UNIVERSITÀ DEGLI STUDI DI BERGAMO

GLOBAL UNIVERSITY ENTREPRENURIAL SPIRIT STUDENTS' SURVEY

NATIONAL REPORT ITALY 2023 DATA COLLECTION

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2023 NATIONAL REPORT ITALY

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The content and conclusions of this report are the sole responsibility of the authors.

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We encourage faculty of Italian universities to contact the Italian GUESSS team to participate in the next waves and obtain the GUESSS data collected at their university. For further information, please contact guesss@unibg.it

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Executive Summary

The Italian GUESSS report is based on data collected in Italy as part of GUESSS – "Global University Entrepreneurial Spirit Student's Survey" – an international research project coordinated by the Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen and the University of Bern in Switzerland.

Since 2003, the GUESSS project has aimed to gather and analyze entrepreneurship-related insights from the universities of various countries. This survey reached its 10th edition in 2023 and is carried out in 57 countries with more than 226,000 participants involved.

The Italian survey, coordinated by the University of Bergamo, included 4,374 participants from more than 25 universities.

The entrepreneurial career choice intentions and behaviors of university students and their academic and family backgrounds are the focus of this report. This report outlines the main findings of the Italian survey and compares Italian students' answers to those coming from students in other countries. It provides useful insights to educators and scholars on cross-country differences and patterns in university students' entrepreneurial spirit, summarized hereafter.

Sample description

- Age and gender: most of the respondents are under 25 years old (85.1%), 10.7% are aged between 26–30, and 4.2% of them are 31 years old or older. Male respondents (49.9%) are slightly more than females (49.2%), while 0.9% of the respondents declared themselves as "other".
- Field of study: the majority of respondents are studying Natural and Applied Sciences, with 2,207 out of 4,374 students (50.5%). The remaining students are studying Business and Economics (1,344 students; 30.7%), 658 students (15.0%) are in the field of Social Sciences, and 165 students (3.8%) are from other fields.
- Level of study: Bachelor's students account for 59.5% of the sample, while 35.7% are enrolled in Master's programs.

University context

- Entrepreneurship courses: just over half of the respondents (56.9%) have never attended a course in entrepreneurship, which is comparable with the international sample (58.8%). Among Business and Economics students, 26.9% have attended at least one entrepreneurship course as compulsory while only 15.2% of Social Sciences and 13.4% of Natural and Applied Sciences students have done so.
- Entrepreneurial climate: overall, students from Business and Economics tend to evaluate the university entrepreneurial climate more positively (4.5 out of 7) compared to respondents in other fields.
- Entrepreneurial learning & external enablers: students in Social Sciences and Natural and Applied Sciences report entrepreneurial learning & external enablers considerably lower (on average, 3.6 and 3.7 out of 7, respectively) than students in Business and Economics (on average, 4.5 out of 7).
- Entrepreneurial self-efficacy: on average, Business and Economics students report entrepreneurial self-efficacy (4.9 on a 7-point scale) higher than students in Natural and Applied Sciences (4.6) or Social Sciences (4.4).
- Family background: students whose parents are self-employed and/or majority owners of a business have higher levels of entrepreneurial learning & external enablers compared to those who have no parents as self-employed and/or majority owners of a business.

Students' career choice intentions

- Employment intentions: immediately after studies, 66.3% of the respondents intend to join a company as an employee. However, this result decreases to 50.1% when considering their career choice intentions five years after completing their studies.
- Founding intentions: 16.1% of the students want to start a venture right after studies. By comparison, 18.9% of the international sample would like to become founders immediately after studies, slightly higher than the Italian sample.
- Gender differences: among male respondents, 18.9% would like to become founders immediately after studies, and 34.9% five years after studies. The percentages are lower for females, respectively 13.2% (right after studies) and 28.5% (five years after studies).

Nascent Entrepreneurs

- Prevalence: 14.9% of the respondents are classified as nascent entrepreneurs since they report currently trying to start a business or becoming self-employed. This percentage is lower than the 25.7% observed in the international sample 2023 and slightly below the 16.1% reported in the Italian report 2021.
- Field and level of study: students in Business and Economics represent 38.7% of the sample of nascent entrepreneurs. The majority of nascent entrepreneurs (60.1%) study at the Bachelor's level.
- Gender distribution: males represent 58.7% of nascent entrepreneurs, despite males and females being almost equally represented in the sample, indicating a difference in entrepreneurial participation between genders.

Active Entrepreneurs

- Prevalence: 8.3% of the respondents are classified as active entrepreneurs, reporting already running a business or being self-employed. This percentage is higher than the 6.9% reported in the Italian GUESSS report 2021, but lower than the 11.1% observed in the international sample 2023.
- Field and level of study: students in Business and Economics represent 40.1% (145 students) of the sample of active entrepreneurs, followed by Natural and Applied Sciences students (40.1%; 145 students). Furthermore, most active entrepreneurs are enrolled in a Bachelor's level with 214 students (59.1%).
- Gender distribution: males represent 59.4% of the sample of active entrepreneurs, highlighting a disparity in entrepreneurial participation between genders.
- Sector focus: the majority of active entrepreneurs' activities are concentrated in the service-oriented tertiary (33.4%) and the knowledge-driven quaternary (24.0%) sectors.

Well-being of students

- Students' subjective well-being shows that active entrepreneurs report the highest average well-being score (4.7), followed by nascent entrepreneurs (4.5), and non-entrepreneurial students (4.4).

- A positive correlation emerges between entrepreneurial activity and well-being, with higher engagement in entrepreneurship associated with slightly greater self-reported life satisfaction and positive emotions.

Potential Successors

- Prevalence: 24.8% of the respondents are classified as potential successors, having at least one parent who is self-employed and/or a majority owner of a business.
- Field and level of study: the majority of the potential successors are at the Bachelor's level of study (665 students out of 1,086 potential successors, 61.2%), while 368 students (33.9%) are enrolled in a Master's level of study. Of the potential successors, 51.7% are enrolled in Natural and Applied Sciences, while 333 students (30.7%) attend Business and Economics.
- Gender differences: females represent 51.2% of potential successors, while males account for 47.7%.
- Career choice intentions: considering potential successors' career choice intentions, on one hand, 4.2% of respondents (46 students out of 1,086 potential successors) declare their intentions right after studies to become successors in their parents' business right after studies; 4.9% of respondents (52 students out of 1,086 potential successors) declare their intention to become successors in their parents' business five years after their studies. On the other hand, 14.5% of potential successors (158 students out of 1,086 potential successors) plan to found their business right after studies, and 30.9% five years after their studies (336 students out of 1,086 potential successors).

1. Introduction

1.1. Goals and Structure of the Survey

GUESSS stands for “Global University Entrepreneurial Spirit Student’s Survey”. It is an international project that tracks university students’ entrepreneurial intentions, activities, and their academic and family backgrounds worldwide over time.

The overall goals of GUESSS are to: (i) collect data on university students’ entrepreneurial spirit, including, for example, intentions to pursue an entrepreneurial career, as well as entrepreneurial skills and attitudes; (ii) gather information on active and nascent entrepreneurship among university students and on their activities; (iii) collect information on university students’ family background and enterprising families, including succession intention; and (iv) identify potential factors, such as family and academic background, which could influence university students’ entrepreneurial spirit and career choices, including for example perceived entrepreneurial university support and participation in entrepreneurship education.

Accordingly, the first part of the questionnaire deals with students’ demographic details and academic background; the second part explores students’ short and medium-term career choice intentions and analyzes entrepreneurial support provided by universities in terms of entrepreneurship education, entrepreneurial climate, learning, and self-efficacy. The questionnaire also includes sections for nascent entrepreneurs (i.e., students who are currently trying to start a business or become self-employed) and active entrepreneurs (i.e., students who are already managing a business or are already self-employed). Next, the questionnaire examines students’ enterprising family backgrounds, which are defined in GUESSS as having at least one parent who is self-employed and/or is the majority owner of a business. For students from enterprising families, the survey further explores their relationship with the parents’ business as well as their succession plans.

1.2. Data Collection

The 10th global edition of GUESSS 2023 expanded its reach to 57 countries, gathering over 226,000 responses. In each participating country, a national representative oversees the recruitment of partner universities, coordinates and promotes data collection, gains access to the national database, and finalizes and disseminates the

national report. In Italy, the survey has been coordinated by the Center for Young and Family Enterprise (CYFE), at the University of Bergamo with the support of the GUESSS Board Italy, which supports the collection of GUESSS data, fosters academic networks, and disseminates findings to enhance understanding and support for entrepreneurial activities in universities.

The national representative sent the survey to the Italian universities involved in the project, and to maximize the representativeness of the student population, it was distributed by the central administrations of the participating universities, when feasible. This approach ensured that the survey reached students all across study fields and levels. Additionally, targeted distribution efforts, such as involving lecturers as active promoters, were conducted to increase the number of respondents.

The survey was distributed from October to December 2023, collecting responses from students across different study fields and levels of study, with a total of 4,374 responses representing more than 26 universities in Italy.

Table 1 gives an overview of the distribution of the Italian 2023 GUESSS sample by university:

University	N	%
Università degli Studi di Napoli Federico II	696	15.91%
Università degli Studi della Calabria	611	13.97%
Università degli Studi di Torino	572	13.08%
Politecnico di Torino	424	9.69%
Università degli Studi di Trieste	355	8.11%
Università Cattaneo - LIUC	349	7.98%
Università degli Studi di Verona	312	7.13%
Università degli Studi di Bergamo	278	6.36%
Politecnico di Milano	220	5.03%
Sapienza Università di Roma	214	4.89%
Università degli Studi di Salerno	163	3.73%
Università degli Studi di Brescia	110	2.51%
Università degli Studi di Urbino "Carlo Bo"	25	0.57%
Other[1]	45	0.78%
Total	**4,374**	**100%**

Table 1. Universities in Italian 2023 GUESSS wave.
(Valid responses: N = 4,374)

[1] The "other" category includes the following universities: Università degli Studi di Udine, Politecnico di Bari, Università degli Studi di Bologna, Università degli Studi di Milano Statale, Università degli Studi di Reggio Calabria Mediterranea, Università degli Studi della Campania Luigi Vanvitelli, Università Cattolica del Sacro Cuore, Università degli Studi di Pisa, Università del Salento, Università degli Studi di Napoli "L'Orientale", Università degli Studi di Cagliari, Università degli Studi di Messina, Università degli Studi di Trento.

2. Sample Description

2.1. Students' Age and Gender

The mean age of students participating in the Italian 2023 GUESSS survey is 24.0 years. Figure 1 shows that 85.1% of students are under 25 years old (3,541 respondents), 10,7% (444 respondents) are between 26 and 30 years old, and 4.2% (177 respondents) are aged 31 years or more.

