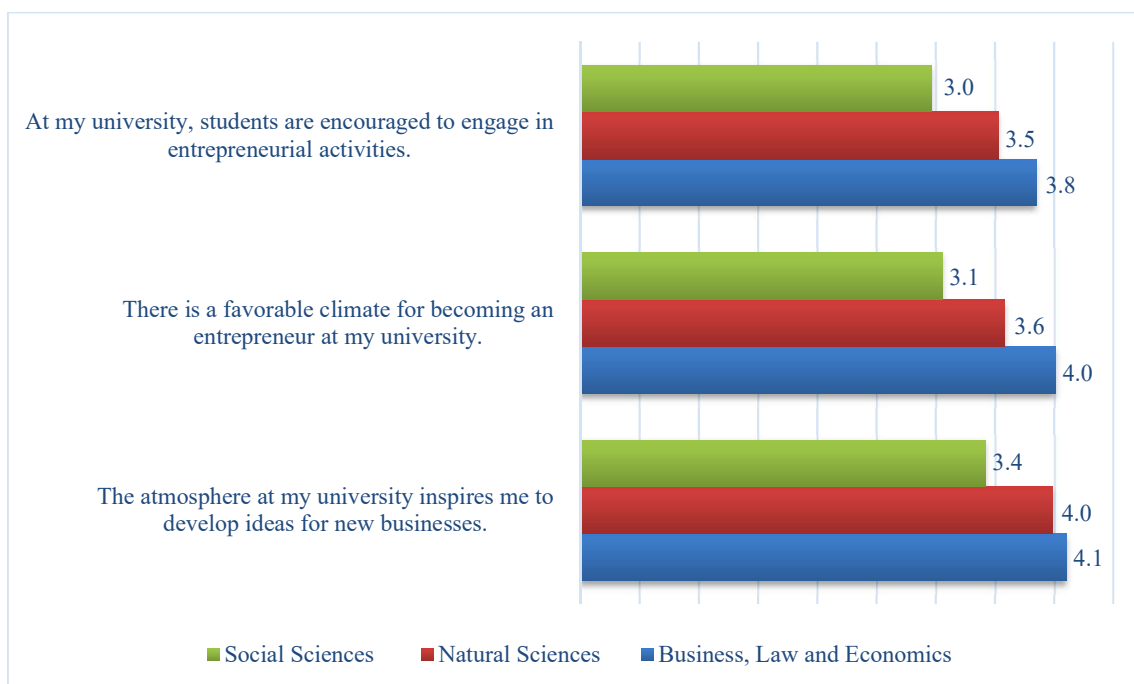


Figure 4.1 University climate for entrepreneurship by field of study in Italian simple (Valid responses N=4,428).

4.2 Entrepreneurship Education

This paragraph describes respondents' participation to entrepreneurship courses during their studies. As the Figure 4.2 shows, there are many Italian students who have never attended these types of courses (66.1%) and this percentage is higher than the one observed in the International GUESSS sample (55.4%).

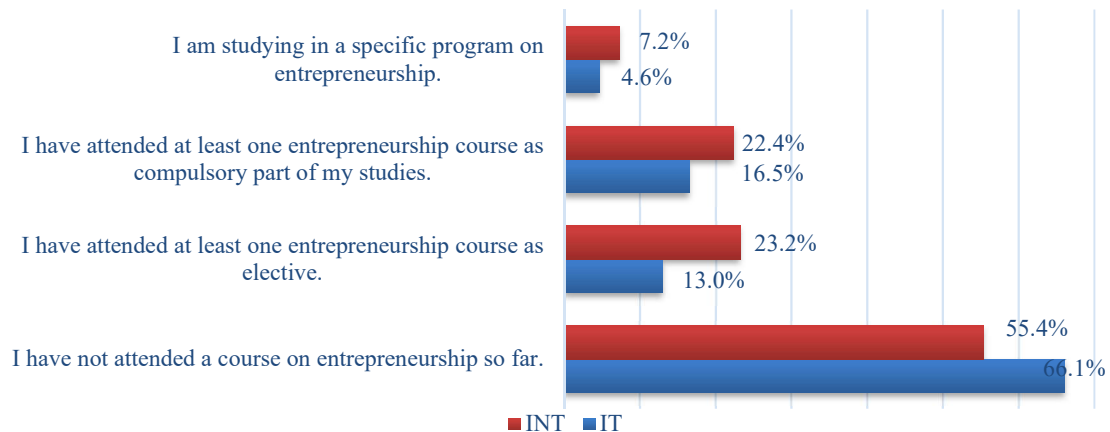


Figure 4.2 Participants to entrepreneurship courses in Italian and International GUESSS samples (Valid responses in the Italian sample N=4,418).

Looking more in detail at students' participation to entrepreneurship education by field of study, we can notice a huge difference between Business, Law and Economics scores and the Social Sciences ones: while in the first more than half of students has attended entrepreneurship courses (particularly as compulsory), in the second case this type of education is fairly less diffused. These discrepancies can be explained by the fact the entrepreneurship education is conceptually closer to the subject taught in business-related faculties. It should be noted that entrepreneurship education is offered not only as elective but also as compulsory to almost a third of Natural Sciences students: a valuable opportunity to help them in appreciating and acting on the commercial value of the technical knowledge they learn during their studies.

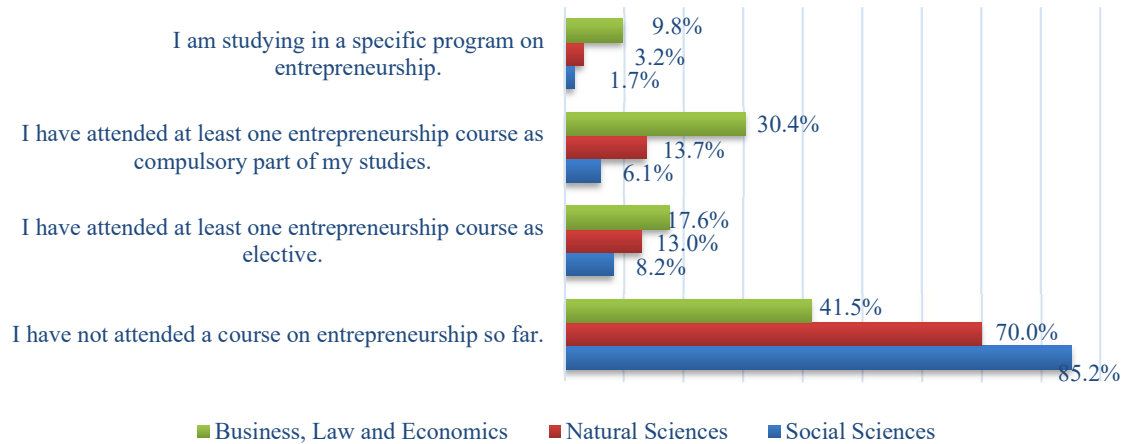


Figure 4.3 Participations to entrepreneurship courses by field of study in the Italian sample (Valid responses N=4,014).

Question	Average
The courses and offerings I attended increased my understanding of the attitudes, values and motivations of entrepreneurs.	3.9
The courses and offerings I attended increased my understanding of the actions someone has to take to start a business.	3.6
The courses and offerings I attended enhanced my practical management skills in order to start a business.	3.5
The courses and offerings I attended enhanced my ability to develop networks.	4.4
The courses and offerings I attended enhanced my ability to identify an opportunity.	4.6

Table 4.2 Effect of university offering on entrepreneurial learning outcomes in Italian simple (Valid responses N=4,407).

The scarce diffusion of entrepreneurship education is reflected in the results shown in Table 4.2, which shows students' evaluation of entrepreneurial learning on a 7-points Likert scale (1=not at all;7=very much). On average, university offerings have produced somewhat limited results on students' entrepreneurial learning outcomes, casting some serious concerns on university effectiveness in preparing students to entrepreneurship. In particular, Italian students lament a scarce improvement of the practical skills and actions needed to start a business. Results are particularly disappointing for Social Sciences students, but are significantly better for Business, Law and Economics students. These students, in fact, not only are more likely to receive entrepreneurship education, as shown above, but are embedded in a university environment which teaches business and management skills that can be useful to entrepreneurs.

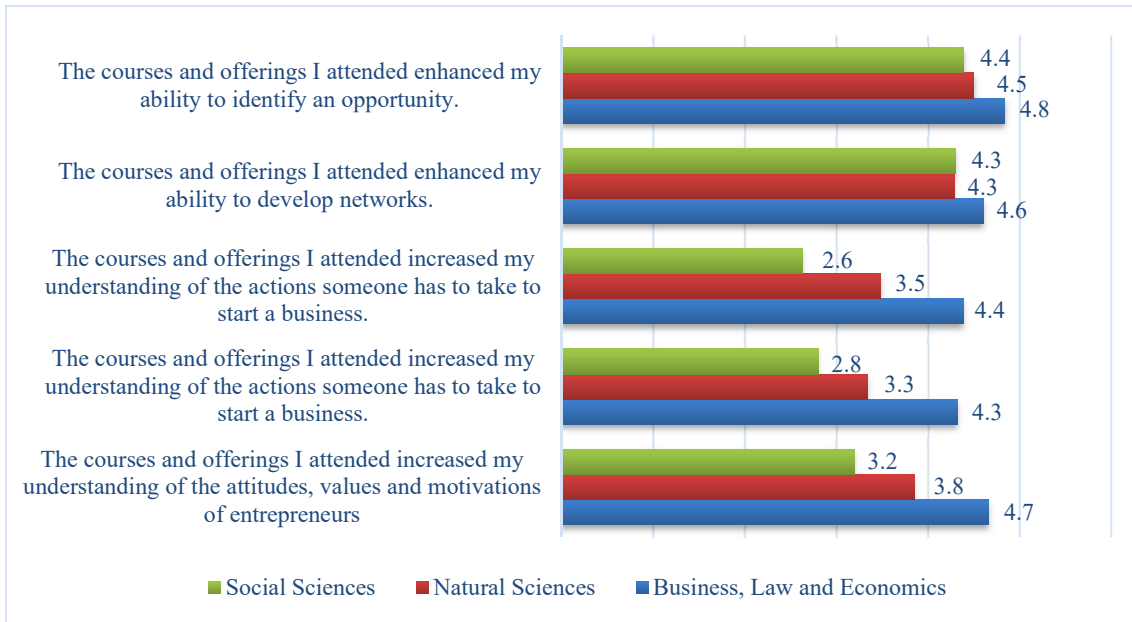


Figure 4.4 Effect of university offering on entrepreneurial learning outcomes by field of study in the Italian sample (Valid responses N=3,979).

5. CAREER ASPIRATIONS

5.1. Long and Short-Term Career Aspirations

Career aspirations offer an important indicator of student's interest towards entrepreneurship as a job. In this paragraph, we analyze respondents' career aspirations in relation to two different time periods: immediately after finishing studies and 5 years after finishing studies. First, we can notice a high number of students who prefer to start working as an employee immediately after their studies. As shown in Figure 5.1, 23.4% of respondents prefer to start their career after university in a large company; also the percentage of students willing to enter an SME is high (43.3%). 8% of the interviewees prefer a career in academia, while a job in a non-profit association or public service is respectively chosen by 4.7% and 5.4% of the respondents. Only 3.8% prefer to found an own business, while 2.7% would like to take over an existing business or become successors in parents' family business.

The scenario 5 years after graduation is fairly different (Figure 5.1), with a larger fraction of students aspiring to found a business and a significant drop in the percentage of students that aim to be employed in SMEs. A possible explanation for this pattern is associated to the possibility of acquiring entrepreneurial capabilities working in SMEs (Elfenbein et al., 2010). Taking advantage of this experience right after studies, students might plan to found a business later in their career.

More specifically:

- Less than half of the students intend to work as an employee. In particular, only a small fraction aims to be employed in a SME (8.2%). The percentage of those who prefer a large business is higher (24.7%).
- 30.3% of the respondents want to found a business 5 years after finishing studies, almost a 30% increase compared to career aspiration right after studies.

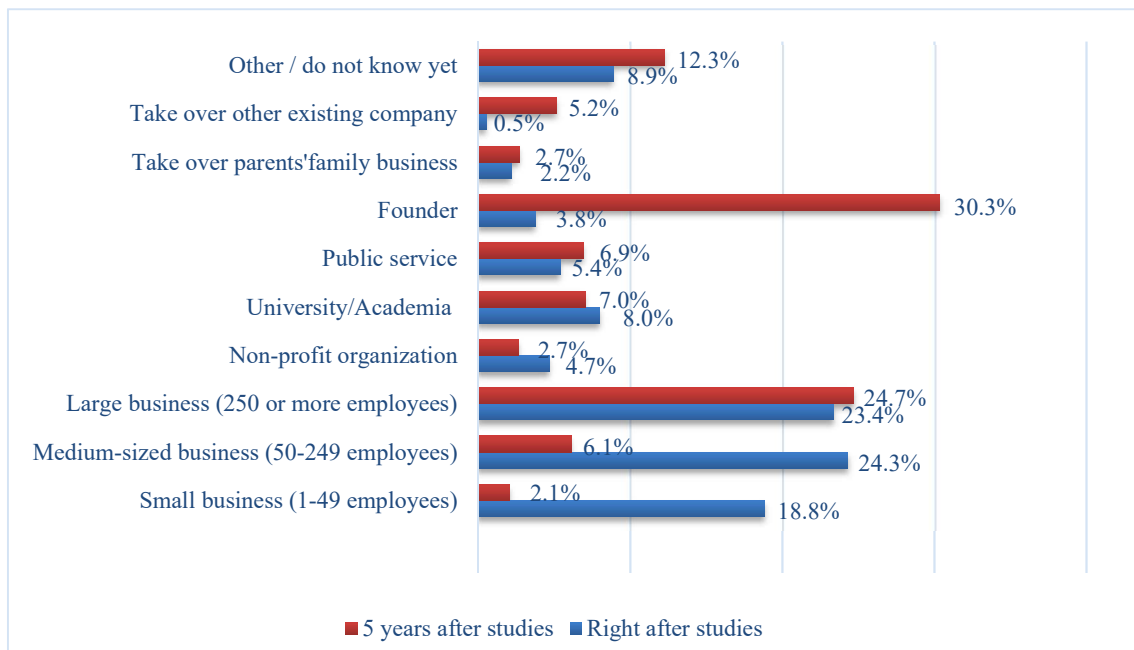


Figure 5.1 Career aspirations directly after studies and five years after graduation in the Italian sample (Valid responses N=4,446).

Figure 5.2 shows the students' career preferences grouping career aspirations into four categories (i.e., founders, successors, employees and other) in the Italian sample. This graph underscores the preferences of students for employment rather than entrepreneurship as a career choice, particularly just after studies. On the other hand, it shows that more than one third of the students aspire to become either founder or successor at some point of their career.

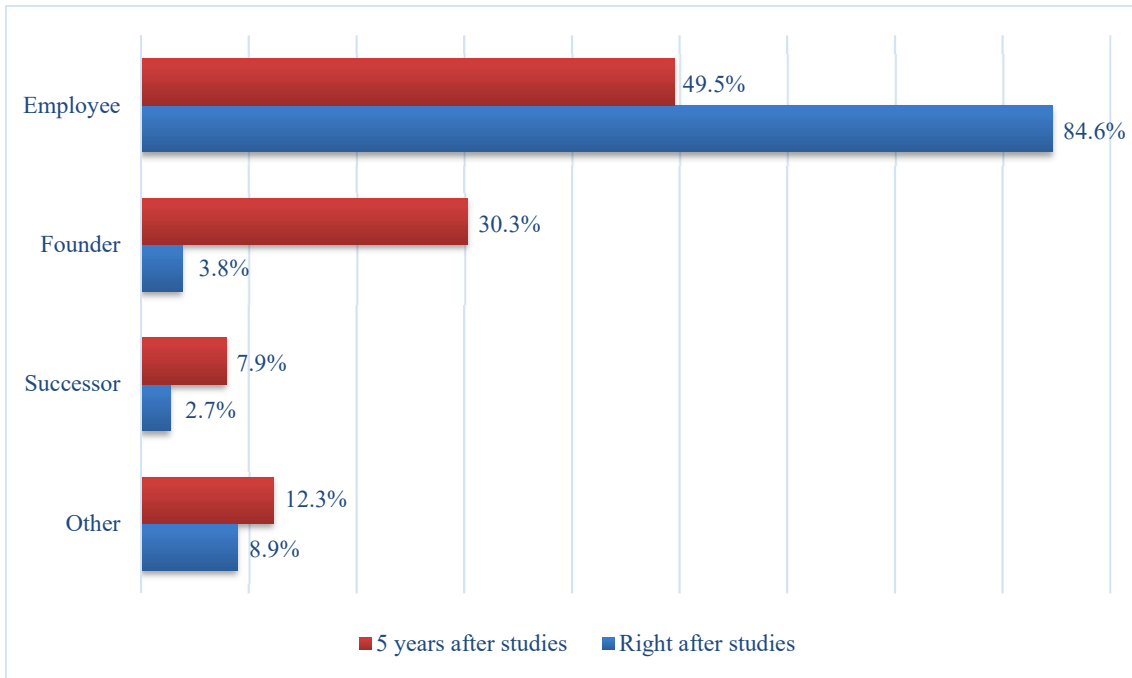


Figure 5.2 Career aspirations in the Italian sample grouped in categories (Valid responses N=4,436).

In an international comparison, the percentage of Italian respondents who intend to found their own business just after studies and 5 years later is lower than the international GUESSS sample (8.8% and 38.2% respectively), as shown in Figures 5.3 and 5.4.