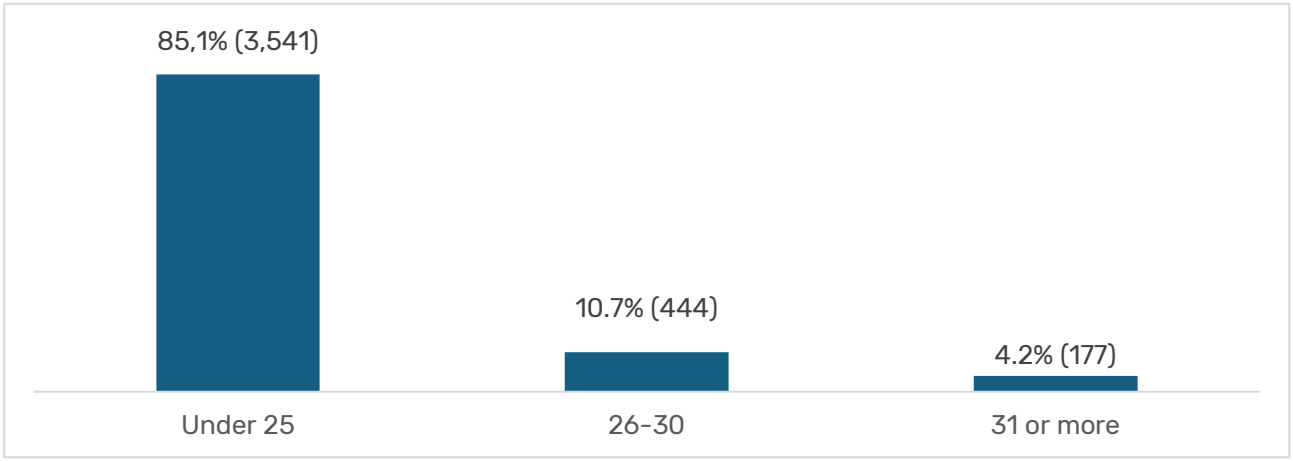

Figure 1. Age: distribution of students.
(Valid responses: N = 4,162)

Considering the gender distribution (Figure 2), 49.9% of the participants in the Italian sample are males and 49.2% are females (respectively 2,177 and 2,149 out of 4,365 valid responses).

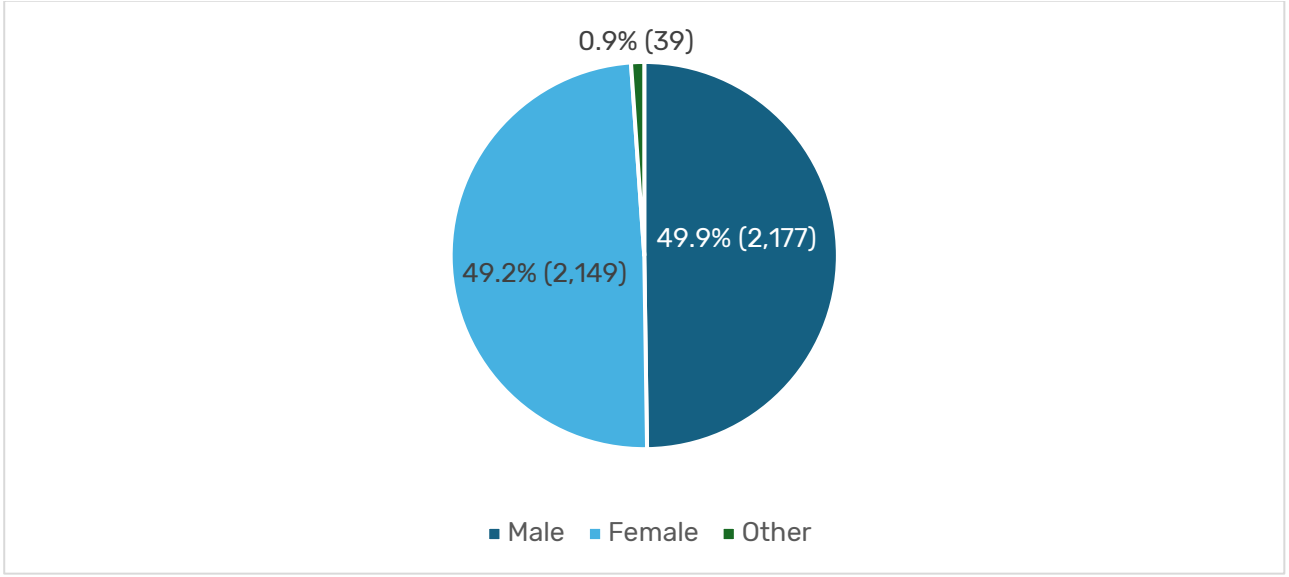

Figure 2. Gender: distribution of students.
(Valid responses: N = 4,365)

2.2. Students' Field of Study

Figure 3 depicts the respondents' field of study. Most of them are currently studying Engineering including Architecture (34.7%; 1,519 students), Business / Management (14.4%; 631 students), and Economics (13.9%; 606 students).

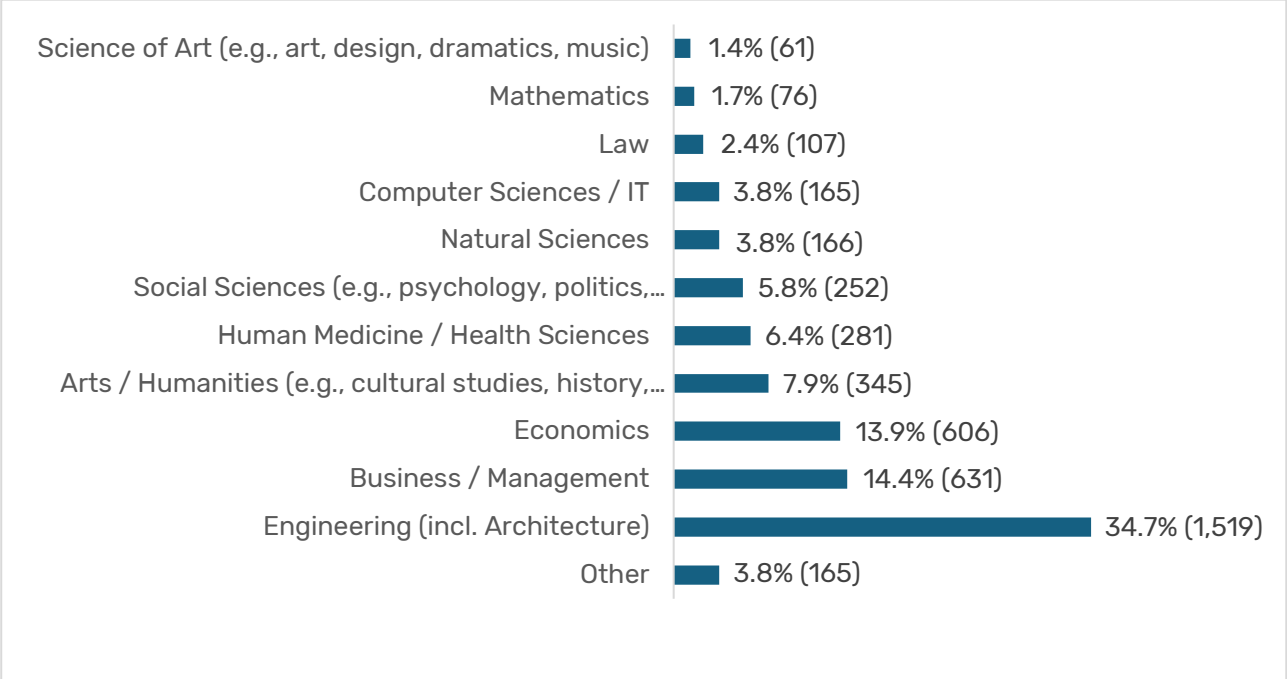

Figure 3. Field of study: detailed distribution of students.
(Valid responses: N = 4,374)

To ensure simplicity and consistency with previous national reports, we classify (as reported in Figure 4) the fields of study into three categories: (i) "Business and Economics", encompassing Law, Economics, and Business/Management; (ii) "Natural and Applied Sciences", which includes Human Medicine and Health Sciences, Mathematics, Natural Sciences, Engineering (including Architecture), and Computer Sciences/IT; and (iii) "Social Sciences", covering Arts / Humanities, Social Sciences, and the Science of Art. Most respondents are studying Natural and Applied Sciences, with 2,207 out of 4,374 students (50.5%). The remaining students are studying Business and Economics (1,344 students; 30.7%), 658 students (15.0%) are in the Social Sciences field of study, and 165 students (3.8%) are from other fields.

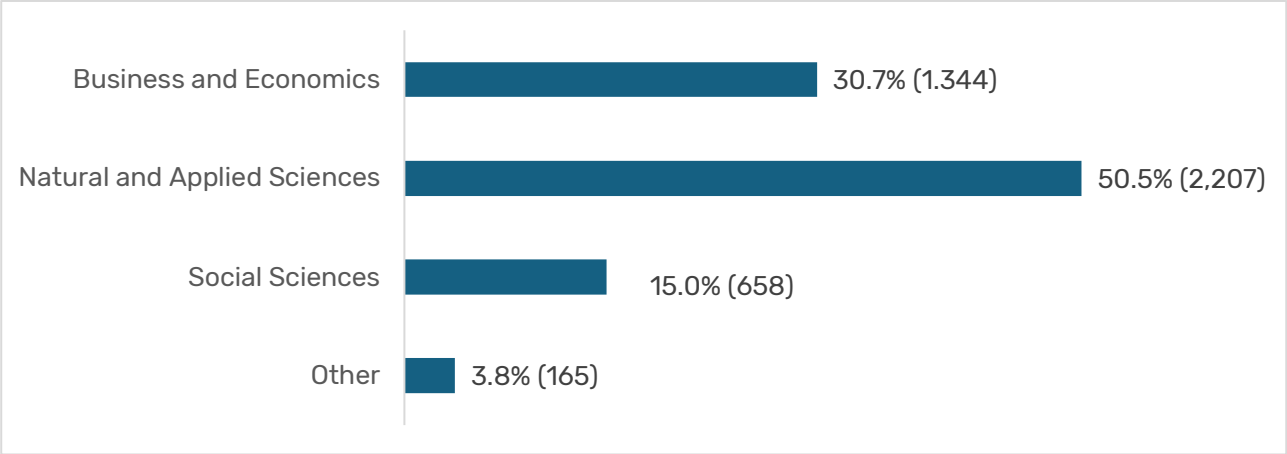

Figure 4. Field of study: aggregated distribution of students.
(Valid responses: N = 4,374)

2.3. Students' Level of Study

Most respondents are enrolled in a Bachelor's level (2,601 out of 4,374 students); followed by those attending a Master's level (1,561 out of 4,374 students). Students undertaking a PhD (132 out of 4,374 students) or enrolled in other study programs (80 out of 4,374) represent a minority of the sample (Figure 5).

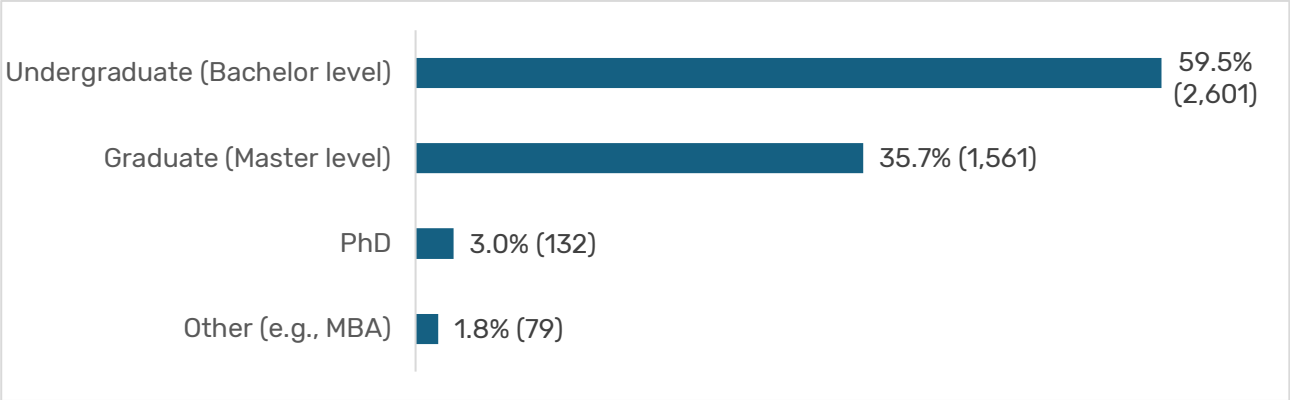

Figure 5. Level of study: distribution of students.
(Valid responses: N = 4,373)

3. The University Context and the Family Background

3.1. Entrepreneurial Climate

The role of universities in fostering entrepreneurship is determined by how students perceive the extent to which their institution supports and promotes entrepreneurial activities (Bergmann et al., 2018). The entrepreneurial climate is a key factor that motivates students to engage in entrepreneurial activities (Bergmann et al., 2016), it can act as a catalyst for high-tech startups by influencing the entrepreneurial activities of students (Franke and Lüthje, 2004). The entrepreneurial climate also plays a crucial role in shaping students' entrepreneurial intentions and influencing students' human capital and entrepreneurial motivation (Franke and Lüthje, 2004).

To this aim, students are asked to rate their level of agreement using a 3-item 7-point Likert scale (Franke and Lüthje, 2004). The items are: (i) the atmosphere at my university inspires me to develop ideas for new businesses; (ii) there is a favorable climate for becoming an entrepreneur at my university; (iii) my university encourages students to engage in entrepreneurial activities. Figure 6 presents the average score for this scale comparing the 2018, 2021, and 2023 waves.

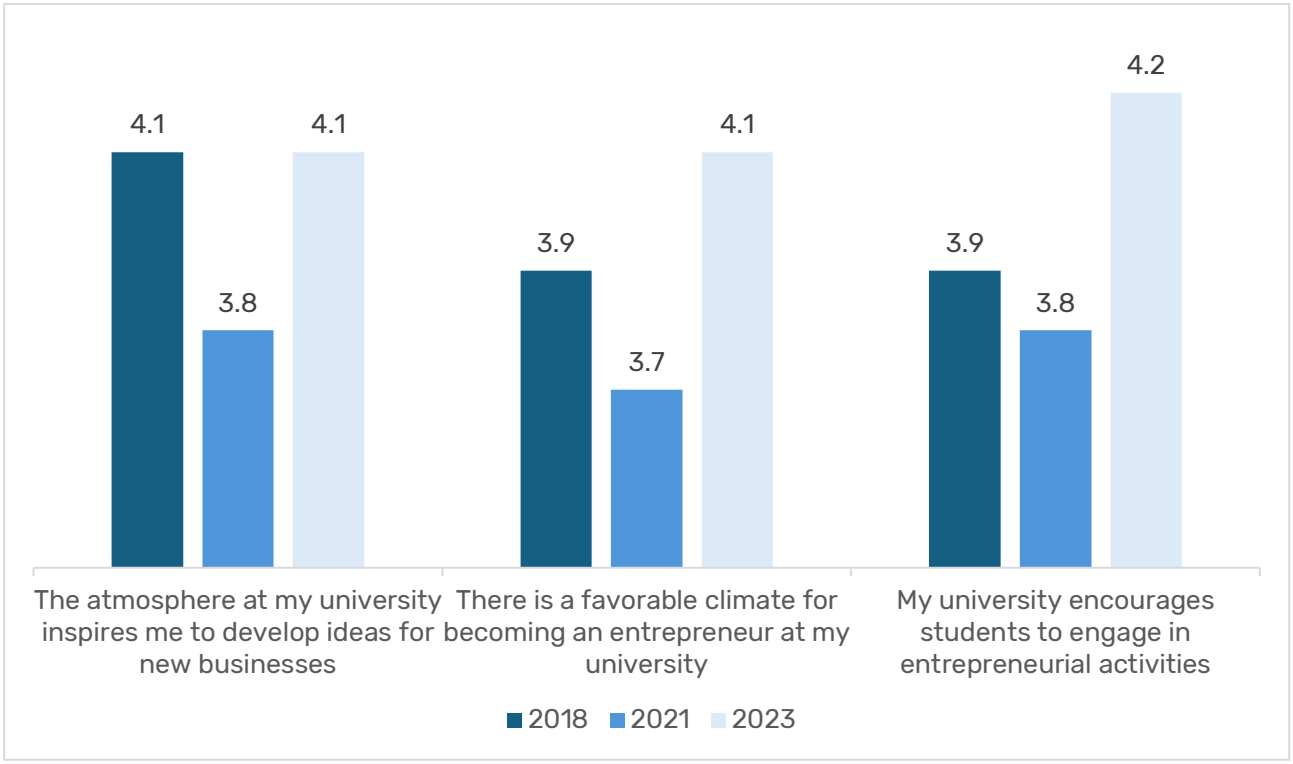

Figure 6. Entrepreneurial climate comparing 2018, 2021, and 2023 waves. (Valid responses: N 2018 = 7,064; N 2021 = 3,294; N 2023 = 4,374)

From 2018 to 2021, there was a decline in ratings for the atmosphere that inspires new business ideas, a supportive climate for entrepreneurship, and encouragement for entrepreneurial initiatives (Cascavilla et al., 2022b; Hahn et al., 2019); this decrease in the entrepreneurial climate was possibly influenced by the effects of COVID-19. However, from 2021 to 2023 these ratings increased, surpassing the 2018 levels for most items. Despite this improvement, the result remains below the global average of 4.5 (Sieger et al., 2024).

Then, Figure 7 shows the average scores for the entrepreneurial climate considering students' fields of study: overall, students from Business and Economics tend to evaluate entrepreneurial climate more positively compared to students from the other fields of study.

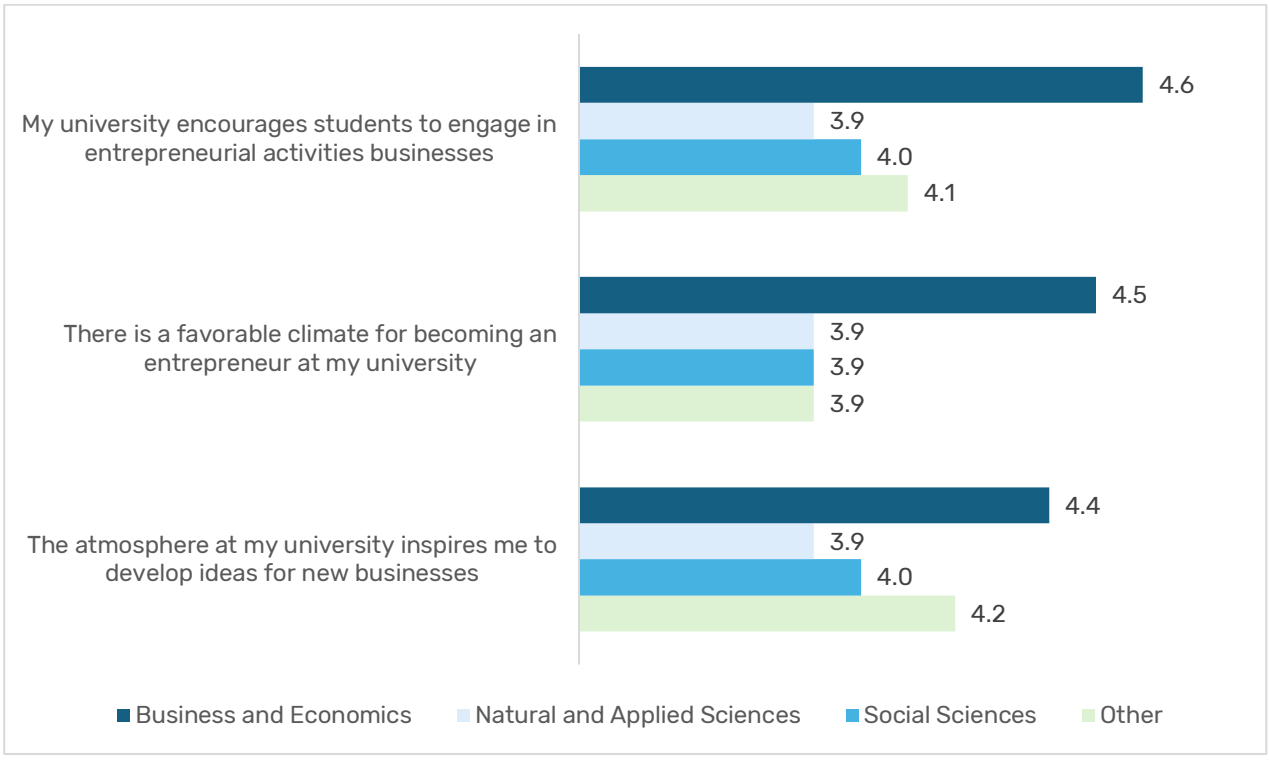

Figure 7. Entrepreneurial climate divided by fields of study.
(Valide responses: N= 4.323; Social Sciences = 653; Natural and Applied Sciences = 2.169; Business and Economics = 1.336; Other = 165)

3.2. Entrepreneurship Education

Entrepreneurship education, defined as courses and educational programs designed to prepare students to acquire entrepreneurial attitudes and skills (Fayolle et al. 2006), holds a central position in academic debates for its numerous benefits on students' skills

and careers (Cascavilla et al., 2022a; Eesley and Lee, 2020; Hahn et al., 2020; Hahn et al., 2017; Martin et al., 2013).