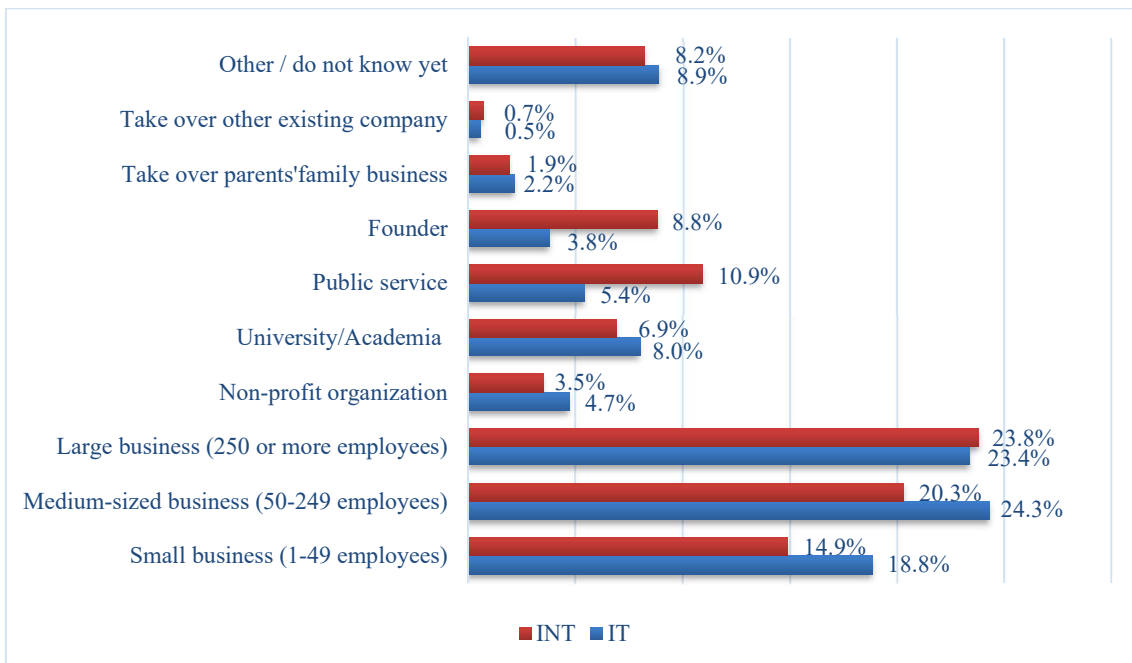


Figure 5.3 Career aspirations right after studies in the Italian and international GUESSS samples (Valid responses N=4,446).

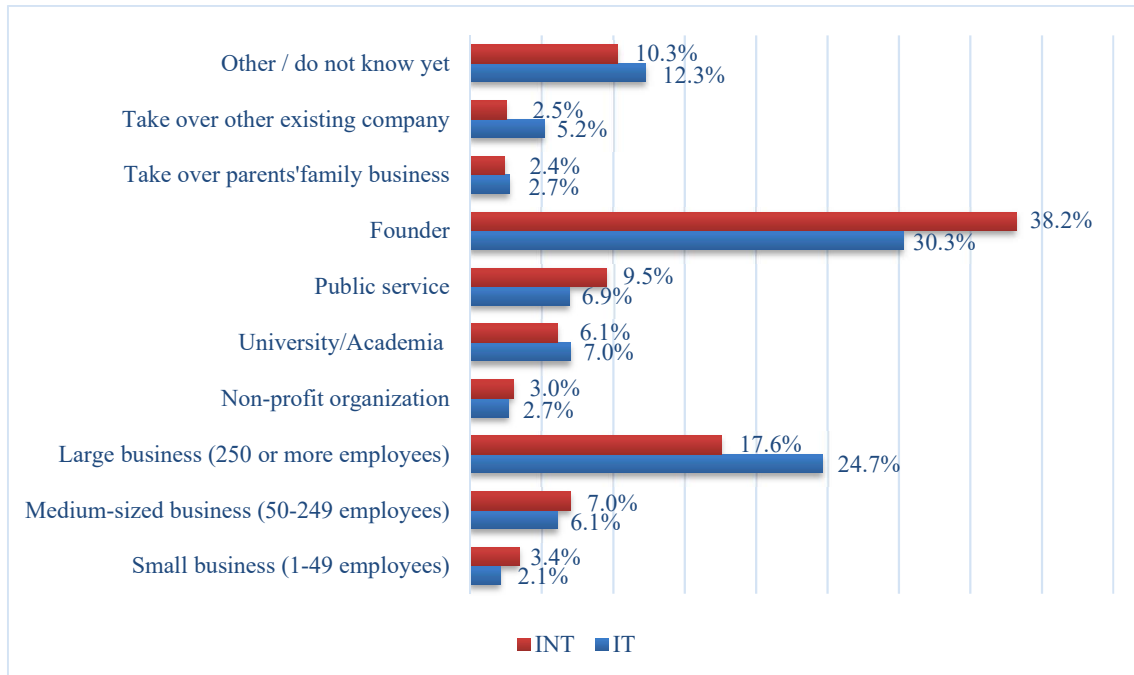


Figure 5.4 Career aspirations 5 years after graduation in the Italian and international GUESSSS samples (Valid responses N=4,436).

Italian respondents who have the intention to work on their own at becoming founders 5 years after graduation (30.3%) are less compared to the international sample (38.2%), as shown in Figure 5.4.

5.2. Career Aspirations by Gender

Figures 5.5 and 5.6 show that the preference for the entrepreneurial career (both right after studies and 5 years later) is more diffused among male students compared to female ones. This is in line with the stylized fact acknowledged in the literature that male is on average more likely to become entrepreneurs (Minniti and Nardone, 2007). Gender differences are far more accentuated considering founding rather than succession as mode of entry into entrepreneurship.

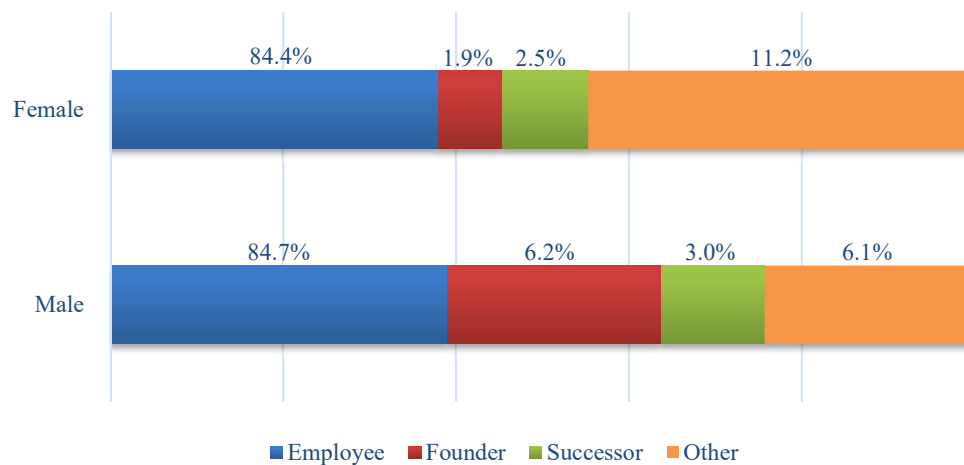


Figure 5.5 Career aspirations right after studies in the Italian sample by gender (Valid responses N=4,436).

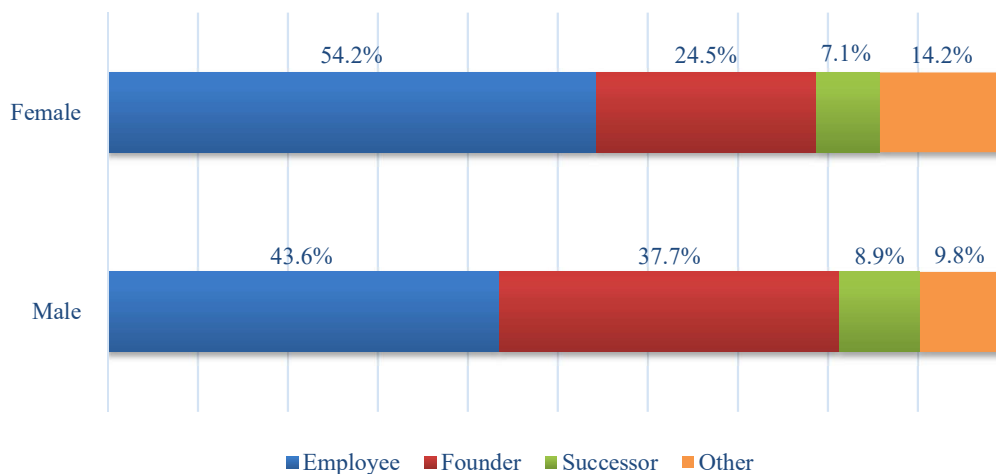


Figure 5.6 Career aspirations 5 years after studies by gender in the Italian sample (Valid responses N=4,436).

5.3. Career Aspirations by Age

Career aspirations right after studies of students grouped by age shown that the preference towards founding a business is more diffused among older students above 30 years old (Figure 5.7). However, considering career aspirations 5 years later, younger students catch up. Such pattern can be explained by the fact that younger students perceive the need to accumulate more resources and experience before founding a business.

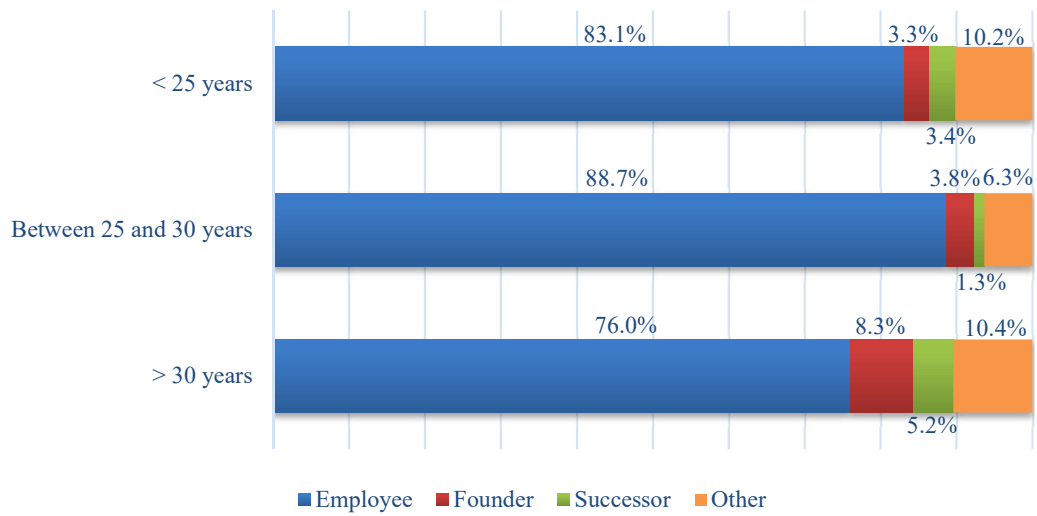


Figure 5.7 Career aspirations right after studies by age in the Italian sample (Valid responses N=4,480).

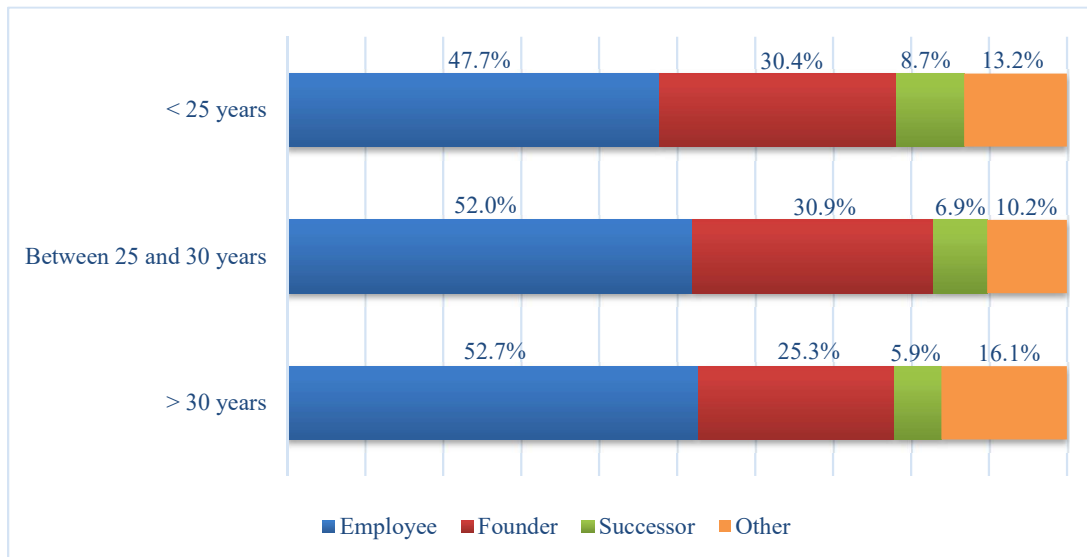


Figure 5.8 Career aspirations 5 years after graduation by age in the Italian sample (Valid responses N=4,388).

5.4. Career Aspirations by Field of Study

The career choice intentions were broken down by students' fields of study: (1) Social Sciences; (2) Natural Sciences; and (3) Business, Law and Economics. As seen in the Figure 5.9, right after studies career preferences are not very different among students of various fields of study.

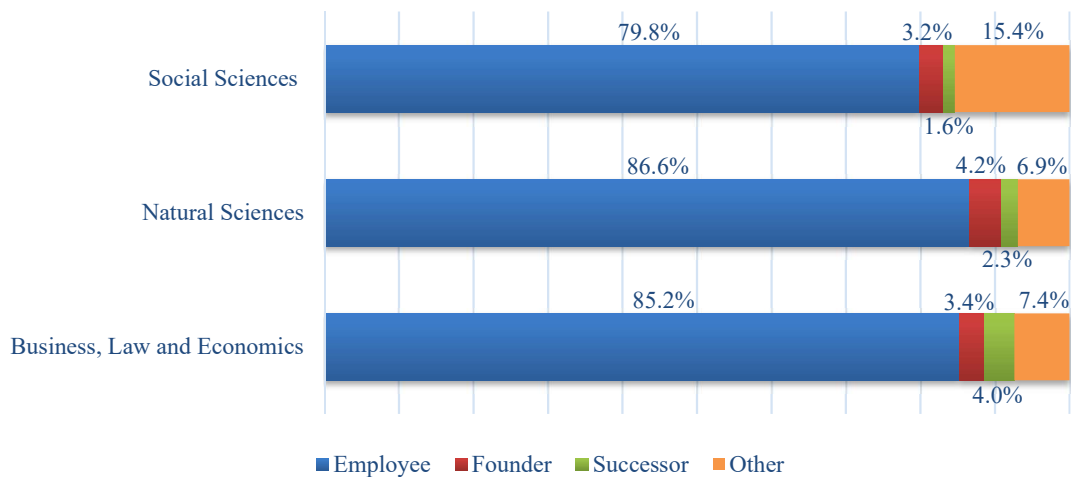


Figure 5.9 Career aspirations right after studies by field of study in the Italian sample (Valid responses N=3,405).

Five years after studies, as reported in Figure 5.10, the percentage of aspiring founders 5 years after studies increases in all study fields, with the most remarkable increase in the Natural Sciences study field.

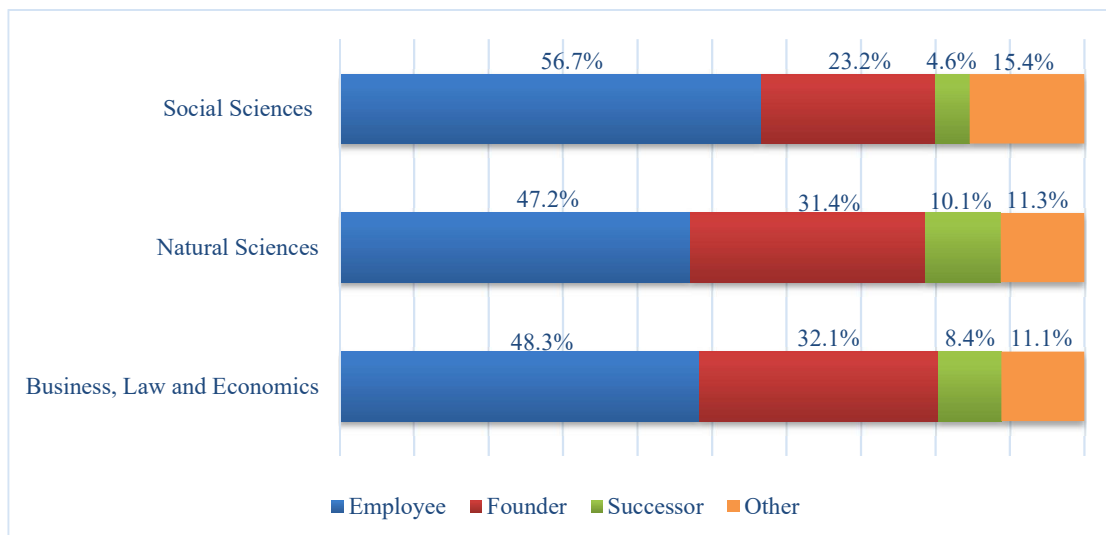


Figure 5.10 Career aspirations 5 years after studies by field of study in the Italian sample (Valid responses N=2,005).

6. STUDENTS AND ENTREPRENEURSHIP

6.1. Family Background

Since family has been widely acknowledged as a social context that nurtures individuals' predisposition and inclinations towards entrepreneurship from their youth (Aldrich and Cliff, 2003; Criaco et al., 2017; Peterman and Kennedy, 2003), the survey dedicates a section to gather information about students' family and its entrepreneurial activities.