Figure 8 shows the number of students who have followed or not entrepreneurship education: 56.9% of respondents (2,488 out of 4,374) have never attended any entrepreneurship course, which is in line with the global average of 58.8% (Sieger et al., 2024). About 35.6% of students (1,556 out of 4,374) declared to have attended at least one entrepreneurship course: 48.5% (755 out of 1,556) of these students have participated in at least one compulsory entrepreneurship course, while 51.5% (801 out of 1,556) had attended at least one entrepreneurship course as elective. In comparison, the global report shows that 22.7% of students follow entrepreneurship education as an elective course in their academic journey, and 17.3% as a compulsory course (Sieger et al., 2024).

Furthermore, 315 students out of 4,374 (7.2%) declared that they are studying in a specific program in entrepreneurship, which is in line with the global average of 6.3% (Sieger et al., 2024).

In addition to questions about entrepreneurship courses, students are asked whether the university's entrepreneurial reputation influenced their decision to study at their university. Among the respondents, 412 students (9.4% of the total sample) indicated that they primarily chose the university because of its strong entrepreneurial reputation.

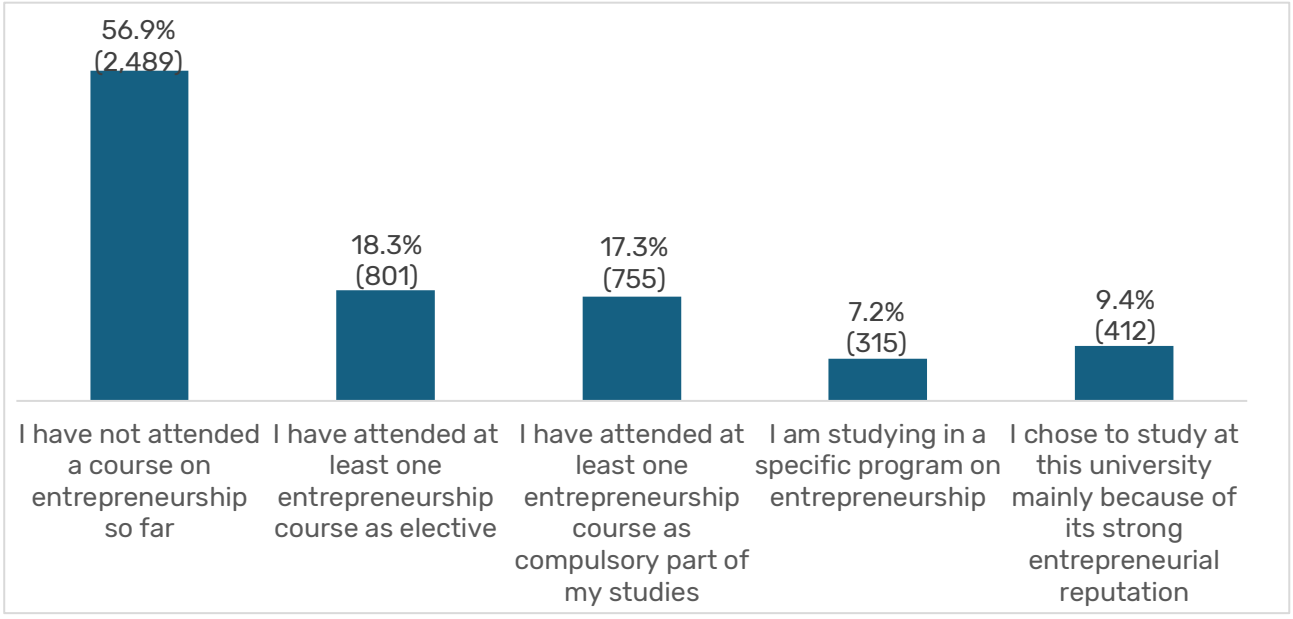

Figure 8. Students' participation in entrepreneurship education.
(Valid responses: N = 4,374)

When examining students' participation in entrepreneurship education by field of study, a notable difference emerges between those studying Business and Economics and those in other fields (Figure 9). Among Business and Economics students, 41.5% have never attended an entrepreneurship course, a significantly lower percentage compared to students in Natural and Applied Sciences (63.9%) and Social Sciences (64.6%). Conversely, 654 out of 1,344 students (48.7%) in Business and Economics, attended at least one entrepreneurship course as compulsory or elective compared to 701 out of 2,207 students (31.8%) in Natural and Applied Sciences, to 202 out of 658 students (30.7%) in Social Sciences, and to 59 out of 165 students (35.8%) in Other fields of study. This further underscores the greater diffusion of entrepreneurship education in Business and Economics compared to other fields of study.

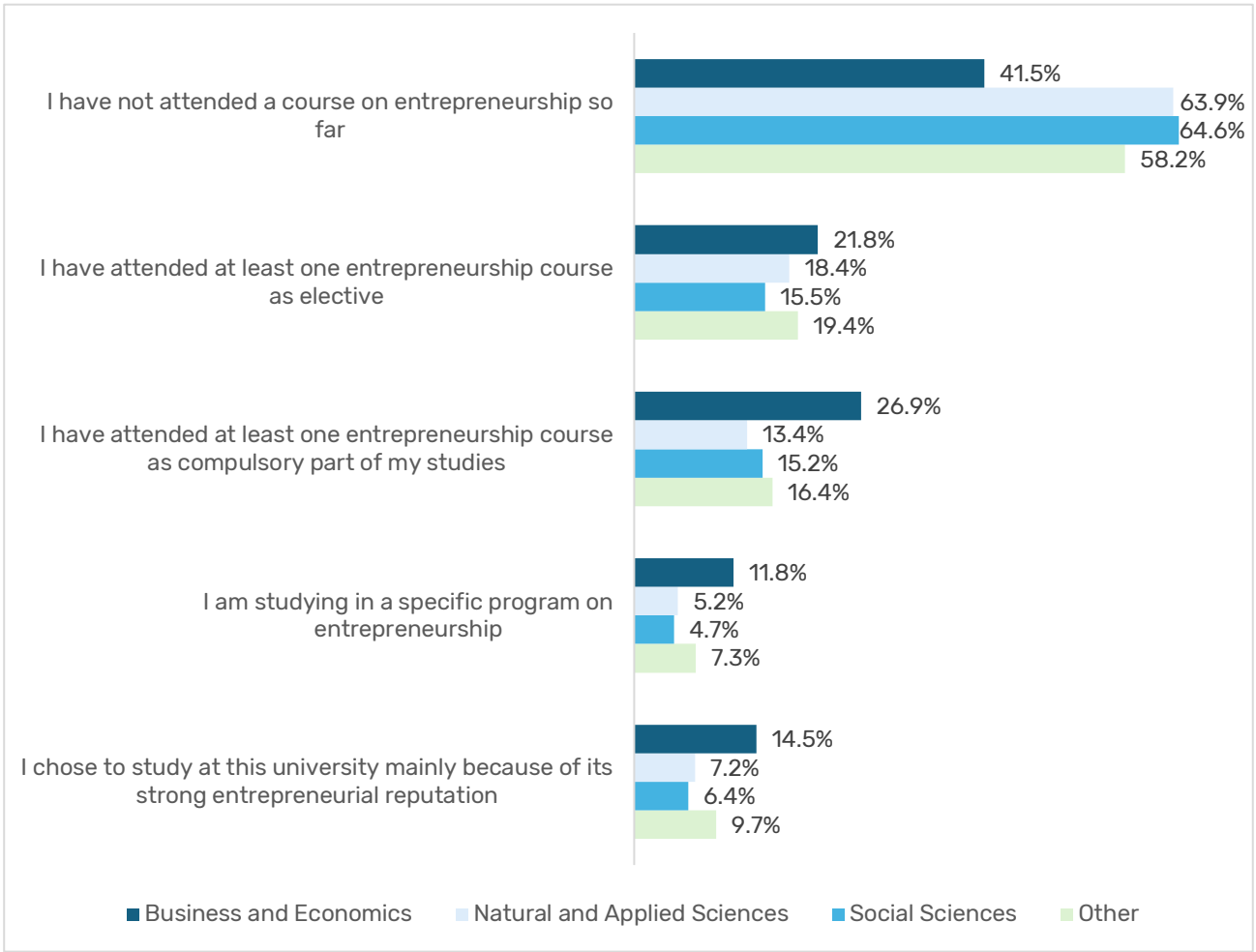

Figure 9. Share of students participating in entrepreneurship education for each field of study. (Valid responses: N= 4,374; Social Sciences = 658; Natural and Applied Sciences = 2,207; Business and Economics = 1,344; Other = 165)

3.3 Entrepreneurial Learning & External Enablers, and Entrepreneurial Self-Efficacy

Since entrepreneurship education aims to equip students with entrepreneurial attitudes and skills (Fayolle et al. 2006), this paragraph mostly focuses on two key dimensions: entrepreneurial learning, defined as the entrepreneurial knowledge, attitudes, and skills students acquire (Souitaris et al., 2007), and entrepreneurial self-efficacy, which refers to the confidence in one's abilities to succeed as an entrepreneur (Drnovšek et al., 2010).

In Table 2, the average perceived impact of university offerings on entrepreneurial learning & external enablers is captured using 7-point Likert items based on the work of Souitaris et al. (2007) and Davidsson et al. (2020). The results show that the various university offerings are not fundamental, according to the respondents, for enhancing the ability to develop networks; whereas these offerings are more useful for encouraging them to identify business opportunities closely aligned with current trends, shocks, breakthroughs or other changes in the environment.

The courses and events I attended...	**Average score Italian sample 2023**
...increased my understanding of the attitudes, values, and motivations of entrepreneurs.	4.2
... increased my understanding of the actions someone has to take to start a business.	4.0
... enhanced my practical management skills to start a business.	3.7
... enhanced my ability to develop networks.	3.9
... encouraged me to identify business opportunities closely aligned with my own knowledge and interests.	4.0
... encouraged me to identify business opportunities closely aligned with current trends, shocks, breakthroughs, or other changes in the business environment.	3.9
Average	**4.0**

Table 2. Average of students' entrepreneurial learning & external enablers. (Valid responses: N = 4,374)[2]

[2] Based on Souitaris et al. (2007), the items for entrepreneurial learning include: "increased my understanding of the attitudes, values, and motivations of entrepreneurs", "increased my understanding of the actions someone has to take to start a business", "enhanced my practical management skills to start a business", and "enhanced my ability to develop networks". Based on Davidsson et al. (2020), the items for external enablers include: "encouraged me to identify business opportunities closely aligned with my own knowledge and interests" and "encouraged me to identify business opportunities closely aligned with current trends, shocks, breakthroughs, or other changes in the business environment".

Considering gender differences (Figure 10), male students report slightly higher entrepreneurial learning & external enablers than female students.

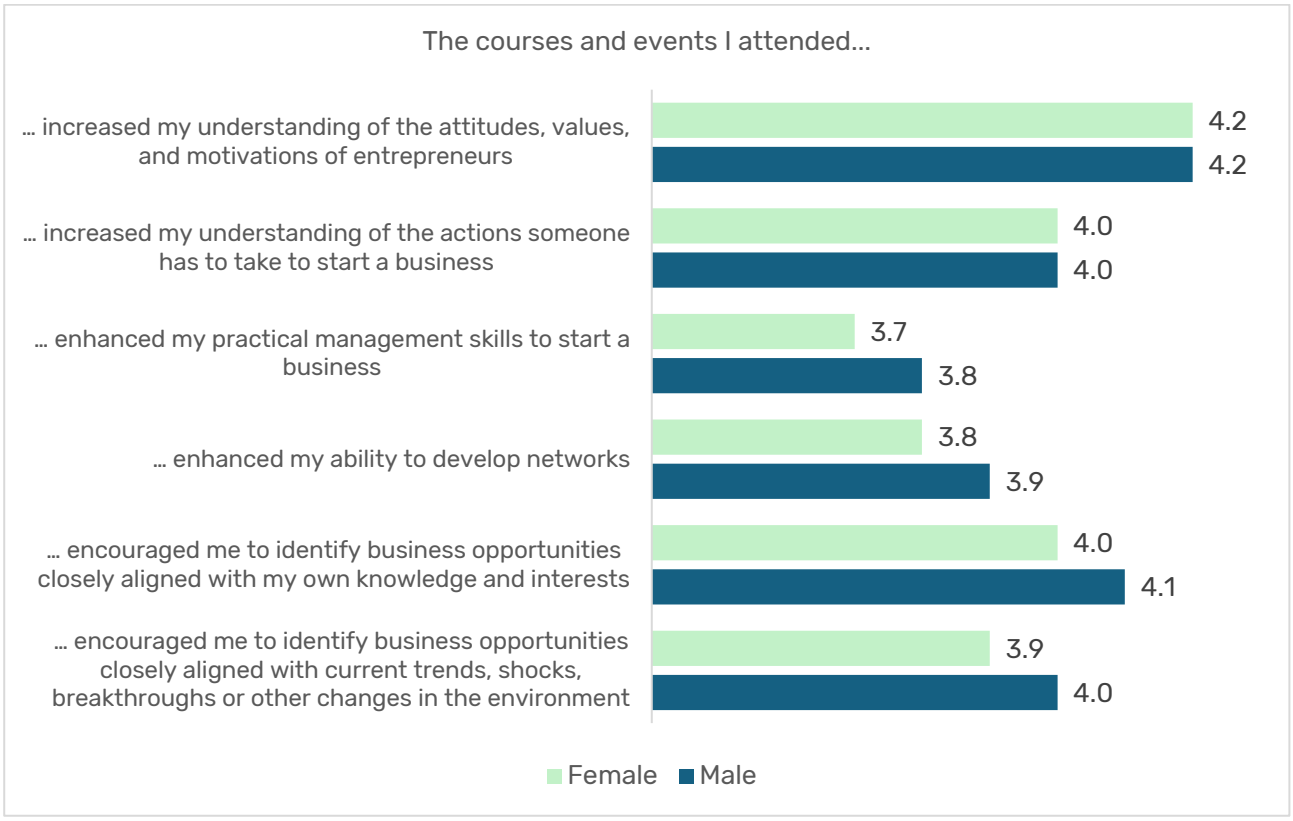

Figure 10. Entrepreneurial learning & external enablers divided by gender. (Valid responses: N = 4,374; Males = 2,177; Females = 2,149

By field of study, students in Social Sciences and Natural and Applied Sciences report considerably lower entrepreneurial learning & external enablers than students in Business and Economics, as shown in Figure 11. A possible explanation is that Business and Economics students are more likely to attend entrepreneurship courses and hence achieve entrepreneurial learning & external enablers at university.

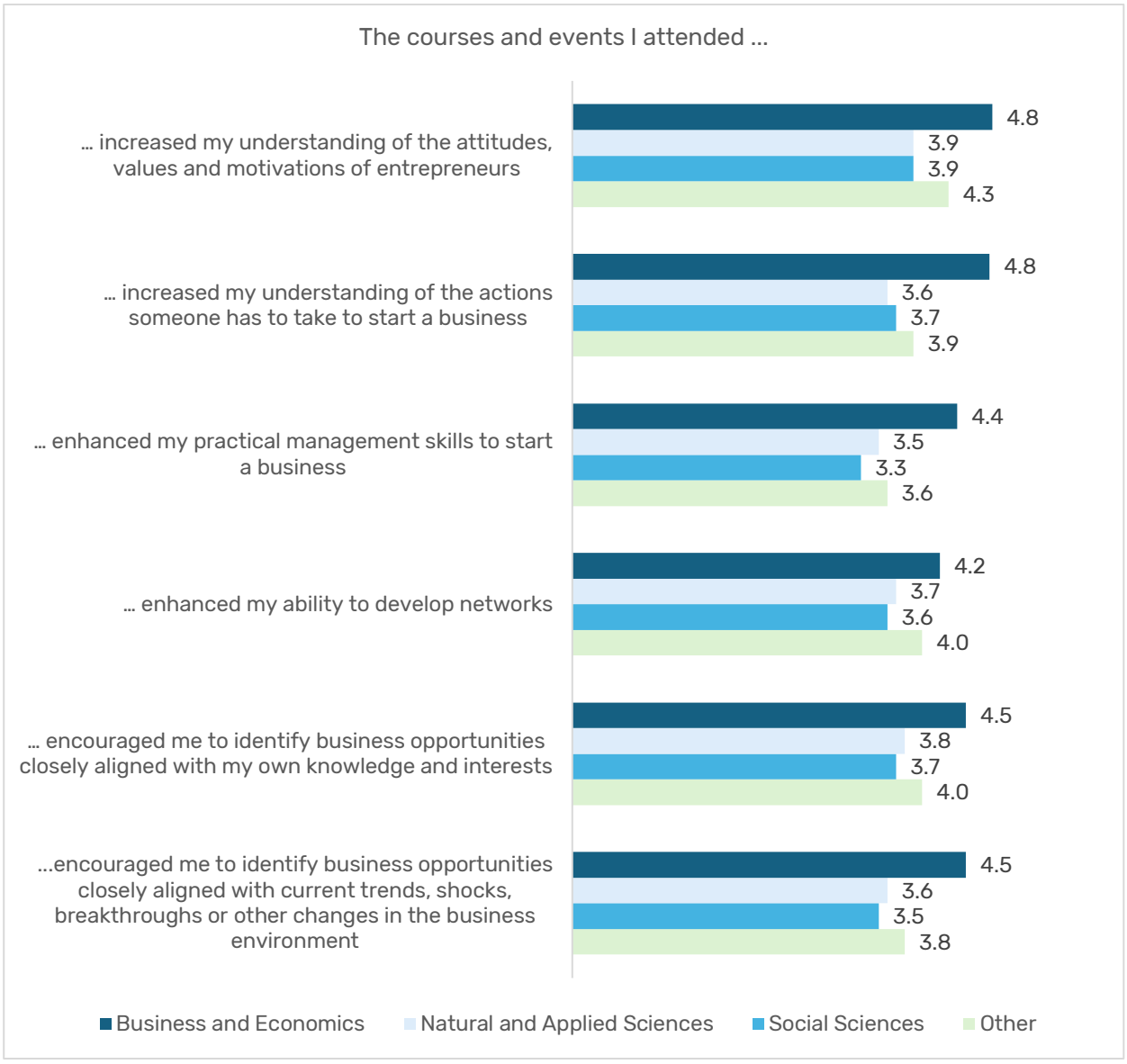

Figure 11. Entrepreneurial learning & external enablers divided by field of study.
(Valid responses: N = 4,374; Social Sciences = 658; Natural and Applied Sciences = 2,207; Business and Economics = 1,344; Other = 165)

To measure entrepreneurial self-efficacy and rate students' skill levels concerning various entrepreneurial tasks, in the GUESSS survey is used a 7-point Likert scale (Zhao et al., 2005). The results are shown in Table 3.

	Average score Italian sample 2023
I can successfully discover new business opportunities	4.6
I can successfully create new products	4.2
I can think creatively	5.2
I can successfully commercialize ideas	4.5
Average	**4.6**

Table 3. Average of students' entrepreneurial self-efficacy.
(Valid responses: N = 4,374)

The result, obtained from the average of the four items, is 4.6 out of 7, which considers four entrepreneurial tasks shown in the table above.

Considering gender differences (Figure 12), males report significantly higher levels of entrepreneurial self-efficacy compared to females, indicating that females continue to perceive lower levels of confidence in their entrepreneurial skills.

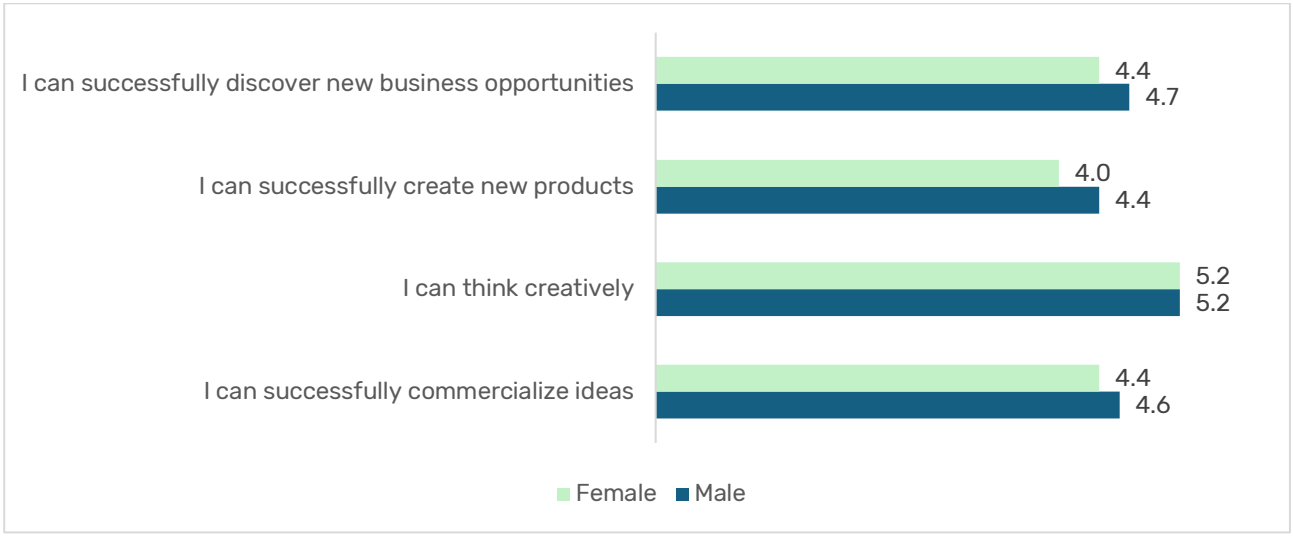

Figure 12. Entrepreneurial self-efficacy divided by gender.
(Valid responses: N = 4,374; Males = 2,177; Females = 2,149)