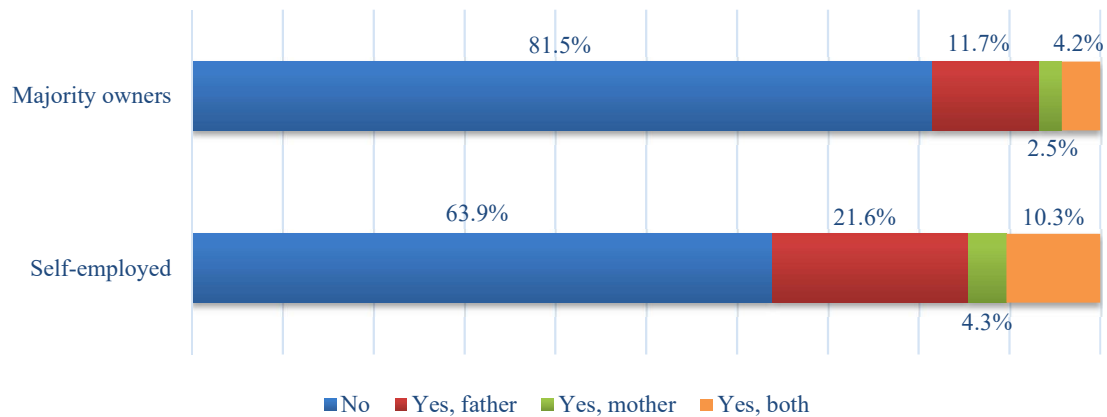


Figure 6.1 Parent entrepreneurship in the Italian sample (Valid responses N=4,446).

In the Italian GUESSS sample, more than a third of the students have at least one parent who is currently self-employed and almost 14% of respondents have at least one parent who has the majority ownership in a company (Figure 6.1).

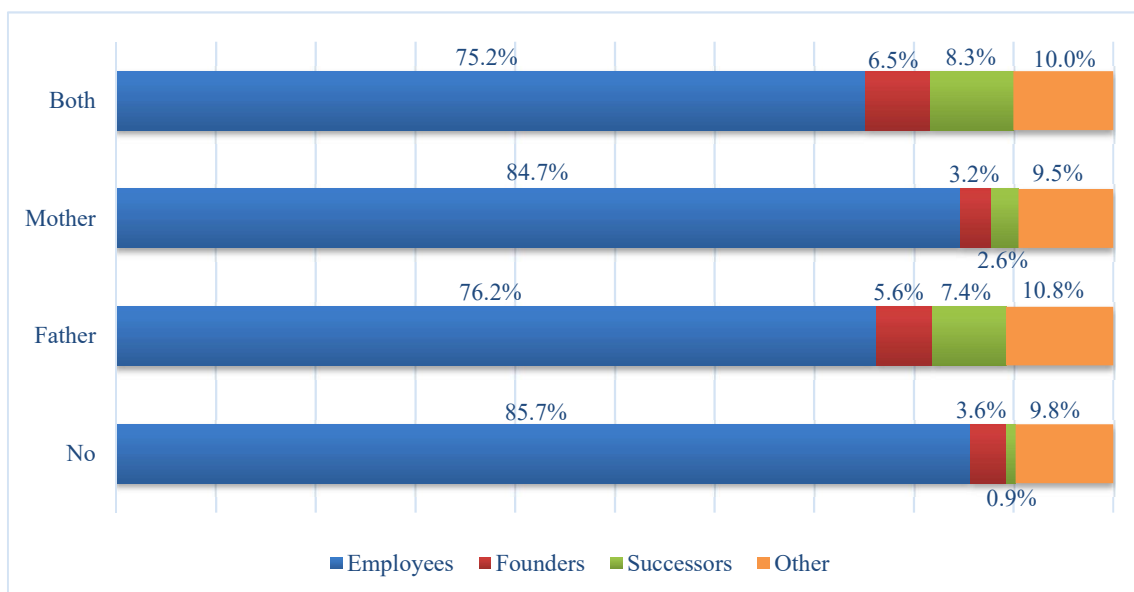


Figure 6.2 Students' career aspirations right after studies broken down by parents' self-employment status (Valid responses N=2,590).

Figures 6.2 and 6.3 point out to a possible association between entrepreneurial career aspirations and parents' self-employment status. We can see a greater percentage of students willing to open their own business both immediately after graduation and 5 years after graduation in the group of respondents with self-employed parents. Figures 6.2 and 6.3 show that a fraction of students with parent entrepreneurs expresses the intention to take over an existing business, an option facilitated by the opportunity to succeed their parents in the family business. Literature offers several explanation in support to the idea that parents' entrepreneurship encourages entrepreneurial activity (Aldrich and Cliff, 2003; Criaco et al., 2017; Peterman and Kennedy, 2003): the exposure to role models, to learning opportunities and to norms and resources that support and encourage an entrepreneurial career.

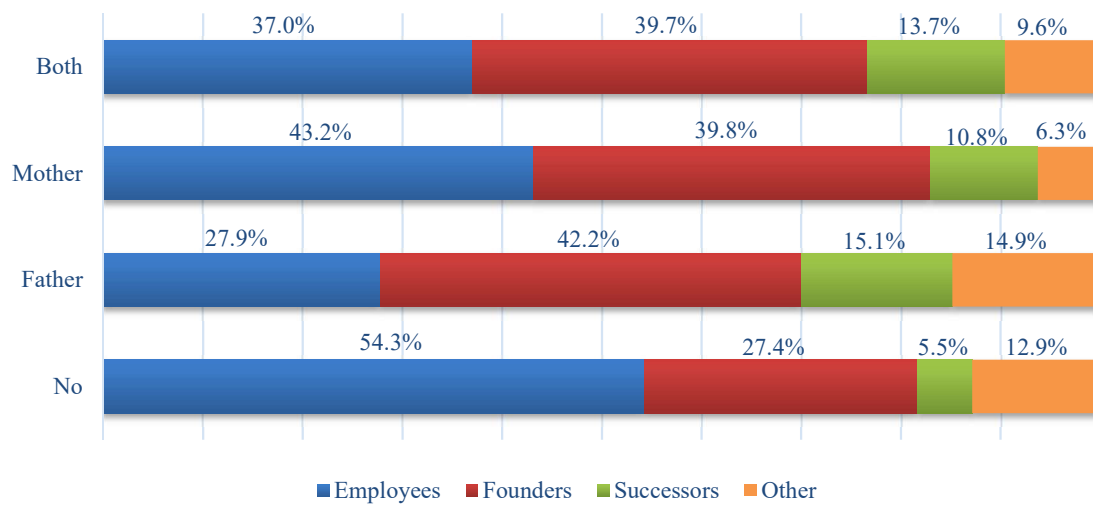


Figure 6.3 Students' career aspirations 5 years after studies broken down by parents' self-employment status (Valid responses N=2,839).

6.2. Entrepreneurial Intentions

Students who were not in the process of founding a business and were not running their own entrepreneurial activity were asked to assess their current entrepreneurial intentions, defined in the survey as the intentions to found a business. To do so respondents answered the 6-item, 7-point Likert-type scale from Liñán & Chen (2009). As shown in the Figure 6.4. shows, respondents express some interest towards founding a business at some point of their career. In line with the findings displayed in Section 5.1 (regarding career aspirations 5 years after studies) the items which score highest relate to founding a business in the future, suggesting that students consider entrepreneurship as a career option but not in the immediate future.

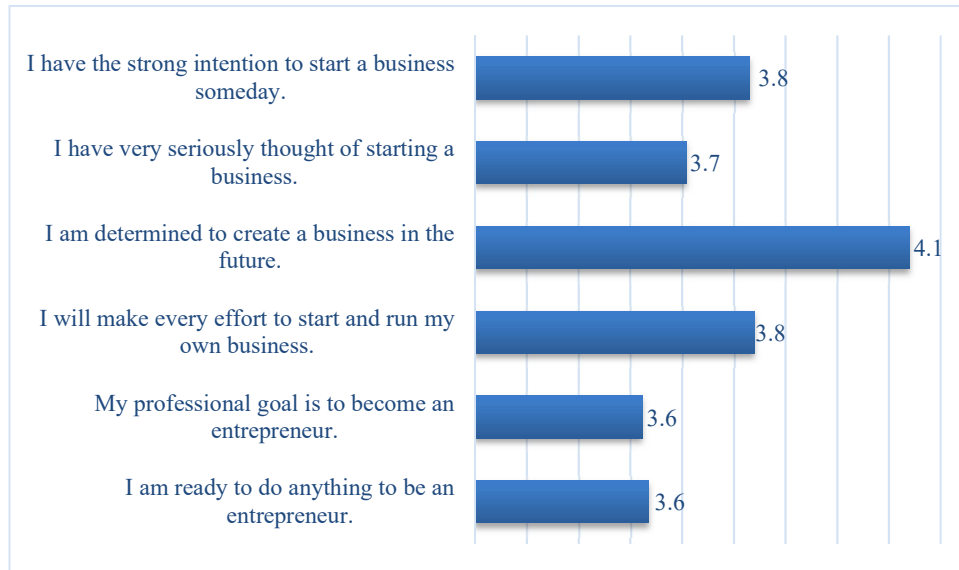


Figure 6.4 Entrepreneurial Intention in the Italian GUESSS sample (Valid responses N=4,180).

6.3. Attitudes toward Founding a Business

The first construct used to predict intention in the theory of planned behavior is "attitudes toward behavior". It measures the degree to which a person thinks positively about performing the behavior of found a business. The GUESSS survey utilized the 5-item, 7-point Likert-type scale from Liñán & Chen (2009). Table 6.1 shows the average scores assigned by students to the different items of the scale. On average attitudes are 4.7, suggesting that Italian students perceive a certain degree of interest towards founding a business.

Question	Average score
Being an entrepreneur implies more advantages than disadvantages to me.	4.0
A career as entrepreneur is attractive for me.	4.7
If I had the opportunity and resources, I would become an entrepreneur.	4.9
Being an entrepreneur would entail great satisfactions for me.	5.4
Among various options, I would rather become an entrepreneur.	4.4
Average	4.7

Table 6.1 Attitudes towards founding a business in the Italian GUESSS sample (Valid responses N=4,185).

Comparing the average attitudes reported by male and female, it appears that male students participating in the Italian GUESSS questionnaire are more inclined towards entrepreneurship (5.1 vs. 4.4), a finding aligned with extant literature that stresses gender differences with respect to entrepreneurship (Minniti and Nardone, 2007).

In an international comparison, on average the students of the international champion have attitudes towards entrepreneurship (4.8) similar to those of Italy (4.7).

As expected, breaking down students' attitudes towards entrepreneurship by career aspirations 5 years after studies, students with interest towards a career as founder or successor show stronger entrepreneurial attitudes (Figure 6.5).

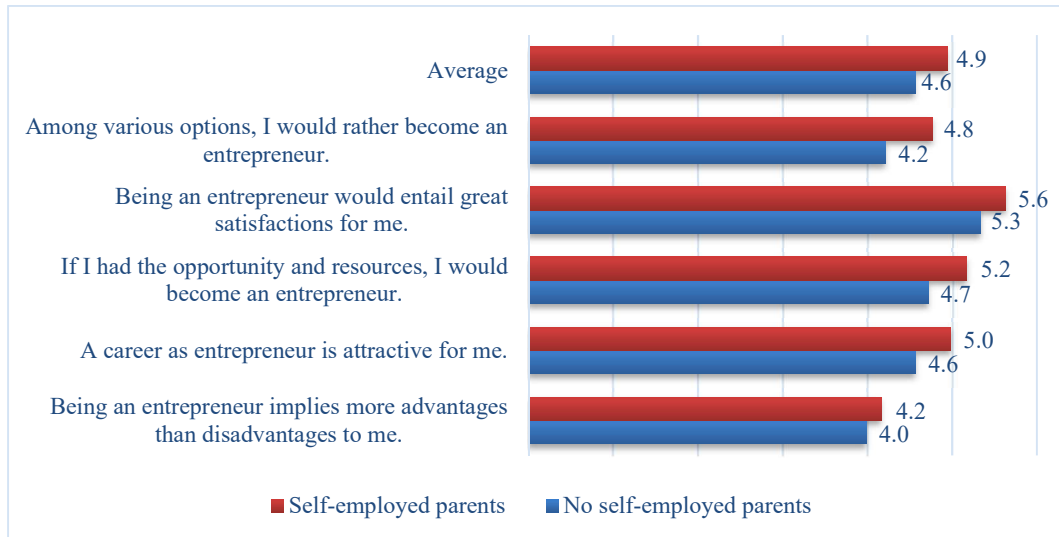


Figure 6.5 Attitudes toward founding a business by family background in the Italian sample (Valid responses N=4,182).

Compared to students of other study fields, respondents from Business, Law and Economics courses report on average higher attitudes towards entrepreneurship, closely followed by students of Natural Sciences (Figure 6.6). This finding is aligned with the more favorable climate to entrepreneurship found in the Law, Business and Economics study area, as well in Natural Sciences field, as discussed in Section 4.

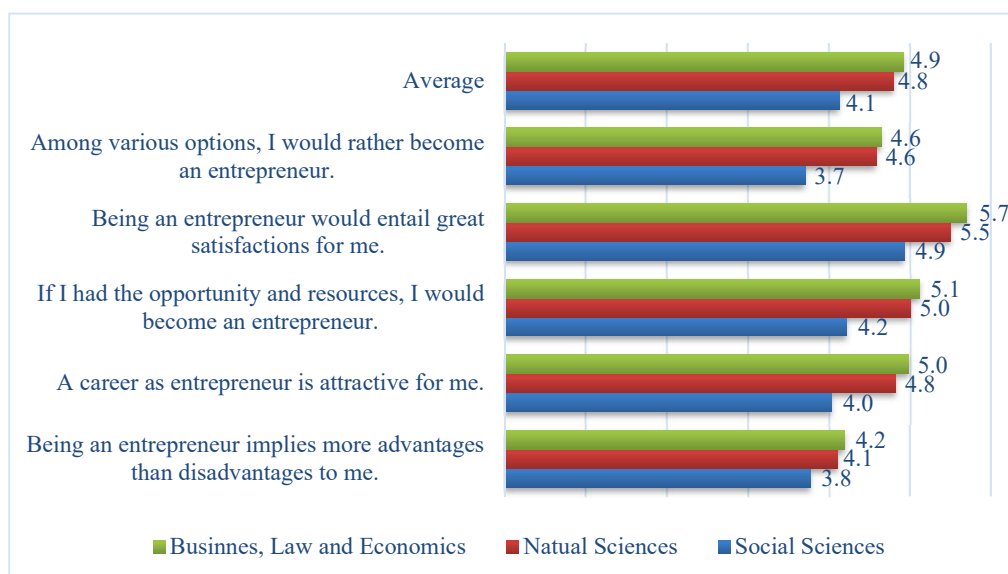


Figure 6.6 Attitudes toward founding a business by field of study (Valid responses N=4,178).

6.4. Subjective Norms

The second construct used to predict intention in the theory of planned behavior is "subjective norms" and refers to the social and cultural pressure to perform a specific behavior. Santarelli and Tran (2013) point out that relation with family, relatives and friends play an important role in supporting the decision to start a career an entrepreneur. In order to measure social norms respondents were asked to answer a 7 points-Likert scale three-item scale to evaluate the expected reaction of family, friends and fellow students if they decided to become entrepreneurs (Liñán & Chen, 2009). Figure 6.7 displays the score of students who expected positive reactions from their social environment (i.e., answering "rather positively", "pretty positively" or "very positively" responses). In the Italian sample expected reactions of family (5.3), friends (5.5) and fellow students (5.3) are in most part positive, but show a lower score compared to the international sample.

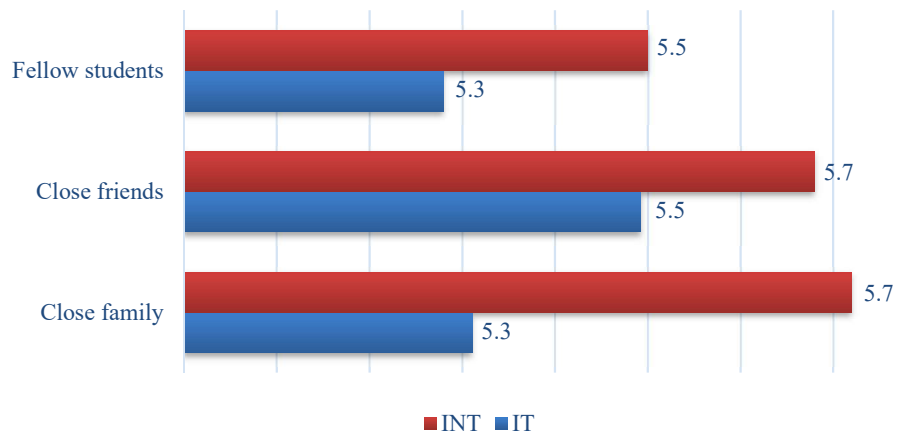


Figure 6.7 Subjective norms in the Italian and international GUESSS sample (Valid responses IT=4,182).

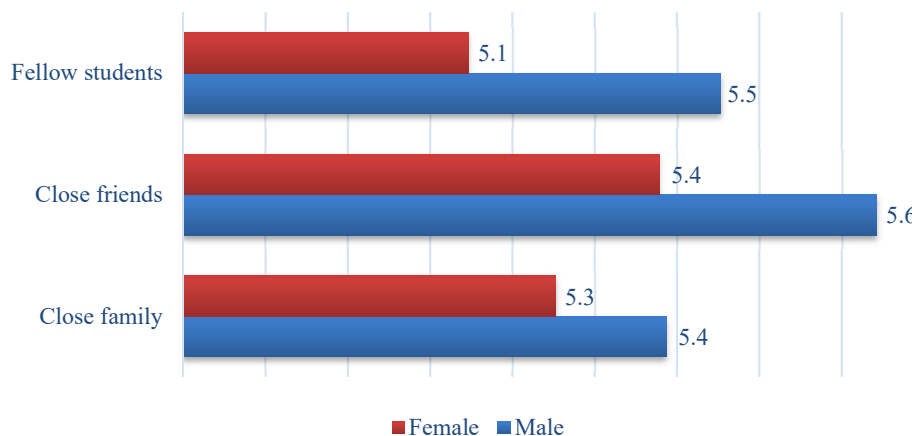


Figure 6.8 Subjective norms by gender in the Italian sample (Valid responses N=4,182).