By field of study, students enrolled in Business and Economics have the highest entrepreneurial self-efficacy, followed by students studying Natural and Applied Sciences, which is consistent with the lower level of entrepreneurship education and

less favorable entrepreneurial climate in Social Sciences compared with Business and Economics (Figure 13)

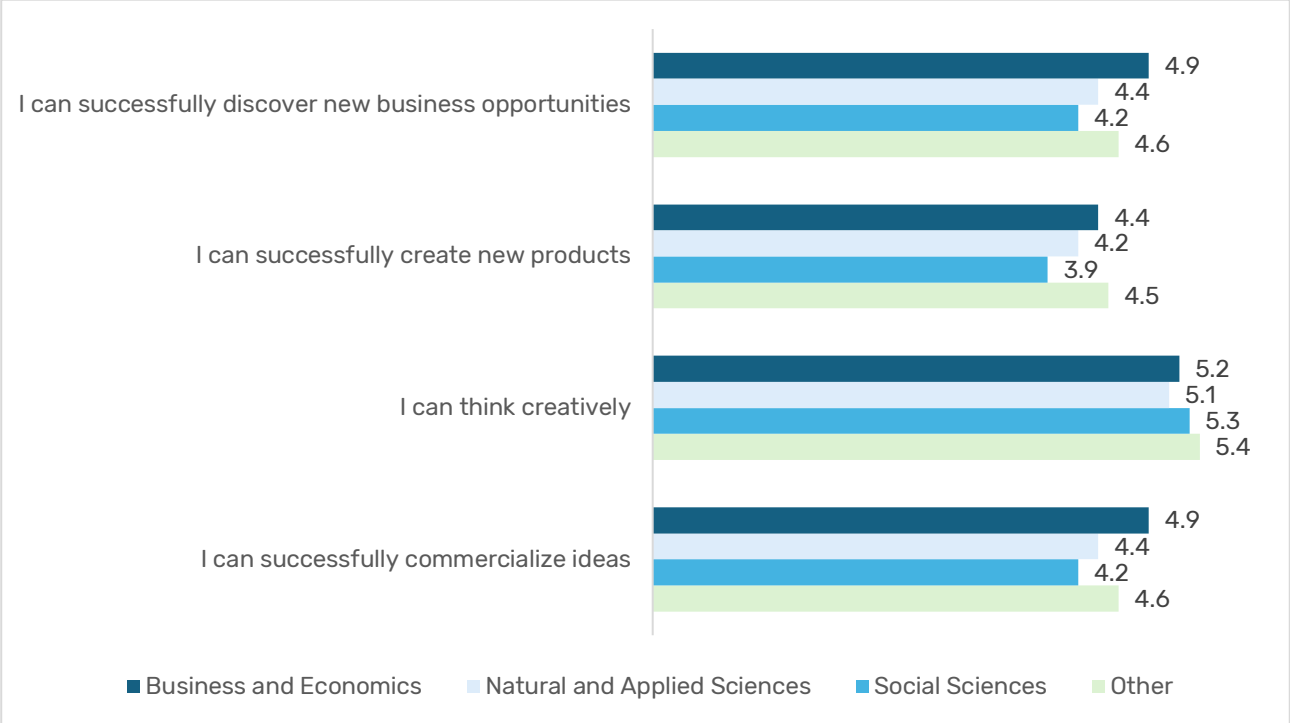

Figure 13. Entrepreneurial self-efficacy divided by field of study.
(Valid responses: N = 4,374; Social Sciences = 658; Natural and Applied Sciences = 2,207; Business and Economics = 1,344; Other = 165)

3.4. Enterprising Family Background

Research about the role of enterprising families in shaping the entrepreneurial intentions and behaviors of younger generations is well-documented in the fields of entrepreneurship and family business (Criaco et al., 2017; Aldrich and Cliff, 2003). For example, exposure to an enterprising family significantly promotes an interest in entrepreneurial activity, with children of entrepreneurs more likely to pursue careers in entrepreneurship (Lindquist et al., 2015). In the GUESSS project, to identify university students with an enterprising family background, respondents are asked whether their parents are self-employed and/or majority owners of a business.

About 35% of the students have at least one self-employed parent and/or majority owners of a business (1,517 out of 4,374 valid responses), and the majority of them (61.0%; 925 respondents out of 1,517) have a father who is self-employed and/or majority owner of a business (Figure 14).

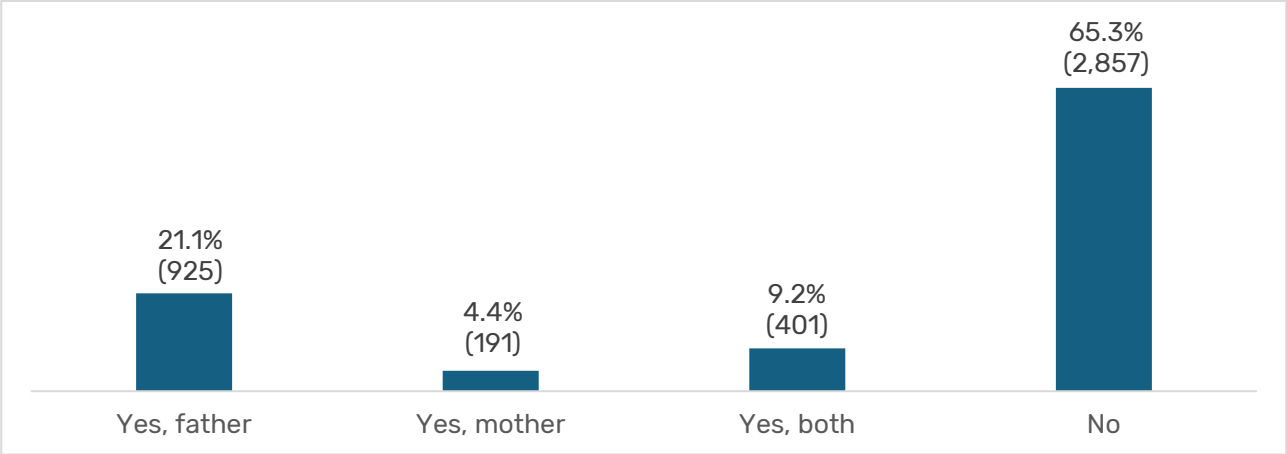

Figure 14. Presence of an enterprising family.
(Valid responses: N = 4,374)

Students whose parents are self-employed and/or majority owners of a business have the highest levels of entrepreneurial learning & external enablers compared to those students whose parents are not self-employed and/or majority owners of a business (Figure 15). Similarly, students whose parents are self-employed and/or majority owners of a business have the highest entrepreneurial self-efficacy compared to those students whose parents are not self-employed and/or majority owners of a business (Figure 16). This aligns with previous research highlighting the advantages of an enterprising family background for entrepreneurship education and its positive effects on outcomes (Hahn et al., 2020)

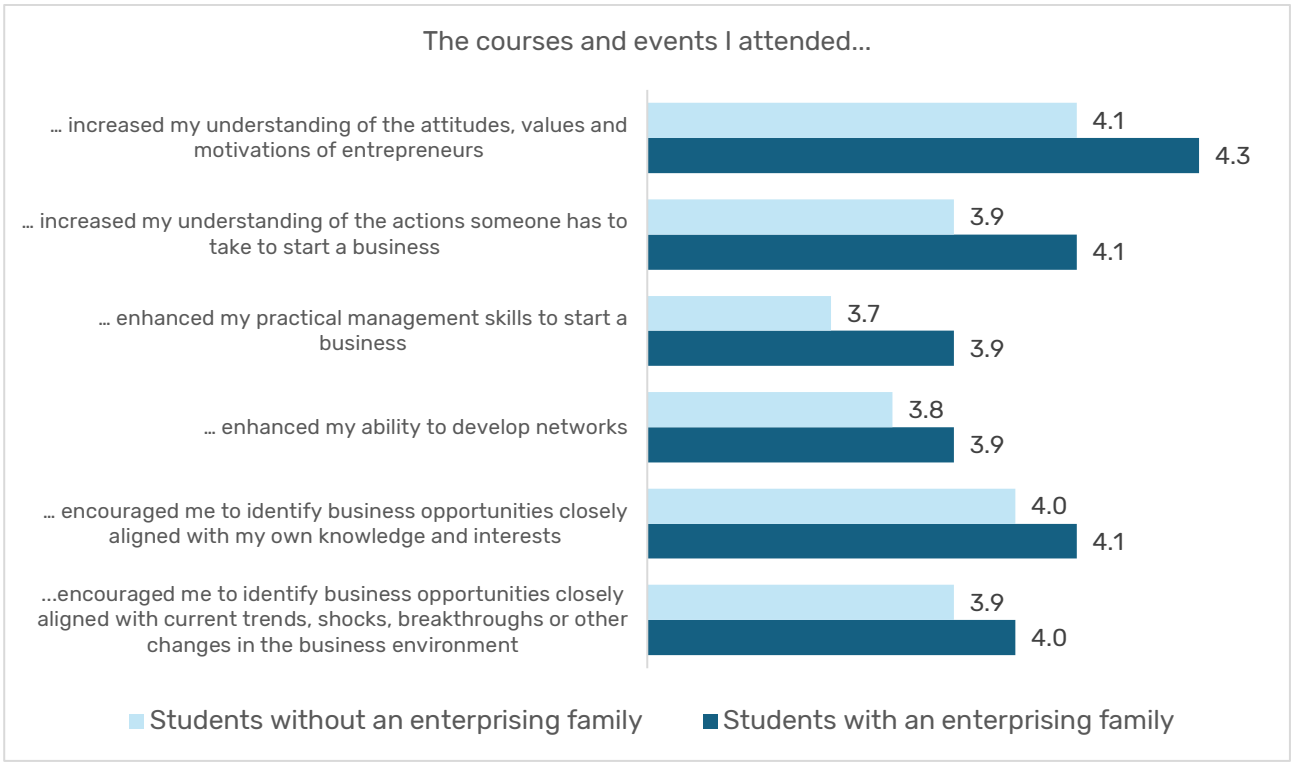

Figure 15. Entrepreneurial learning & external enablers divided by the presence of an enterprising family.
(Valid responses: Students without an enterprising family = 2,857; Students with an enterprising family = 1,517)