The gender differences in terms of subjective norms displayed in Figure 6.8 suggest that female students perceive less support from their social environment if they decided to

engage into entrepreneurship. This indicates that social influences might deserve a particular attention to understand what drives and hinders female entrepreneurship.

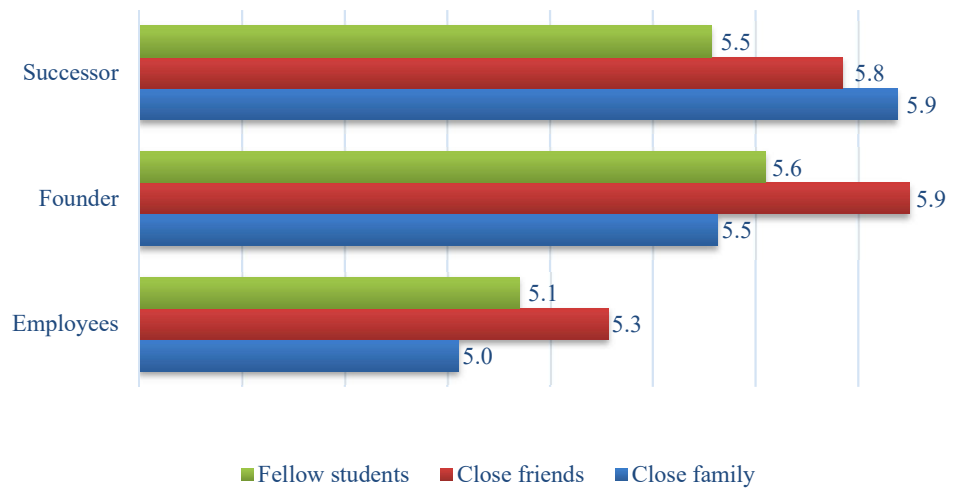


Figure 6.9 Subjective norms by career aspiration 5 years after studies in the Italian sample (Valid responses N=4,183).

Not surprisingly students who aspire to become founders 5 years after studies report subjective norms more favorable towards entrepreneurship (Figure 6.9). Interestingly for successors, the most positive reactions are expected from family members (followed by friend) while for founders they are expected from fellow students (followed by friends). This pattern would suggest that these different forms of entrepreneurship (succession vs. founding) are embedded in different social contexts.

6. 5. Entrepreneurial Skills

The third construct used to predict intention in the Theory of Planned Behavior is "perceived behavioral control". It measures the respondent's belief in his capacity to perform the behavior and affects positively both intent and likelihood to perform the behavior (Ajzen, 1991). In this respect, survey participants were asked to assess their entrepreneurial skills (Chen et al., 1998; Kickul et al., 2009) on a 7-points Likert scale.

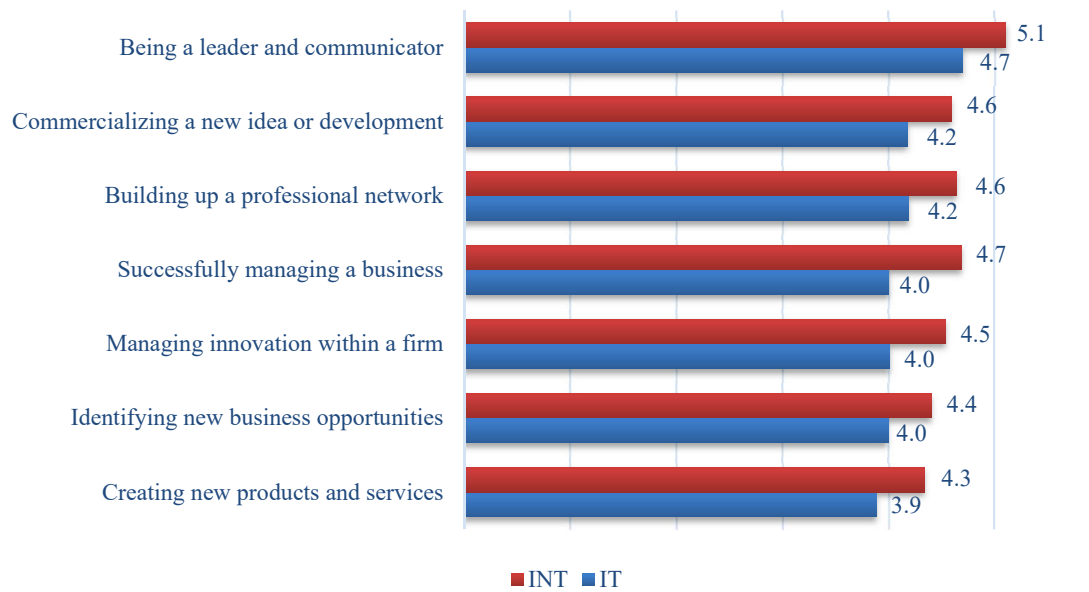


Figure 6.10 Entrepreneurial skills in the Italian and International samples (Valid responses IT=4,187).

The scores assigned by Italian students are not particularly satisfactory, especially for the items more closely referring to the identification and exploitation of new business opportunities, which is the essence of entrepreneurship. Additionally, the level of skills reported by Italian students is on average lower than the international one, raising some concerns about their abilities to perform activities associated with entrepreneurship or, more in general, innovative behaviors.

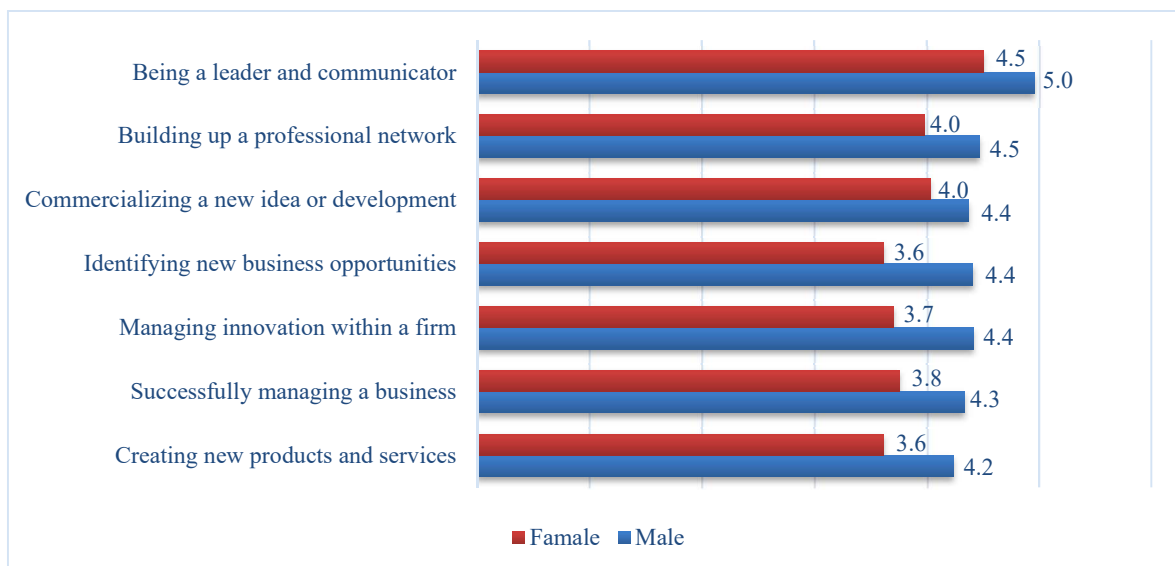


Figure 6.11 Entrepreneurial skills by gender in the Italian sample (Valid responses F=2,370 M=1,821).

Self-confidence significantly differs by gender (Figure 6.11). Males report higher assessment of their entrepreneurial skills. The higher self-confidence of males may

partially explain why males are more likely to be engaged into entrepreneurial activities (Minniti and Nardone, 2007).

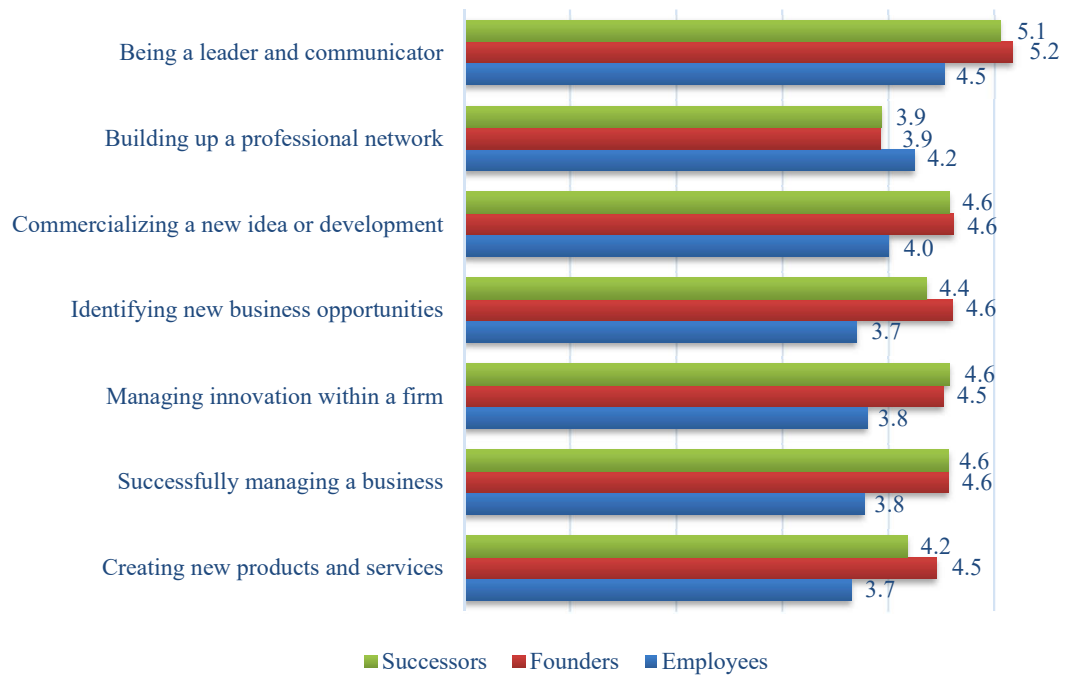


Figure 6.12 Entrepreneurial skills by career aspirations five years after graduation in the Italian sample (Valid responses N=4,180).

As predictable, students that aspired to be self-employed reported more confidence in their entrepreneurial skills (Figure 6.12). Moreover, successors are less confident than founders, suggesting that the aspiration of starting a business from scratch requires greater confidence in entrepreneurial skills. Overall this figure is in line with the pecking order of career preferences (Zellweger et al., 2011), with founding career chosen at high levels of self-efficacy, successor career at medium level and employee career at the lowest level.

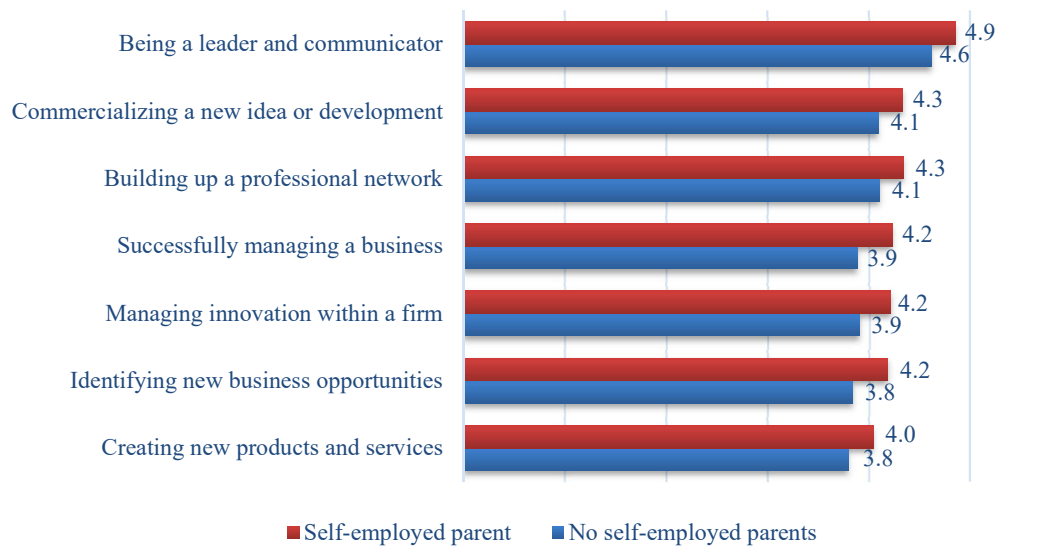


Figure 6.13 Entrepreneurial skills by parent entrepreneurship in the Italian sample (Valid responses N=4,179).

Students with self-employed parents assigned higher scores to their entrepreneurial skills (Figure 6.13). The possibilities for vicarious learning on the job provided by a family business is one of the explanation for the observed association between the choice for entrepreneurship of parents and their children (Fairlie and Robb, 2007; Hamilton, 2011).

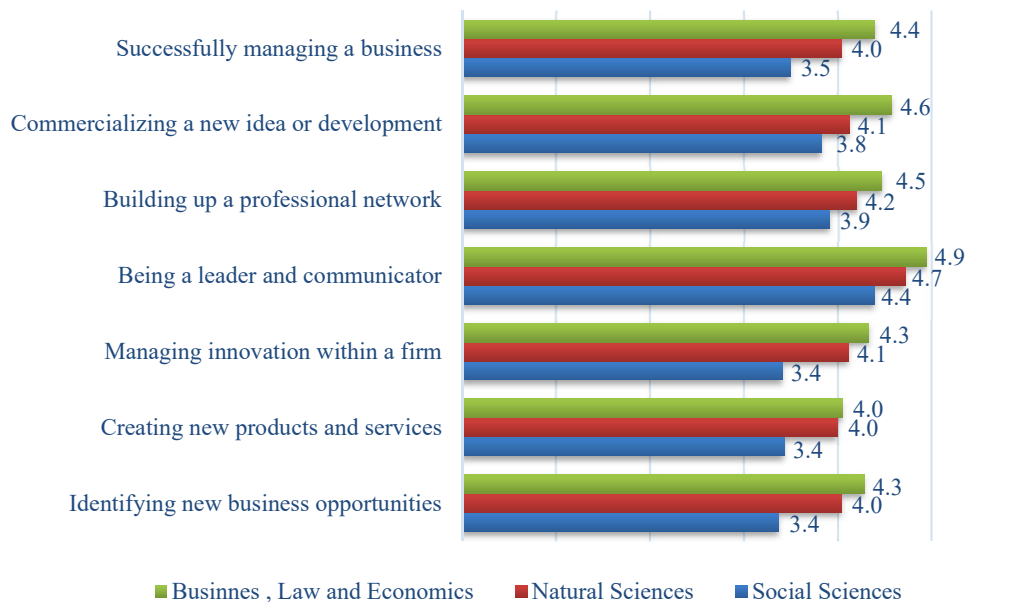


Figure 6.14 Entrepreneurial skills by field of study in the Italian sample (Valid responses N=4,176).

Breaking down entrepreneurial self-efficacy by field of study (Figure 6.14), it appears that respondents from Business, Law and Economics display more confidence in entrepreneurial skills, followed by students of Natural Sciences with respondents of Social Sciences lying far behind. This is in line with patterns previously shown and

discussed concerning entrepreneurial climate at university, entrepreneurship education and learning. Respondents from Social Sciences report an average score above 4 only for the item related to the ability to be leader and communicator. This suggests that even in their studies there is the potential to nurture some of the broad range of abilities required to entrepreneurs.

7. NASCENT ENTREPRENEURSHIP

One of the main objective of the GUESSS project is to describe university students' actual or planned entrepreneurial activities. For this purpose, the questionnaire identified students who were trying to start a business at the time of the survey (here defined as *nascent entrepreneurs*), and those who were already running their own businesses (here defined as *active entrepreneurs*). This chapter describes the former group in the GUESSS sample, while the next one is dedicated to active entrepreneurs and their companies.

7.1. Profile of the To-Be-founded Companies

A first questions asks nascent entrepreneurs "In how many months are you planning to found your business?". As displayed in Figure 7.1, less than a half of the students plans to found the business within a year. Most nascent entrepreneurs think it will take more than 1 year to actually start their business, suggesting that significant amount of time is required to translate entrepreneurial intentions into actions.

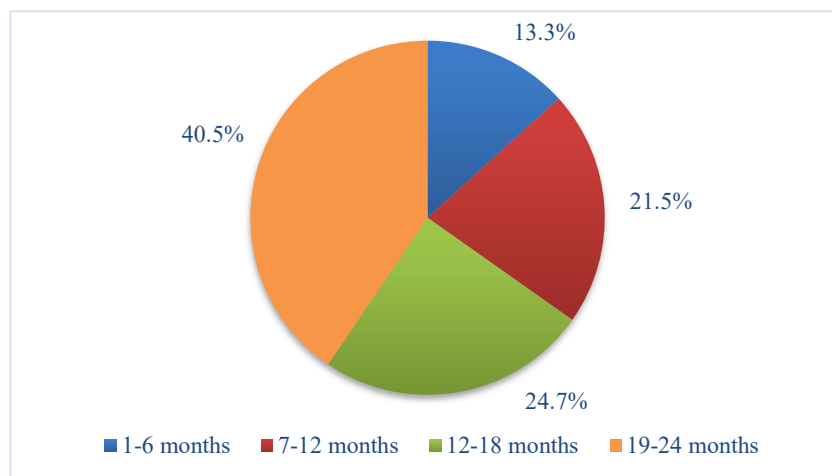


Figure 7.1 Time horizon of completing business creation (Valid responses N=279).

Nascent entrepreneurs were asked to tick the gestation activities they had completed in order to found the business, among the ones listed in the questionnaire. This provides an indication of their progress in new venture creation (cf. De Carolis et al., 2009). The range of the activities which nascent entrepreneurs have already taken to found a business varies from “nothing done so far” (ticked by 15.8% of the nascent entrepreneurs) to “registered the company” (selected by 4.3%).