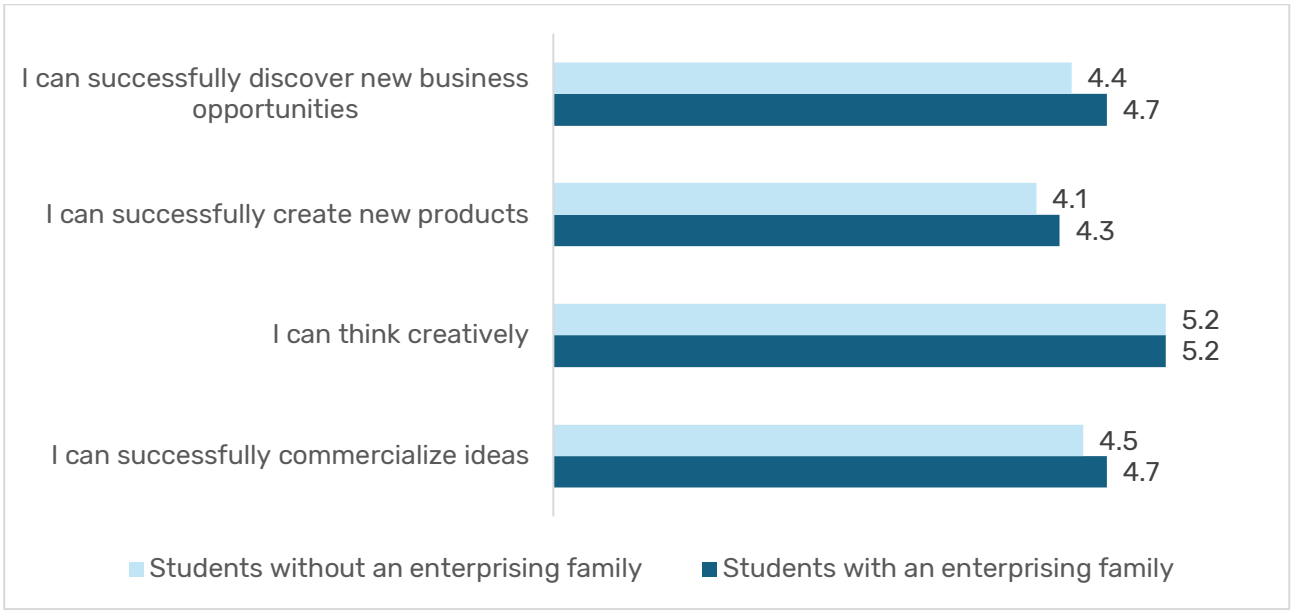

Figure 16. Entrepreneurial self-efficacy divided by the presence of an enterprising family.
(Valid responses: Students without an enterprising family = 2,857; Students with an enterprising family = 1,517)

4. Students' Career Choice Intentions

4.1. Employment and Founding Intentions

The career choice intentions of the respondents are reported in Figure 17, considering two different time frames, namely immediately after studies and five years after studies. Students are asked to choose from ten different career options: (i) an employee in a small business; (ii) an employee in a medium-sized business; (iii) an employee in a large business; (iv) an employee in public service; (v) an employee in academia; (vi) an employee in a non-profit organization; (vii) a founder; (viii) a successor in the parents'/family's business; (ix) a successor in another business; (x) other/do not know yet.

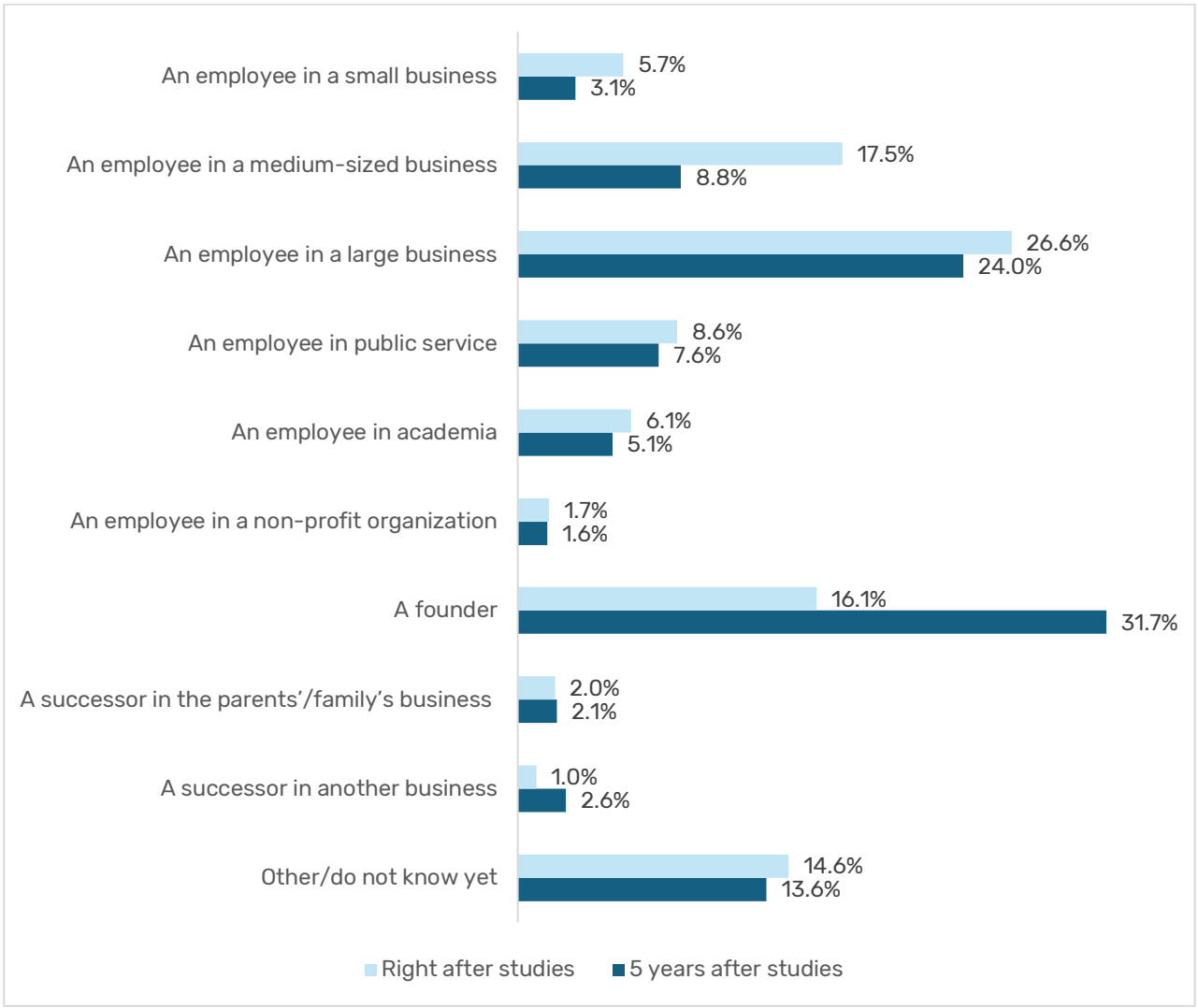

Figure 17. Breakdown of students' career choice intentions right after studies and five years after studies: detailed distribution of students.
(Valid responses: N = 4,374)

26.6% of students express the aspiration to become an employee of large companies (1,162 students) immediately after studies, while only 16.1% want to engage in entrepreneurship and become a founder (704 students). However, students' answers reveal a shift in career choice intentions when comparing their immediate plans after studies with their long-term goals five years later. Indeed, this result reverses when looking five years into the future: the respondents aspire to become founders (1,385 students; 31.7%) rather than working as employees in large businesses (1,048 students; 24.0%) or other career options.

In Figure 18, four subgroups are created to describe career choice intentions: (1) "Employee", which includes employees in small, medium, and large businesses, public service, academia, and non-profit organizations; (2) "Founder", namely entrepreneurs creating their own business; (3) "Successor", which includes successors in their own family business and other types of business; (4) "Other", who do not know yet. Overall, respondents exhibit stronger intentions to pursue careers as employees, both immediately after their studies (66.3%) and five years later (50.1%). This is in line with the global results where students prefer employment right after studies (65.9%) with a decrease five years after studies (53.3%) (Sieger et al., 2024).

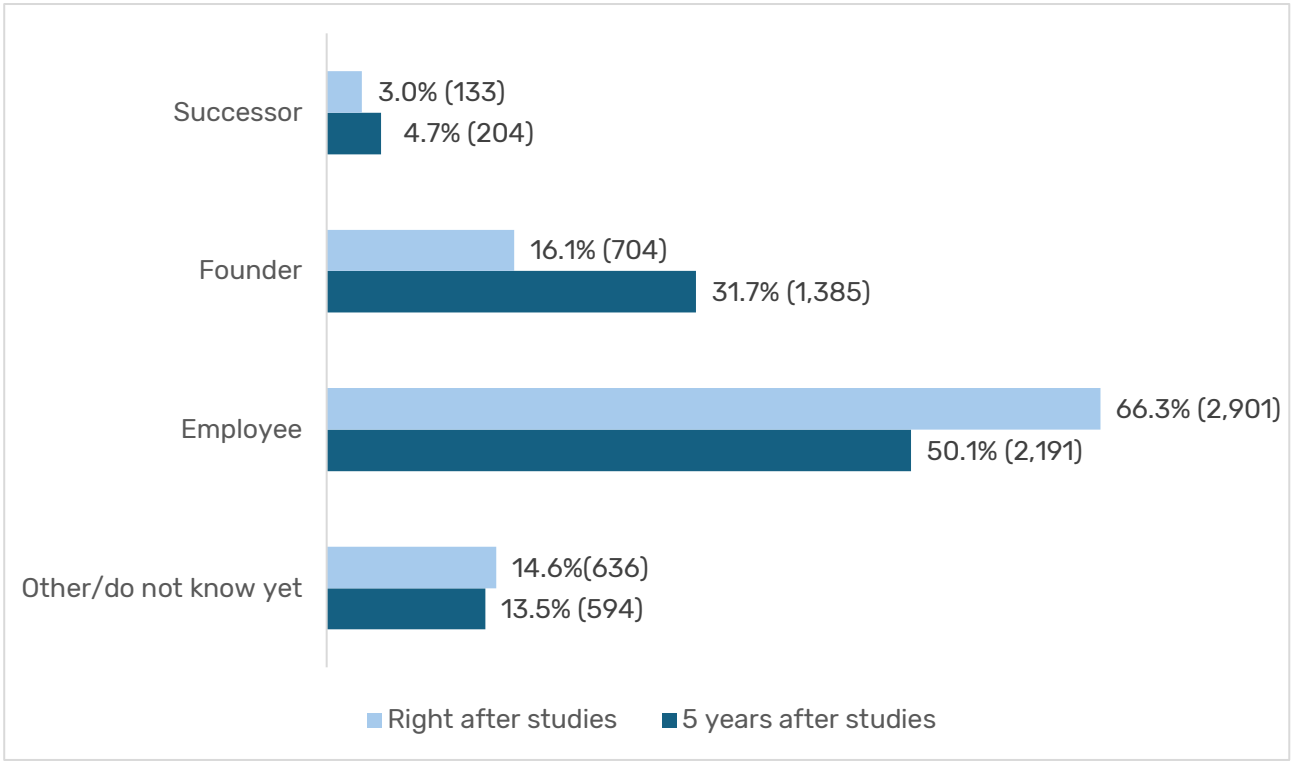

Figure 18. Breakdown students' career choice intentions right after studies and five years after studies: aggregated distribution of students.
(Valid responses: N = 4,374)

4.2. Gender Differences in Career Choice Intentions

Figure 19 and Figure 20 show that male students are slightly more likely to aspire to an entrepreneurial career compared to females, both immediately after studies (18.9%; 412 out of 2,177) and five years after studies (34.9%; 760 out of 2,177).