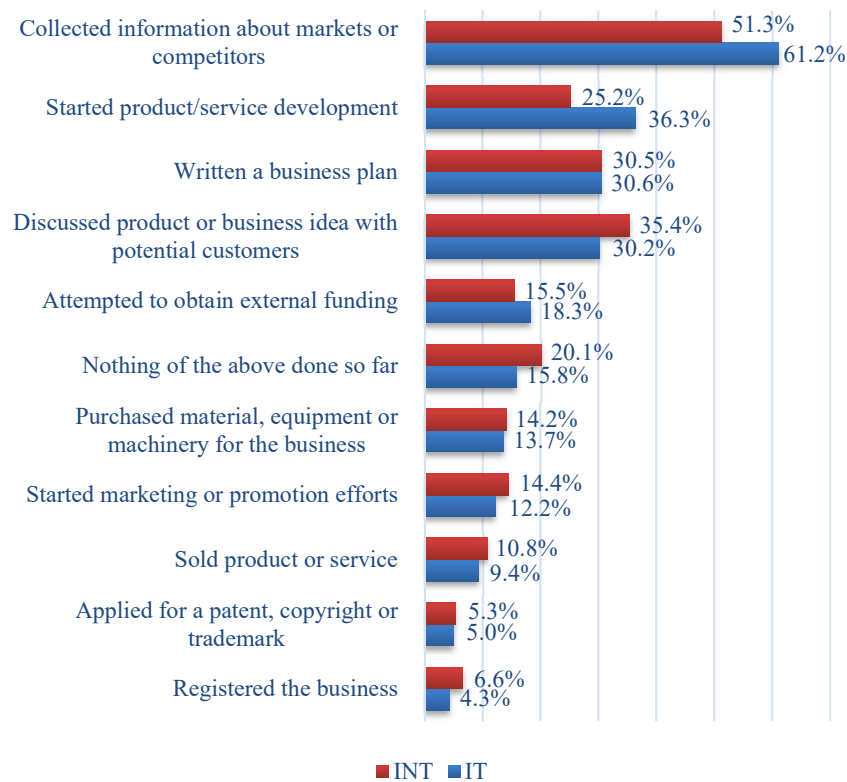


Figure 7.2 Steps taken to found a business (multiple responses) in the Italian and international GUESSS samples (Valid responses IT=268).

About 16% of nascent entrepreneurs have never taken a concrete step to found a company, a lower percentage compared to the international sample. Only few nascent entrepreneurs have never registered a business (4.3%), registered a patent (5.0%) or sold a product (9.4%). On the other hand, the activities that are more likely to be taught in university courses, such analysis of market and writing of business plan, are tackled more frequently. In an international comparison, nascent entrepreneurs of the Italian sample are more likely to have completed activities related to the identification and development of the business opportunities (e.g., collecting market information, developing the product), but are less likely have undertaken the most advanced steps required to start the company (e.g., selling the product, purchasing machinery).

Most nascent entrepreneurs in the Italian sample see their transition into entrepreneurship not as their definitive career decision (71.8%). There might a variety of reasons: entrepreneurship can represent a temporary career spell (Burton et al., 2016), in which students accumulate experiences, contacts and resources to be spent in another occupation or in another entrepreneurial activity. Many students might also found “lifestyle” ventures (Carey et al., 2010), linked to their hobbies or passions, to be run alongside their future jobs.

Concerning previous startup experience, almost all nascent entrepreneurs in the sample (94.3%) have no past experience as founder. This is not surprising as data come from a

sample of university students, who due to their young age and the time spend to study are less likely to have previously accumulated hands-on business experience.

Looking at sectors of the to-be-founded companies, the industry, where most of the nascent entrepreneurs plan their entrepreneurial activity, is communication and information technology (13.1%), followed by tourism and leisure (13.1%), advertising/design/marketing (10.8%) and architecture/engineering with 10.4% (Figure 7.3). The strong focus on IT sector and architecture and engineering sectors seems to be a peculiar feature of the Italian sample in an international comparison. The large fraction of future companies in architecture and engineering sector may be influenced by the large representation of students of Natural Sciences in the Italian GUESSS sample.

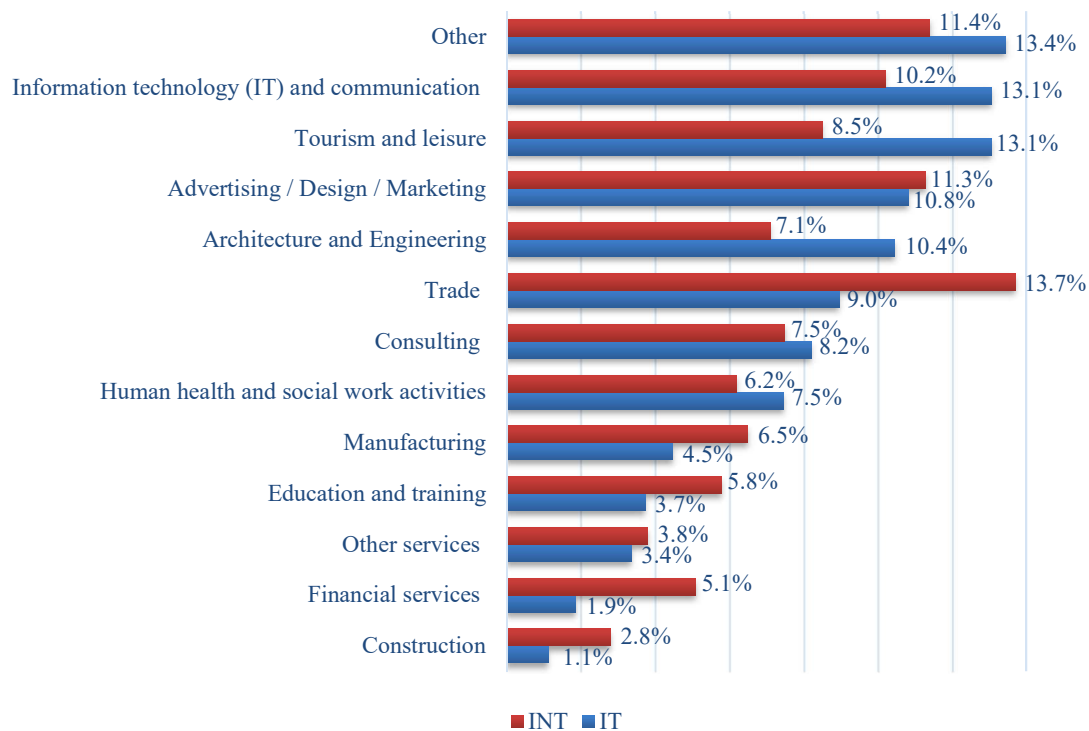


Figure 7.3 Industry sector of future companies in the Italian and international GUESSS samples (Valid responses IT=268).

Comparing the Italian sample with the international one, the importance of tourism is evident (Figure 7.4). In a country whose art, history and culture are sought in all the world, future companies that exploit the attractiveness of their territory and of its past take advantage of a key opportunity offered by Italian regions. On the other hand, a lower percentage of nascent entrepreneurs in the Italian sample plan to start their business in the manufacturing sector, an industry of strategic importance for Western economies.

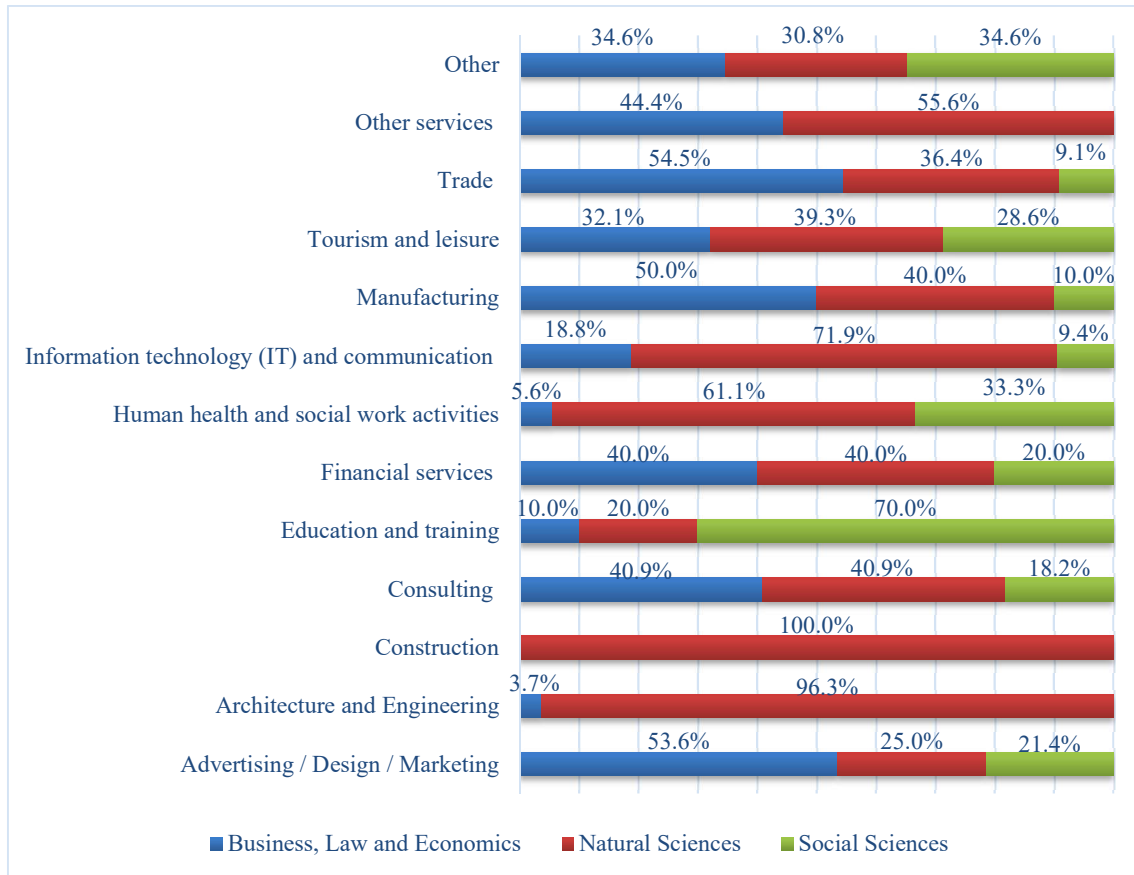


Figure 7.4 Industry sector of future companies by field of study in the Italian sample (Valid responses N=268).

Breaking down data by field of study, we see that nascent entrepreneurs tend to enter sectors linked to their field of study. For example, technology-intensive sectors are dominated by students from Natural Sciences, while Social Sciences students prevail in the humanistic industry of education and training, but are fairly represented in human health and social work activities (together with students of Natural Sciences who might be studying health-related fields). Students from Business, Law and Economics are fairly represented in most sectors with some exception (e.g., construction, IT, architecture and engineering) and can be found especially in the trade, marketing and manufacturing areas.

7.2. Foundation Partners of Nascent Entrepreneurs

Given the importance of founding teams for new venture creation and development (Gilbert et al., 2006; Klotz et al., 2014), nascent entrepreneurs were asked to provide information about the founding team of their planned ventures. As displayed in Figure 7.5, about 79% of the nascent entrepreneurs in the Italian GUESSS sample plan to become a majority shareholder, but only 19% aims to become solo-owner.

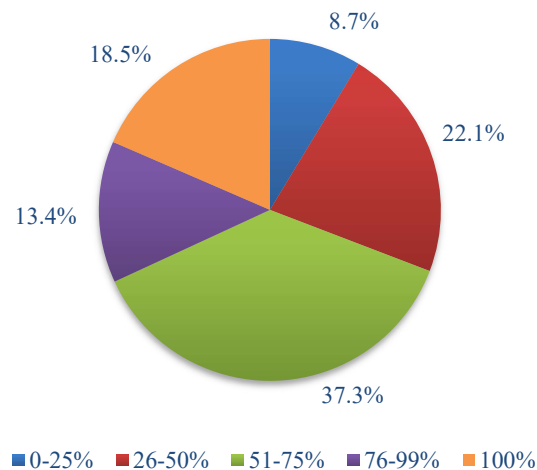


Figure 7.5 Ownership of Italian nascent entrepreneurs in the to-be founded companies (Valid responses N=276).

Only 16.7% of the nascent entrepreneurs plan to found an enterprise without partners; almost one third want to found with one partner; the rest of the nascent entrepreneurs plans to start their business with two or more partners (Figure 7.6). In an international comparison, the inclination to found a company alone is less diffused in the Italian sample. The tendency to join co-founders can be interpreted positively as team size is commonly associated to entrepreneurial performance and support in managing the increased complexity of an innovative firm (Klotz et al., 2014).

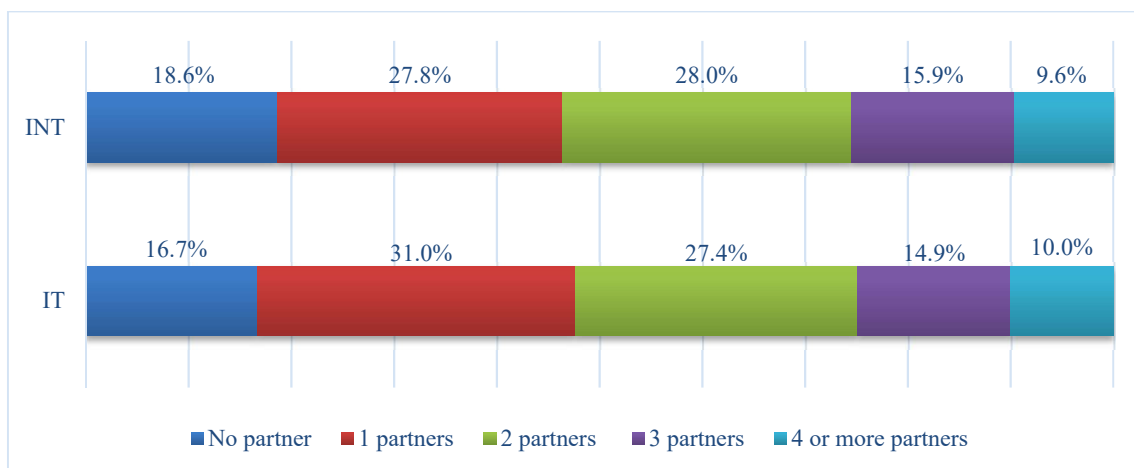


Figure 7.6 Number of founding partners of nascent entrepreneurs in the Italian and international GUESSS samples (Valid responses IT=281).

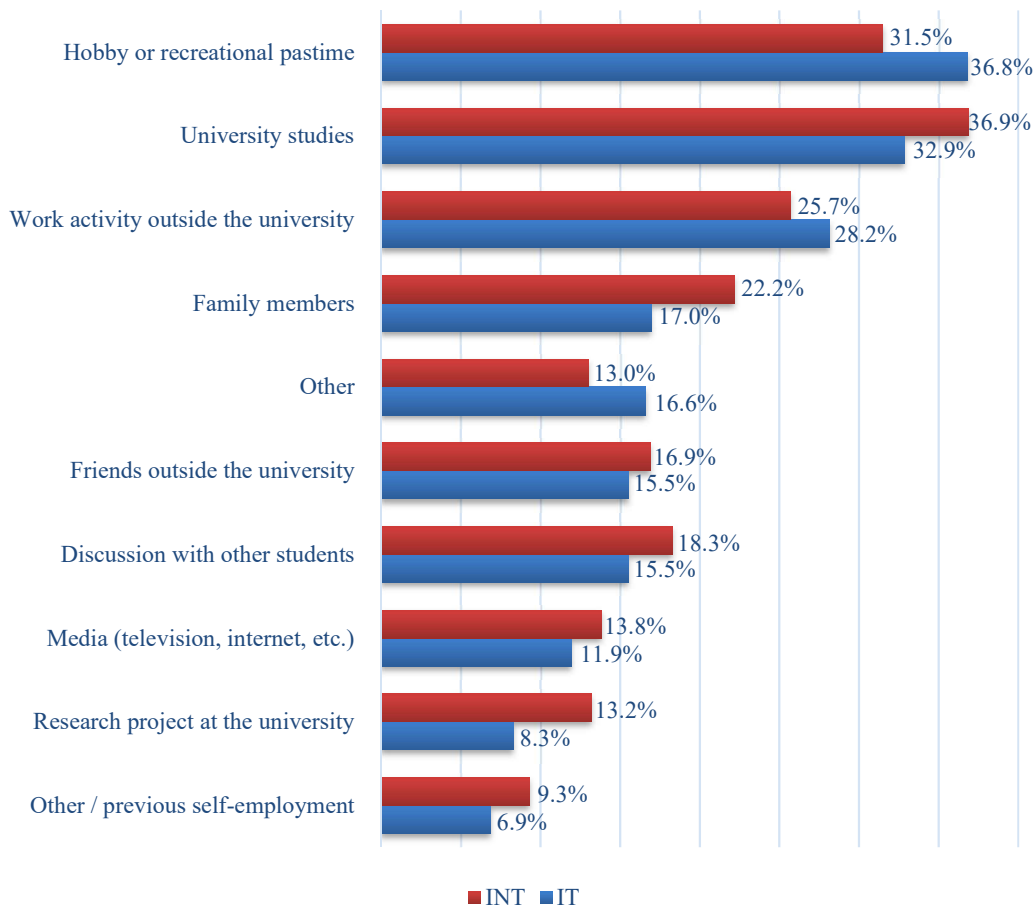


Figure 7.7 Origin of the business idea in the Italian and international GUESSS samples (Valid responses IT=277).

Figure 7.7 illustrates the context in which nascent entrepreneurs have matured the business idea for their future company. Overall it emerges that university plays a pivotal role, either because students are exposed to opportunities during their studies (IT=32.9%, INT=36.9%) or because they socialize with other students (IT=15.5%, INT=18.3%). This is in line with extant literature that underscores the importance of university as a fertile ground for student entrepreneurship through mechanisms not limited to specific entrepreneurship education (Bergmann et al., 2016; Kacperczk, 2013). Overall university plays a less important role in the Italian sample compared to the international one. Next to universities, as highlighted in entrepreneurship literature (Fauchart and Gruber, 2011; Mathias et al., 2015) hobbies (IT=36.8%, INT=31.5%) and work experience outside the university (IT=28.2%, INT=25.7%) are also of central importance in the generation of new business ideas. In an international comparison, the responses of the Italian GUESSS sample show a greater tendency to transform the experiences and passions into business idea.

7.3. Motives and Goals of Nascent Entrepreneurs

Founders associate to their ventures a variety of meanings, which motivate them to engage in entrepreneurial activities. The survey gathers information about this aspect by asking to nascent entrepreneurs a set of items that describe their “social identity” (Sieger et al., 2016), drawing upon the widely acknowledged classification of Fauchart and Gruber (2011) into three categories: Darwinians, Communitarians, and Missionaries.

- Darwinians are generally motivated by the pursuit of profit, evaluate themselves in terms professional competences, and see the competitive landscape as the primary frame of reference through which their value is proven and demonstrated.
- Communitarians create a business with the basic social motivation of contributing to a community they strongly identify with.
- Missionaries want that their business addresses issues faced by society as a whole; they want to contribute to make the world a better place; and see society-at-large as frame of reference. These firms often follow a political or ideological mission such as curing hunger or helping immigrants to find jobs.
- In addition, “hybrid” identities may exist, meaning that founders exhibit two or more identities at the same time. When only a social identity characterizes the individual, he/she possesses a “pure” identity. The questionnaire asked a set of 15 items recently used by Sieger et al. (2016) to validate the measures of social identity. Each of these items was associated to one of the three identities (5 items for each identity type). Respondents were regarded as having a “pure identity” when their agreement to all five items that measure one specific identity was at 5 or higher (on a 1-7 scale), with no such agreement to other identity types. Hybrids are respondents who exhibit the corresponding “>5” agreement for all items that belong to the same identity type for at least two different identity types.

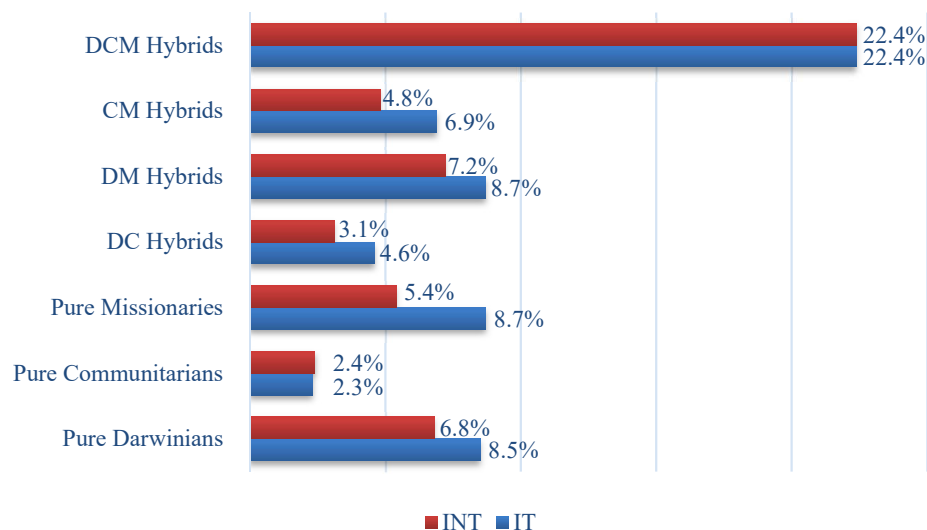


Figure 7.8 Founder social identities of nascent entrepreneurs (Valid responses IT=278).

The social identities of nascent entrepreneurs in the Italian and international samples are displayed in Figure 7.8. In the Italian sample there is a higher fraction of nascent entrepreneurs with pure missionary identity (8.7% vs. 5.4%). This suggests that among Italian nascent entrepreneurs the sensitivity to environmental and societal issues represents one important driver of student entrepreneurship, at least as much as important as the pursuit of profit that characterizes pure Darwinians.

8. ACTIVE ENTREPRENEURS

This chapter focuses on students that had were already active entrepreneurs at the time of the survey. They represent 4.9% of the Italian GUESSS sample (n=198). The fraction of active entrepreneurs in the Italian GUESSS sample is considerably lower compared to the international sample (8.8%). Since student entrepreneurship represent a key resources for the economy and important contribution offered by university to our society (Wright et al., 2017), policymakers and educators should take into consideration this pattern.

A quarter of the founded companies has been founded in the last twelve months and more than a half in the last two years (Figure 8.1). A tenth of the companies has more than 5 years. The firms of active entrepreneurs in the international GUESSS sample are more frequently of recent foundation.

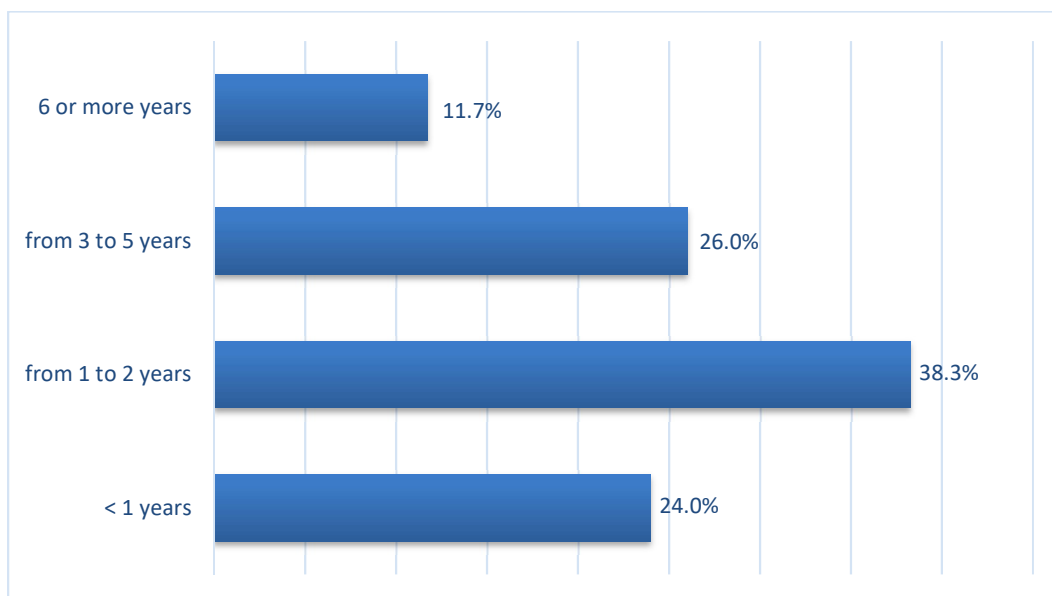


Figure 8.1 Age of the companies founded by active entrepreneurs (Valid responses=196).

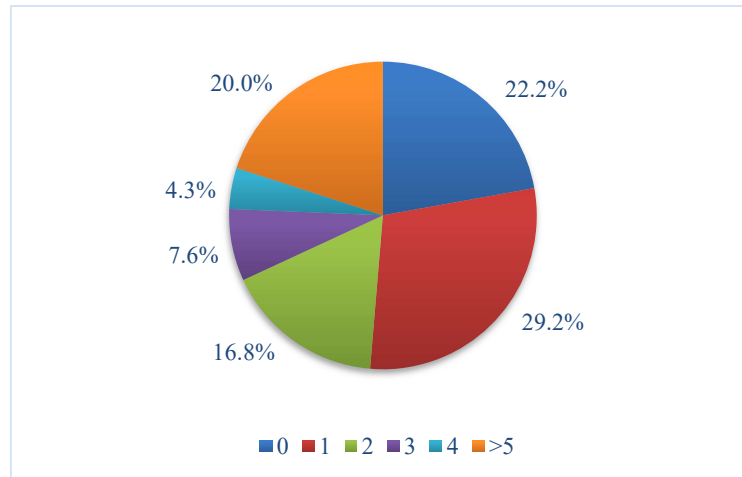


Figure 8.2 Number of employees of active entrepreneurs' firms (Valid responses N=185).

Figure 8.2 shows that the entrepreneurial activities run by students employ few people: more than half of the companies have no more than one employee, while only 20% have more than 5 employees.

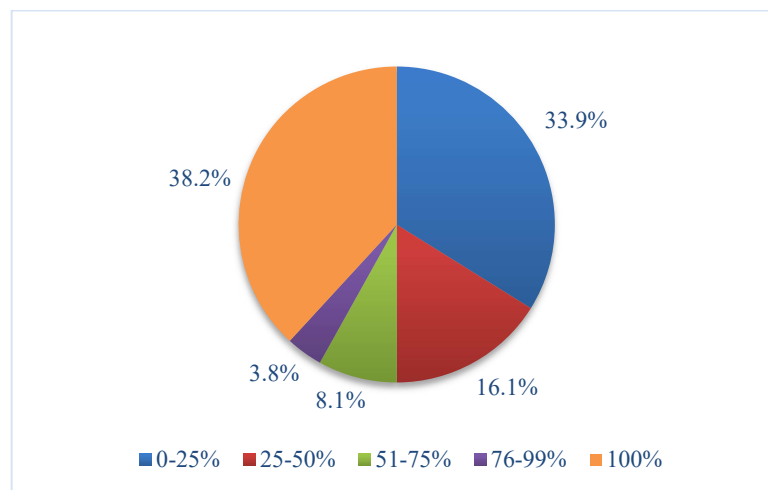


Figure 8.3 Percentage of active entrepreneurs' ownership of the business (Valid responses N=186).

More than one third of the active entrepreneurs has full ownership of the business. 46% of the active entrepreneurs in the Italian sample declare that the company launched will be the main job after graduation. Those who intend to continue with the business already started typically have more than one employee and collaborate with at least one partner. This suggests that for many active entrepreneurs their current business does not represent a definitive career choice.

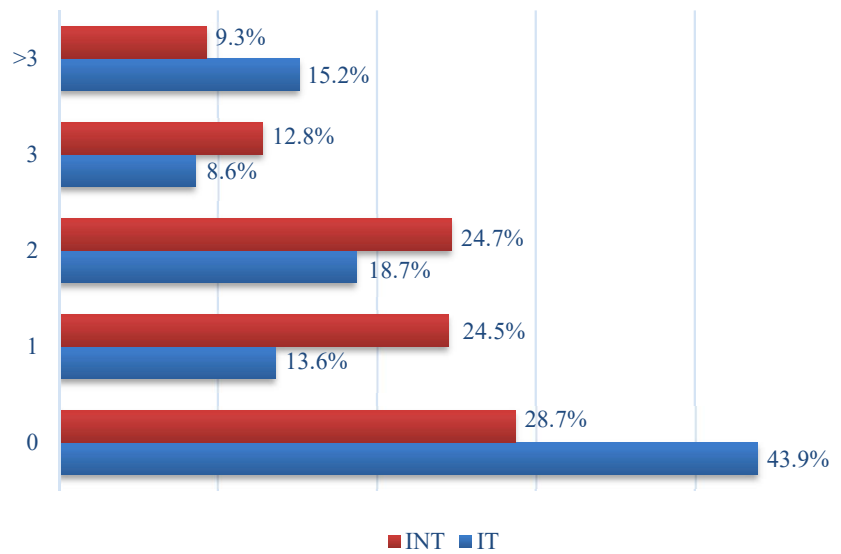


Figure 8.4 Number of partners in the Italian and international GUESSS samples (Valid responses IT=198).

Most active entrepreneurs have no partners in their business (Figure 8.4). Comparing Italian data with international data, the gap in the number of partners in Italian company is evident; Italian active entrepreneurs are more likely to be solo-founders. The high fraction of solo-founders can be explained by the fact that many companies of Italian active entrepreneurs represent some type of professional activity, led by a self-employed student. This data is also somewhat in contrast to the tendency observed for Italian nascent entrepreneurs who are more likely to plan having co-founders.

8.1. Industry Sector of Founded Companies

As for nascent entrepreneurs (cf. Section 7.1), most companies of active entrepreneurs operate in the “Trade” sector (14.1%), followed by the ICT industry (12.6%) and “education and training” (8.6%). In comparison with the international sample, the larger focus on ICT and architecture/engineering sectors are peculiar features of the Italian sample, as already seen in Section 7.1.

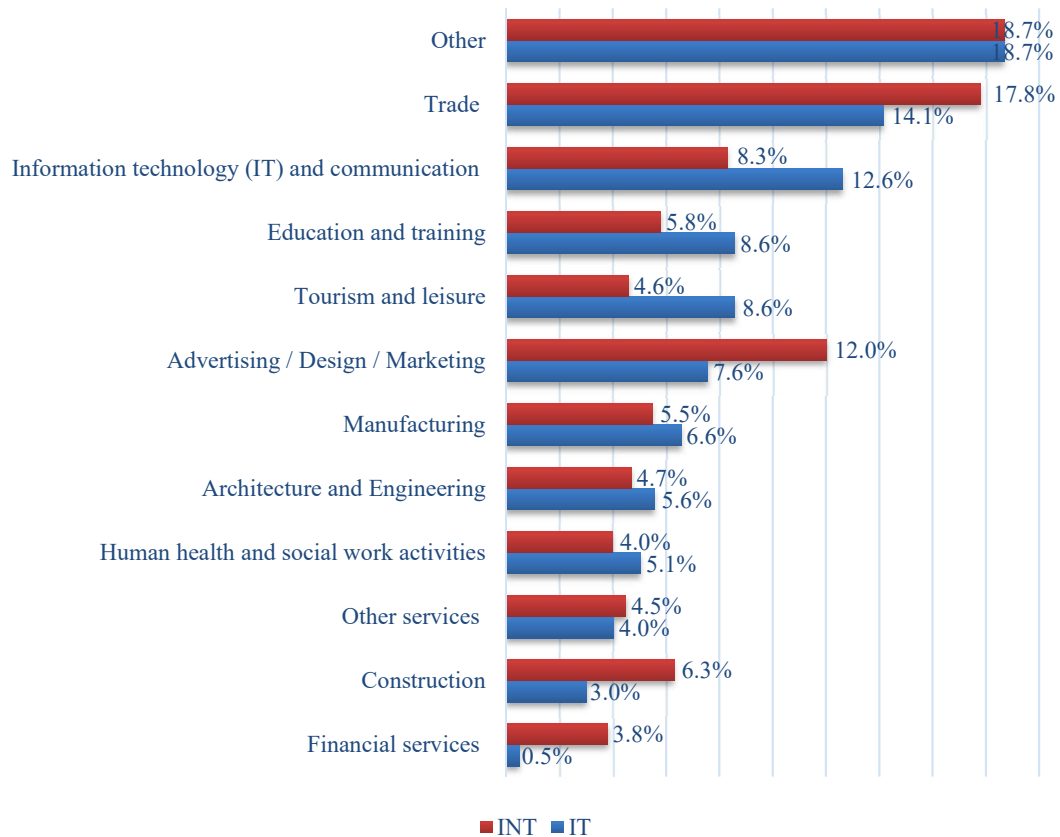


Figure 8.5 Industry sector of active entrepreneurs' companies in the Italian and international GUESSS samples (Valid responses IT=198).

Figure 8.6 suggests that the sectors in which active entrepreneurs operate are somewhat connected with their field of study. For example, the preferred sectors of Natural Sciences students are technology-intensive ones; students from Business Law and Economics tend to operate in marketing, trade and consulting sectors; Social Sciences students are prevalent in the education sector.

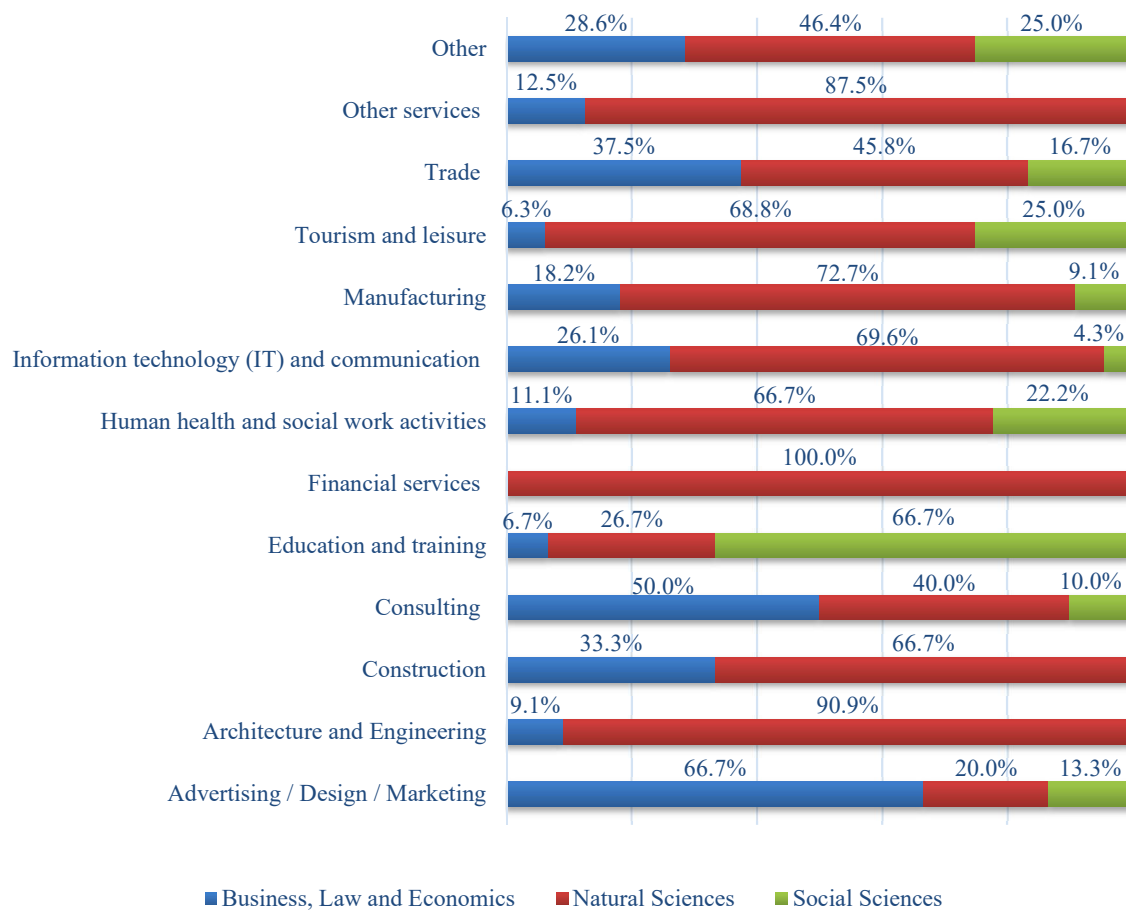


Figure 8.6 Industry sector of active entrepreneurs' companies by field of study in the Italian sample (Valid responses N=198).

8.2. Motives and Goals of Active Entrepreneurs

As in the previous chapter we refer to three main types of founders who have been identified according to their respective "social identity" (Fauchart and Gruber 2011, Sieger et al., 2016).

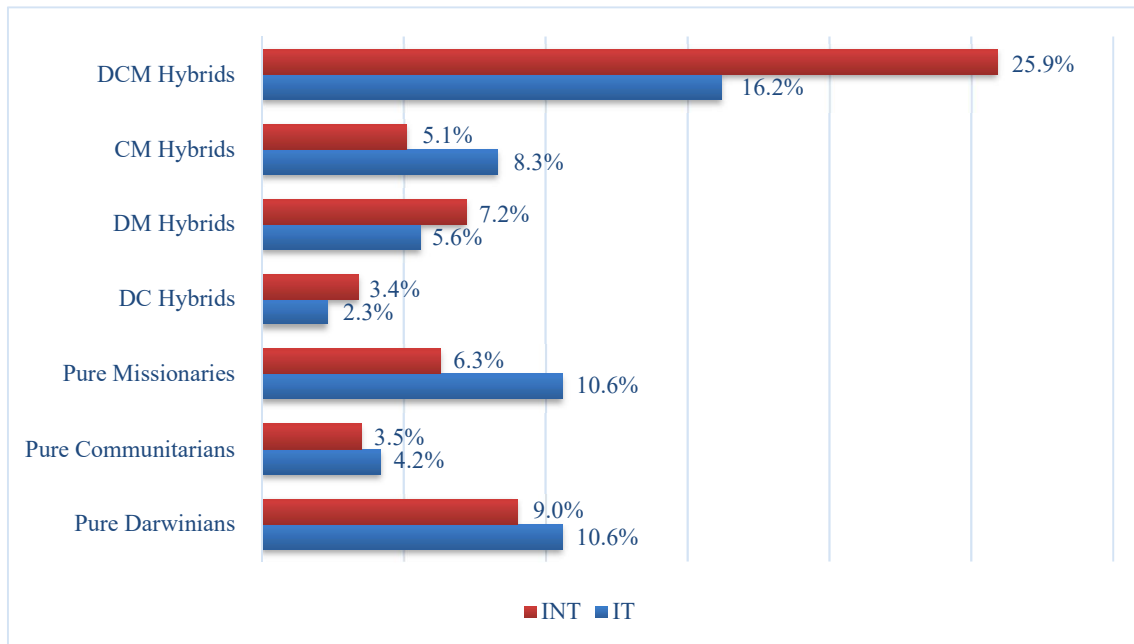


Figure 8.7 Founder social identities of active entrepreneurs in the Italian and international GUESSS samples (Valid responses IT=173).

Figure 8.7 shows that, as for nascent entrepreneurs, among Italian active entrepreneurs of the sample a pure Missionary social identity is more diffused compared to the international sample. Pure Darwinians and Missionaries are equally represented in the Italian sample (10.6%), indicating that next to making money societal issues receive much attention by student entrepreneurs. The Italian sample has a low percentage of Communitarian, albeit greater than in the international sample; however, the noticeable representation of hybrid Darwinian-Communitarian suggests that many founders combine the pecuniary motivation of making profits with attention to problems of a specific community they identify with. Overall, this figure points out that a variety of economic and non-economic goals motivate student entrepreneurship in the Italian sample.

8.3. Performances of Active Entrepreneurs

More than half of the businesses created by active entrepreneurs generate no profit (50.8%). Most companies founded by active entrepreneurs generate revenue from their business (70.9%) and about two-thirds of companies founded are able to cover the costs incurred by the company. These data suggest that many companies of the Italian active entrepreneurs fail to reach good levels of economic performances.

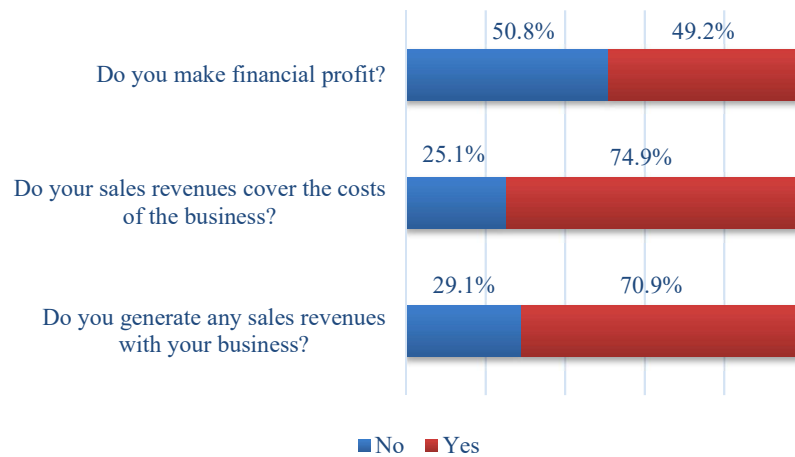


Figure 8.8 Economic results of the businesses founded by active entrepreneurs in the Italian GUESSS sample (Valid responses N=191).

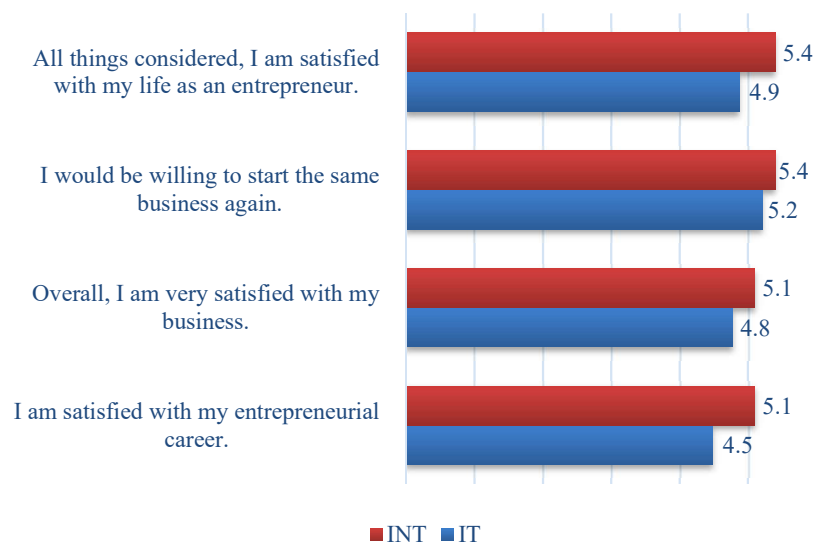


Figure 8.9 Entrepreneurial satisfaction in the Italian and International GUESSS sample (Valid responses IT=188).

Next to business-related performance, active entrepreneurs were asked to rate their overall career satisfaction, a key measure of individual performance (Cooper and Artz, 1995; Lange, 2012) on 4-items 7- points Likert scale. On average active entrepreneurs

tend to report positive scores (i.e., greater than 4) for these items (Figure 8.9). This is important since satisfied entrepreneurs are more likely to work hard and to sustain efforts to develop their business (Cooper and Artz, 1995). As shown in Figure 8.9, active entrepreneurs in the international sample are more satisfied with their entrepreneurial career compared to the Italian sample.

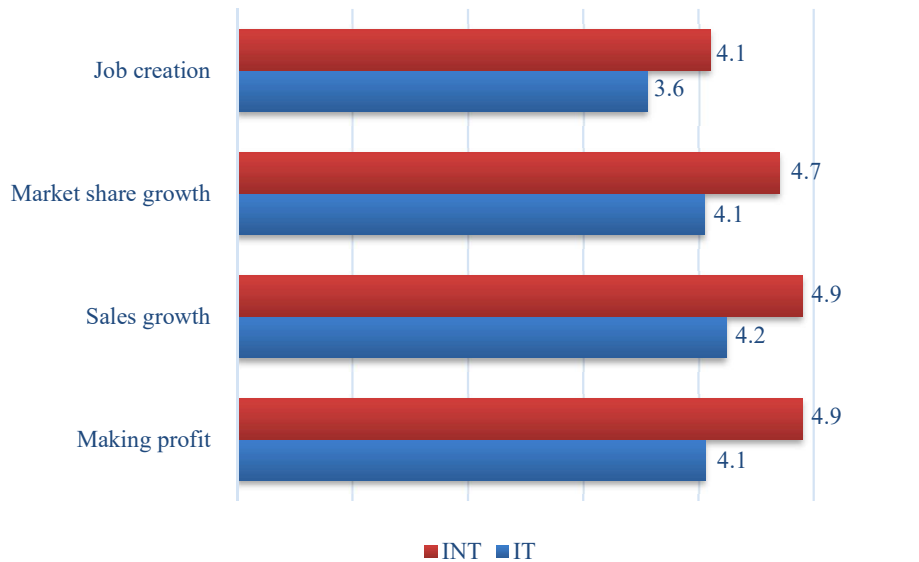


Figure 8.10 Firm Performance assessed by active entrepreneurs in the Italian and International GUESSS sample (Valid responses ITN=185).

Active entrepreneurs were also asked to assess on a 7-points Likert scale the performance of their business along different economic dimensions compared to other companies selling similar products/services (1=very poor, 7=very well). Figure 8.10 suggests that the performance of their companies is not excellent but at least satisfactory with responses around 4 on average. The performances rated by active entrepreneurs in the Italian sample are also on average lower than in the international sample.

9. POTENTIAL SUCCESSORS

The present section focuses on potential successors, defined as those students who have at least one self-employed and/or majority shareholder parent. In the Italian sample 36.1% respondents were classified as potential successors. Of these 27.5% students are planning to succeed parents' family firm right after studies and/or 5 years after finishing studies: we call these students "family successors". For the scope of the present report potential successors are classified into four groups, based on their aspiration to succeed parents' entrepreneurial activity: "non-successors" are students that do not aim to take over parents' firm right after studies or five years after graduation; "immediate successors" aim to take over parents' firm right after studies, but they plan a different career in the long term; "future successors" plan to succeed the family firm only five years after graduation; finally "stable successors" choose family succession as career path both right after studies and 5 years after graduation. In the Italian GUESSS sample, 5.6% of the potential successors are immediate successors, 20.0% are future successors and 1.9% are stable successors.

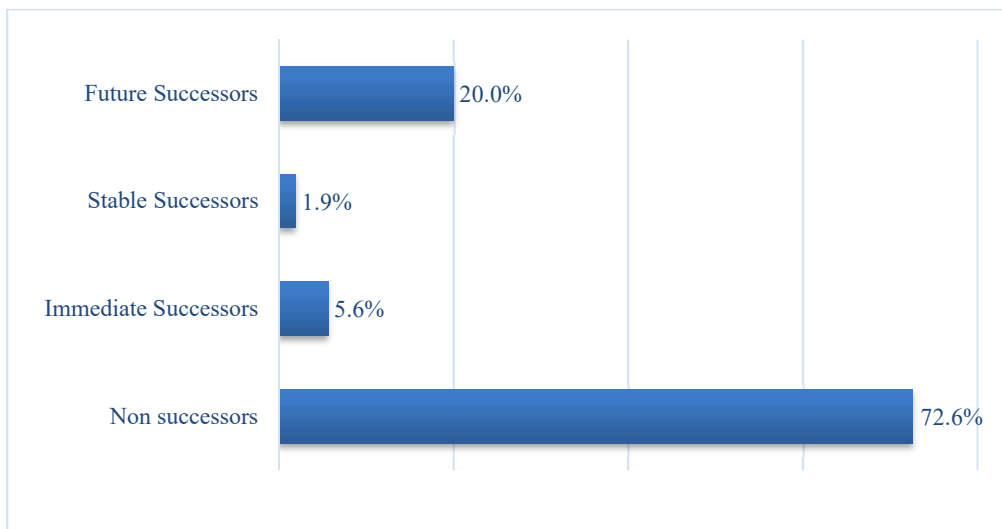


Figure 9.1 Potential successor in the Italian GUESSS sample (Valid responses N=1,607).

9.1. Profile of Potential Successors

Having a detailed look on the career preferences of potential successors of the Italian sample it is possible to observe that right after studies most of the potential successors (80.5%) plan to start their career as employees and that 4.7% want to found a business before taking over parents' firm. In the international sample potential successors are more likely to plan having entrepreneurial experience as founder (8.8%) before succeeding the family business.

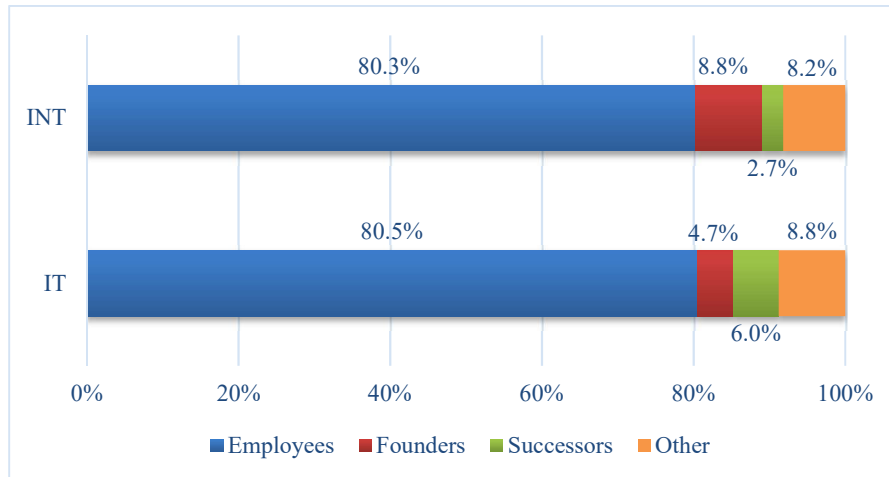


Figure 9.2 Career path right after studies of potential successors in the Italian and international GUESSS Samples (Valid responses IT=1,607).

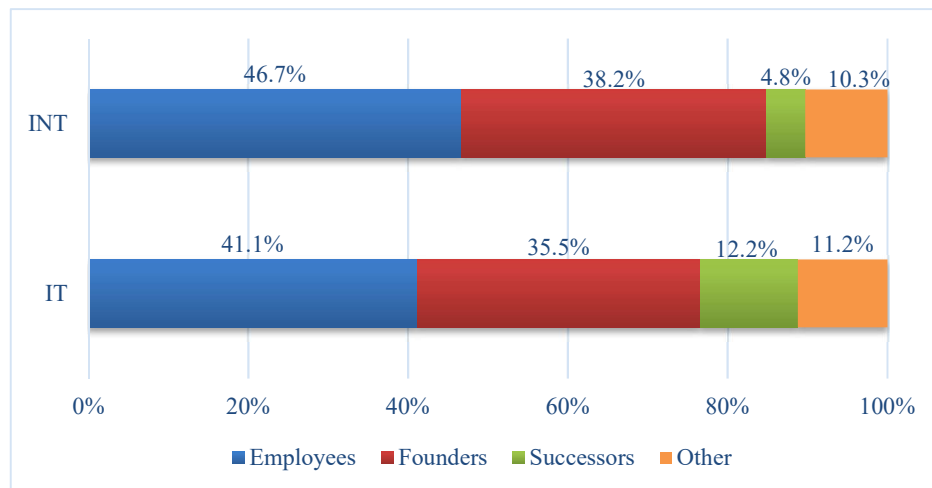


Figure 9.3 Career path five years after studies of potential successors in the Italian and international GUESSS samples (Valid responses IT=1,607).

A possible explanation is that students prefer having a first working experience as employee or an entrepreneurial experience as founder that prepares them better to succeed parents' entrepreneurial activity.

Figure 9.3 above suggest that about one third of the potential successors plan to start their own venture 5 years after graduation. This suggests that parents' entrepreneurship works as a powerful mechanism to pass entrepreneurial career aspirations across generations (Criaco et al., 2017).

Male and female students differ only a little in term of succession intentions in the Italian sample (Figure 9.4). However, males seem to be more inclined to take over parents' firm immediately after studies compared to females.

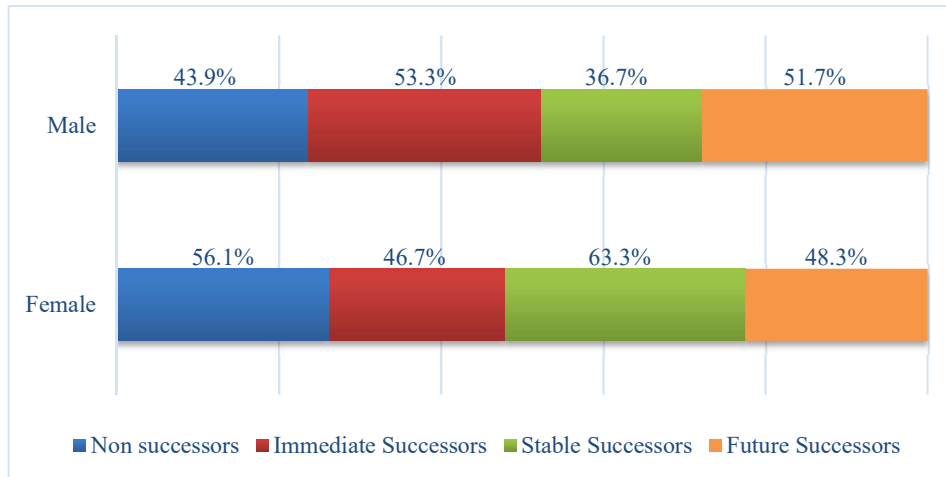


Figure 9.4 Succession intentions by gender in the Italian GUESSS sample (Valid responses F=598; M=729).

9.2. General Information about the Family Business

Figure 9.5 displays the longevity of potential successors' family businesses and shows that many companies have more than 10 years (average 29 years). Most of these had at least one change of generation and were mainly founded by the respondents' parents or grandparents. Although most of them are small, 67% of them have at least one employee (average 15 employees). Since these are companies for the most part family run and most of them are SMEs, 56% of the entrepreneurs own 100% of the company. 52% of the potential successors have no shares in the parents' business. More than half of the participants in the Italian GUESSS questionnaire consider the company a "Family business" (67.3%), when asked in the questionnaire.

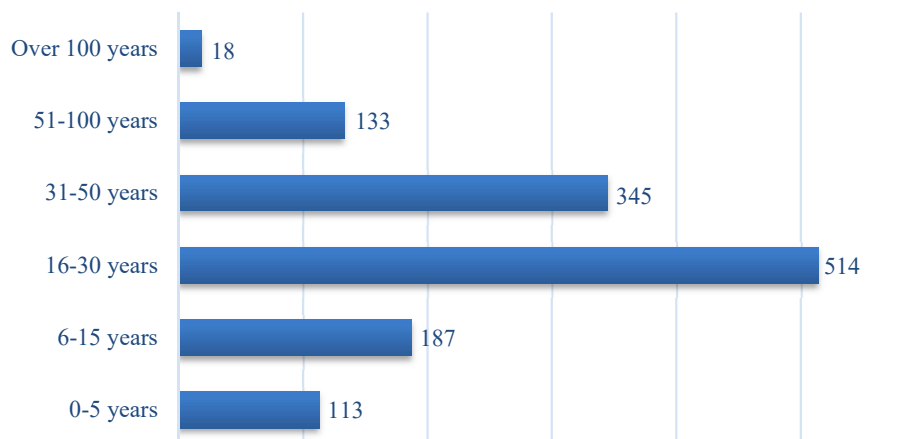


Figure 9.5 Age of the family businesses in the Italian GUESSS sample (Valid responses N=1,310).

9.3. Industry Sector of the Family Business

Analyzing the sectors in which the family firms operate, the trade branch stands out (22.6%), followed by the manufacturing sector and then by the construction sector (respectively 12.1% and 11.8%). Only 6.9% of the companies operate in Architecture and Engineering.

Only the wholesale and retail trade sector is largely represented both from family businesses and companies founded or to be-founded by students. Overall this figure suggests that student startups and their parents' family businesses operate in different sectors of the economy. Therefore, the entry mode into entrepreneurship chosen by student actual or potential entrepreneurs (i.e., succession or founding) has implication on the industry sectors in which they will operate. This pattern is even more evident taking into consideration an international comparison. Compared to international GUESSS sample, family firms in the Italian sample are less focused on ICT and more active in the commercial sector. On the other hand, Italian nascent entrepreneurs found more frequently in the ICT sector and less likely in the commercial sector than their international counterparts. Moreover, compared to the international sample, Italian family firms of potential successors are far more focused on the manufacturing/construction sector; but this sector is less attractive for Italian active and nascent entrepreneurs compared to their international counterparts.

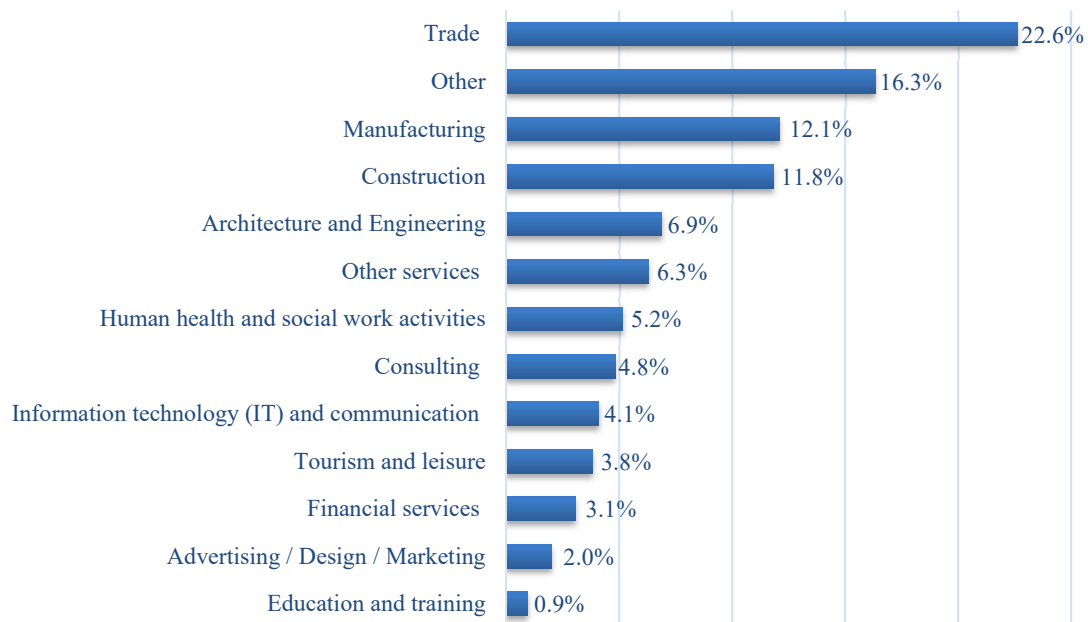


Figure 9.6 Industry sector of family businesses in the Italian GUESSS sample (Valid responses N=1,494).

9.4. Perceived Parents' Performance in Entrepreneurship

Potential successors were asked to assess the performance of parents' firm on the same 5-items 7-points Likert scale used for active entrepreneurs. These items describe Perceived Parents' Performance in Entrepreneurship, which represents a key mechanism through which parents influence offspring entrepreneurship (Criaco et al., 2017). According to Italian respondents, parents' entrepreneurial activities perform well but not exceptionally. Especially in terms of job creation perceived performance are quite poor, while in term of sales growth and innovativeness average scores are better. On average, potential successors in the Italian sample also perceive that their parents' entrepreneurial activity performs worse along the various dimensions of firm performance compared to the international counterparts.

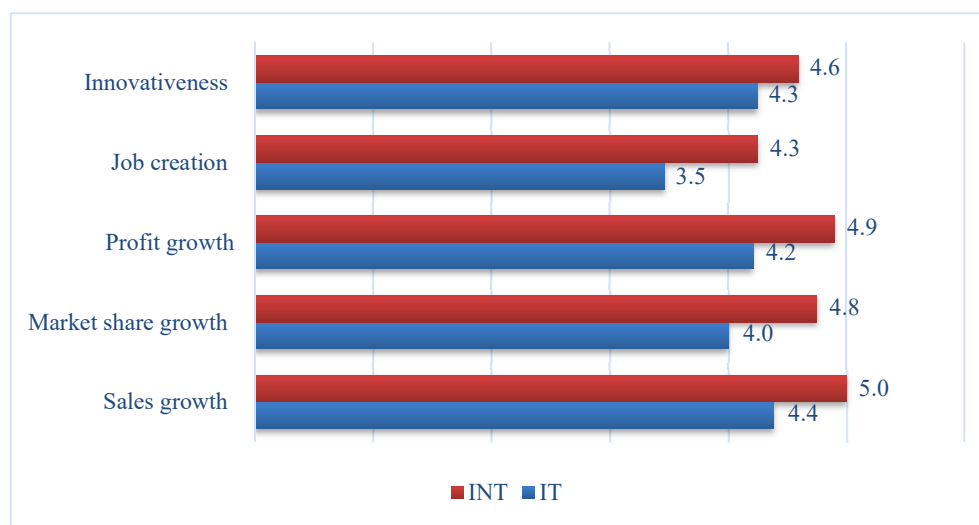


Figure 9.7 Perceived Performance of Parents' Entrepreneurial Activity in the Italian and International GUESSS sample (Valid responses N=1,401).

9.5. Student's Relationship with Parents' Entrepreneurial Activity

Figure 9.8 shows how many of the potential successors have accumulated working experiences in parents' entrepreneurial activity. Most of those who intend to take over the family business immediately after graduation have already worked there (52.0%). Almost one half of future successors has worked in parents' entrepreneurial activity. By contrast, the fraction of potential successors without succession career aspirations is much less likely to have worked in parents' business. Overall, this figure suggests that most potential successors intend to gain some hands-on experience before taking over parents' business. The opportunity of being involved in parents' business might also stimulate succession career aspirations.

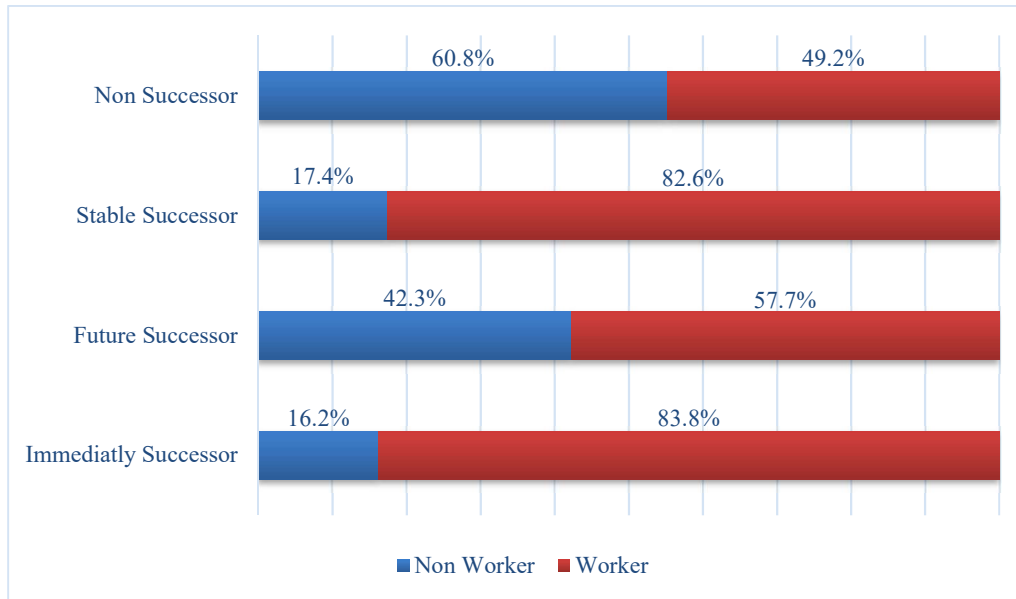


Figure 9.8 Working experience in parent's firm by succession intentions in the Italian sample (Valid responses N=1,349).

10. CONCLUSION

The GUESSS research project represents a huge data collection effort that allows to gather information about student entrepreneurship around the world. With every data collection wave, GUESSS has grown and has become more international, culminating in the 7th edition in 2016 with 50 participating countries.

The present report has presented the results of the GUESSS survey administrated in 2016 to Italian university students and, to some extent, compare the Italian sample to the international one.

After describing the main sample characteristics in terms of demographics and student information, this report presents a number of data that inform educators, policymakers and scholars about Italian students' predisposition and inclination towards entrepreneurship and about their entrepreneurial activities, planned and realized, including performances. Besides, the report sheds light on the links between university and family as social contexts on one hand and student entrepreneurship on the other. The picture emerging from the report underscores that social context – family and university – and students' entrepreneurial inclinations, predisposition and actions are deeply interconnected, confirming that entrepreneurship is fundamentally a social embedded phenomenon (Aldrich and Cliff, 2003; Dahl and Sorenson, 2009).

In terms of students' inclination towards entrepreneurship, this report provides information about students' career aspirations right after studies and 5 years after studies. While right after studies most students aspire to be employed, almost one third of the students intend to found a business later in their career, a fraction which increases up to more than 40% considering also students who want to take over an existing firm. This

suggests that entrepreneurship is considered by a considerable part of the surveyed Italian university students as possible career spell at some point of their life. On the other hand, most of the students who plan to become entrepreneurs plan to accumulate some hands-on business experience by working in SMEs right after studies. The report also underscores that among female students are less likely to consider entrepreneurship as their preferred career path both right after studies and 5 years later, in line with the stylized fact that female are less prone to engage into entrepreneurship. Interestingly, entrepreneurship is considered as an option at some point of the career by students from different disciplinary areas, suggesting that interest towards entrepreneurship is not confined in business- and management-related majors.

Despite the widespread interest towards an entrepreneurial career expressed by university students of the Italian sample, students' responses suggest that university does not prepare them sufficiently well to such career path. A considerable amount of students has never received entrepreneurship education courses during their studies. Especially in social sciences, entrepreneurship education is a rarity. This is a pity considering the significant fraction of Social Sciences students that claim they are interested to become entrepreneurs 5 years after finishing studies. Given such scarce diffusion of entrepreneurship education, it is not surprising that students are not particularly self-confident in their entrepreneurial skills, especially in those practical- and business-related capabilities required to identify and act upon new business opportunities founding a firm. In addition, they lament scarce results in terms of entrepreneurial learning experienced at university.

On the other hand, there are several encouraging signals suggesting that university plays an important role in nurturing student entrepreneurship through different channels. For example, in terms of subjective norms students report that among their classmate's entrepreneurship is seen favorably as career path. More importantly, the survey identifies a number of entrepreneurial activities started or planned by university students. Specifically, 5.9% of the respondents are nascent entrepreneurs (i.e., are in the process of starting a business) and 3.8% are active entrepreneurs (i.e., already run a business). The report shows that university can play a role in nurturing these entrepreneurial activities. In particular, most nascent entrepreneurs have developed their business idea taking advantage of their studies, of discussion with other students or of some research project undertaken at university. Moreover, the sector in which they plan to found the business is often aligned with their field of study. A similar pattern is observed also for active entrepreneurs. For example, students of Natural Sciences tend to focus on technology-intensive industries such as information technology or engineering.

While university seems to support the generation of business ideas, still students struggle to obtain results from their efforts. In terms of economic performance, most firms started by active entrepreneurs do not make profits and have no more than 1 employee, even though active entrepreneurs are quite satisfied with their career overall. This is in line with the stylized fact that entrepreneurs obtain satisfaction from non-economic results (Lange, 2012). Nascent entrepreneurs also present some criticalities. 65.2% of them estimate that it will take more than 1 year to actually start the business and most have already completed only early-stage activities, such as collecting market information or starting the development of the product/service. Moreover, the majority of them see their to-be-founded companies not as their main occupation in the future, suggesting that their

planned ventures have not represent a definite career choice. They might be a temporary career spell before searching for different jobs or founding/taking over another venture; or they might be seen as lifestyle ventures to be run alongside another occupation. Also for active entrepreneurs in the Italian sample their current venture is seen as definite career choice for less than a half (46%).

Next to university, family emerges as another fundamental context that nurtures student entrepreneurship. 27.5% have parents who are either self-employed or majority owners of a business. This represents an opportunity of being exposed to entrepreneurship (Peterman and Kennedy, 2003). These students are on average more likely to show interest towards founding a business at some point of their career or enter entrepreneurship by taking over their parents' business. Interestingly, a considerable fraction of students who aim to succeed parents' business 5 years after finishing studies has accumulated experience in their parents' firm and/or plans to get entrepreneurial experience by founding a venture right after studies. In some cases, students intend to take over parents' business right after studies and found a venture later in their career. Overall this suggests that family can potentially represent a valuable learning environment for university students.

The results of this report provide insights to educators, policymakers and entrepreneurship scholars, but before illustrating these implications, it should be noted that the findings of this report have to be interpreted with care. There is a large heterogeneity observed in the Italian GUESSS sample with regard to regions, universities, and students included. Furthermore, the non-random process used for building the database makes the population not fully representative of the Italian student population.

Educators and policymakers should focus their attention on the lack of entrepreneurial skills and learning at university that emerges from the report. Promoting entrepreneurship especially in campuses of Social Sciences and Natural Sciences where diffusion of entrepreneurship education is still scarce. A first attempt to do so could consist in offering elective programs and making sure that students are aware of their availability and importance. Moreover, since many students see entrepreneurship as a possible career option at some point of their lives, university should offer at least to these students the opportunity to acquire entrepreneurial skill, since they lament the inadequacy of their education in this respect.

To conclude, this report provides some insights to scholars who can take advantage of GUESSS data to tackle several research questions that deserve attention in various entrepreneurship literature streams (e.g., entrepreneurial career trajectories, students entrepreneurship, entrepreneurial intention and actions). For example, the report endorses a career perspective in entrepreneurship (Burton et al., 2016), where entrepreneurship can represent a temporary career spell of individuals who enter the job market. The sequence of career choices undertaken by university students to prepare themselves for subsequent steps of their life is worth investigating. The emerging research stream on the intentions-behavior gap (Van Gelderen et al., 2015) can take advantage of the insights of this report to mind the time required to translate entrepreneurial intentions into actions for nascent entrepreneurs. Also studies on the effect of university on entrepreneurship should take into consideration that many students will found a business probably several years after

finishing studies if they do. Finally, this report suggests that, besides entrepreneurship education, on which most research on university entrepreneurship is based, university offers also other mechanisms that nurture entrepreneurial activities, for example providing opportunities to develop business ideas or contacts with entrepreneurially-minded peers.

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