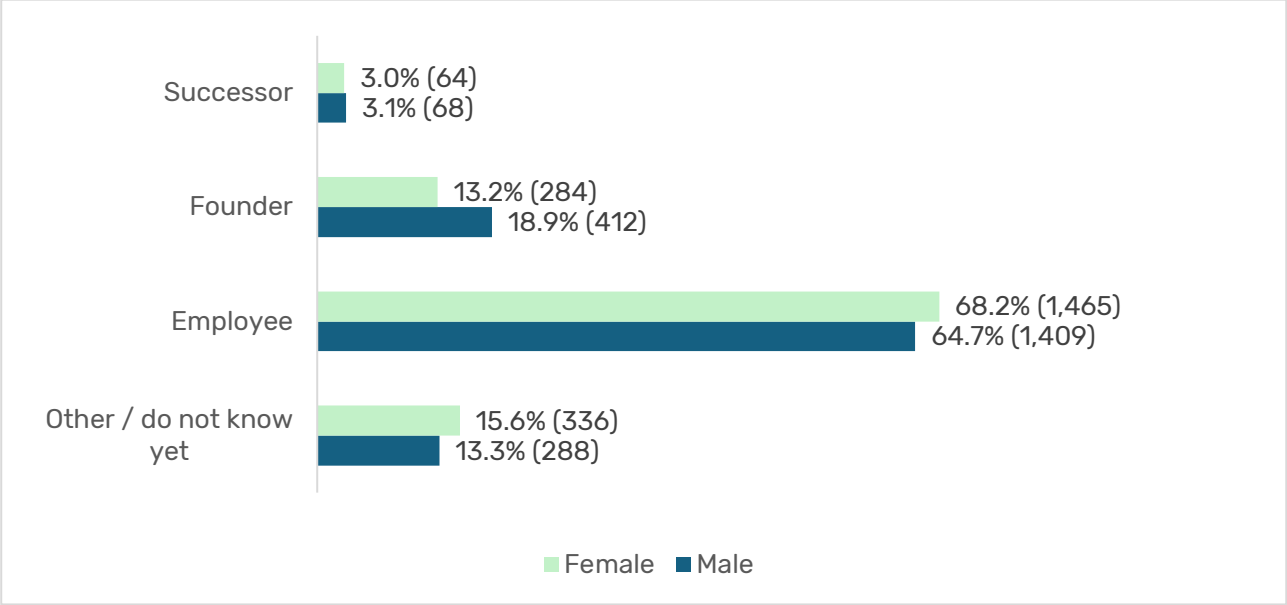

Figure 19. Students' career choice intentions right after studies divided by gender. (Valid responses: Males = 2,177; Females = 2,149)

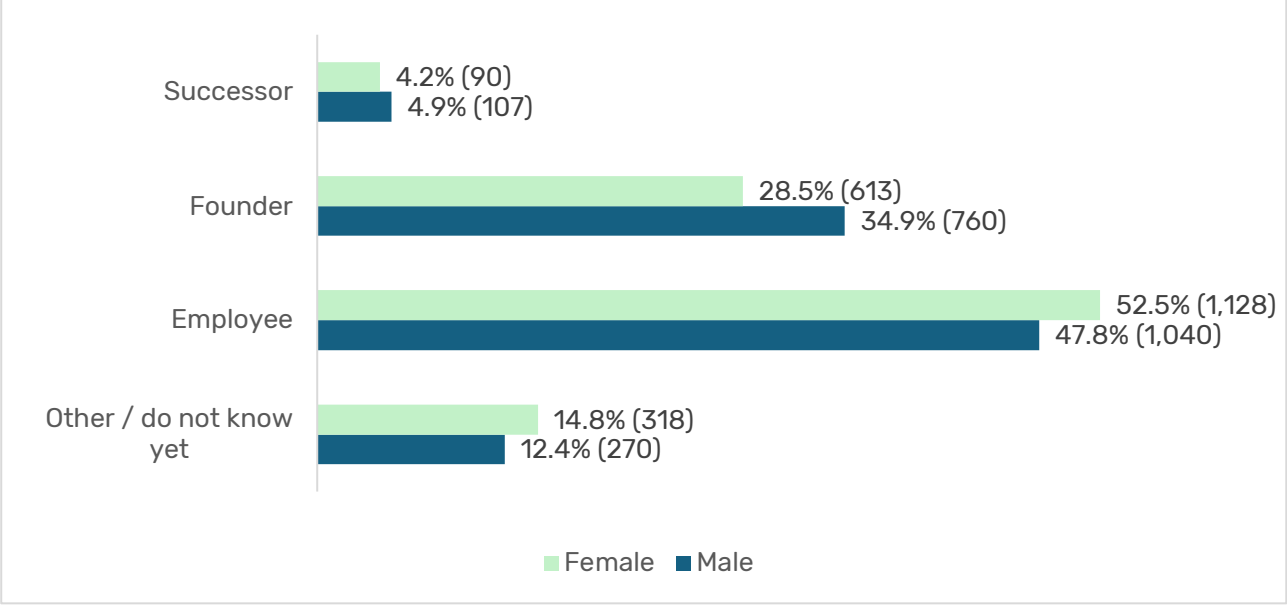

Figure 20. Students' career choice intentions five years after studies divided by gender. (Valid responses: Males = 2,177; Females = 2,149)

4.3. Career Choice Intentions across Fields of Study

Considering career choice intentions across disciplines, the majority of students, regardless of their field of study, prefer to embark in a career as employee right after

studies (Figure 21). However, students in Business and Economics are more likely to aspire to entrepreneurship, aiming to become founders or successors, compared to those in other fields. Conversely, students in Natural and Applied Sciences demonstrate a stronger inclination toward careers as employees.

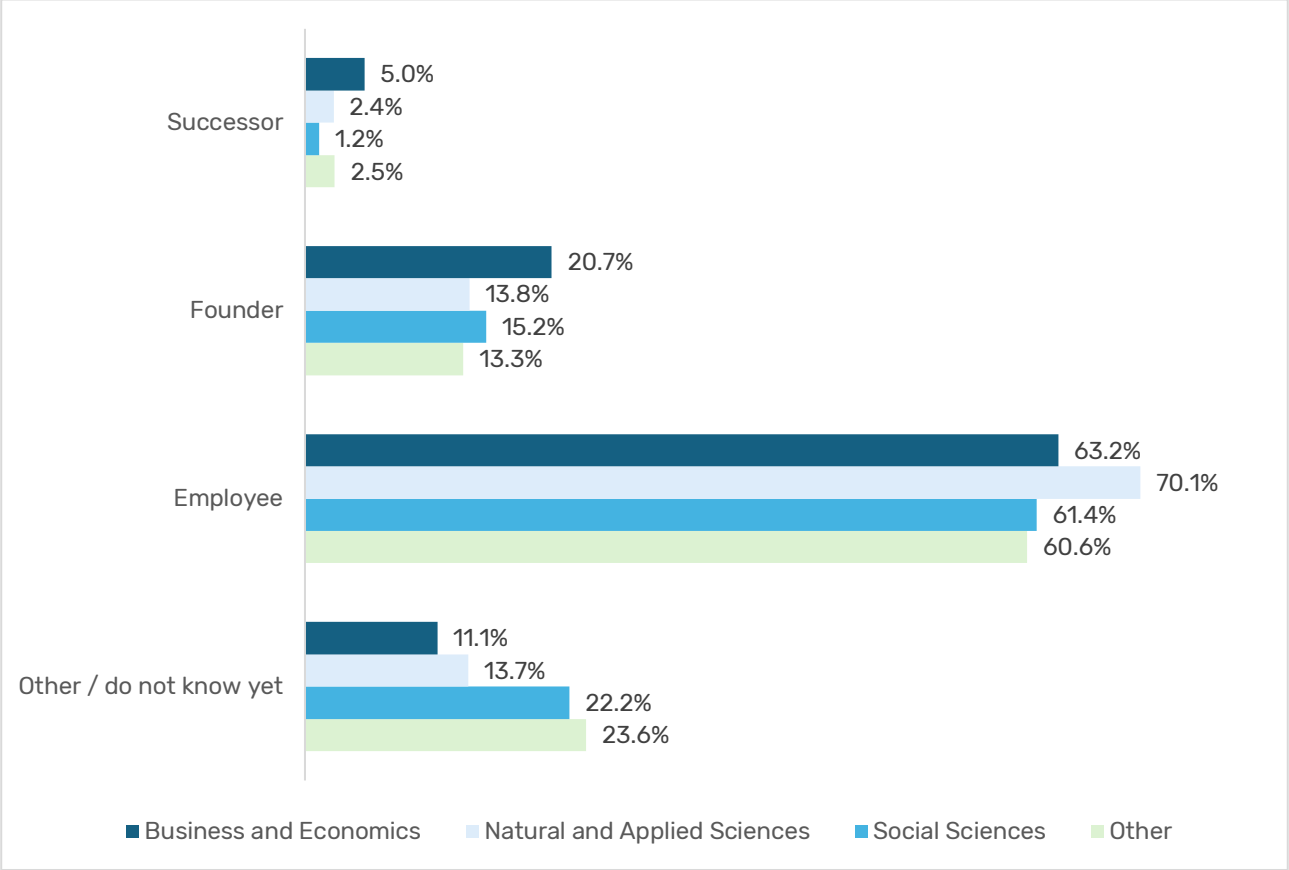

Figure 21. Students' career choice intentions right after studies divided by field of study. (Valid responses: N = 4,374; Social Sciences = 658; Natural and Applied Sciences = 2,207; Business and Economics = 1,344; Other = 165)

Students' career choice hierarchy remains stable considering the time frame five years after studies since they express the desire to become employees also five years after studies. However, considering the time frame five years after studies the preference for an entrepreneurial career increases in all fields of study, compared to the time frame right after studies. There is a relatively diffused interest in an entrepreneurial career even for students of Natural and Applied Sciences (31.4%; 692 out of 2,207) and Social Sciences (24.0%; 158 out of 658) even though these students are less likely to take entrepreneurship education and consider the university's entrepreneurial climate as supportive (Figure 22).

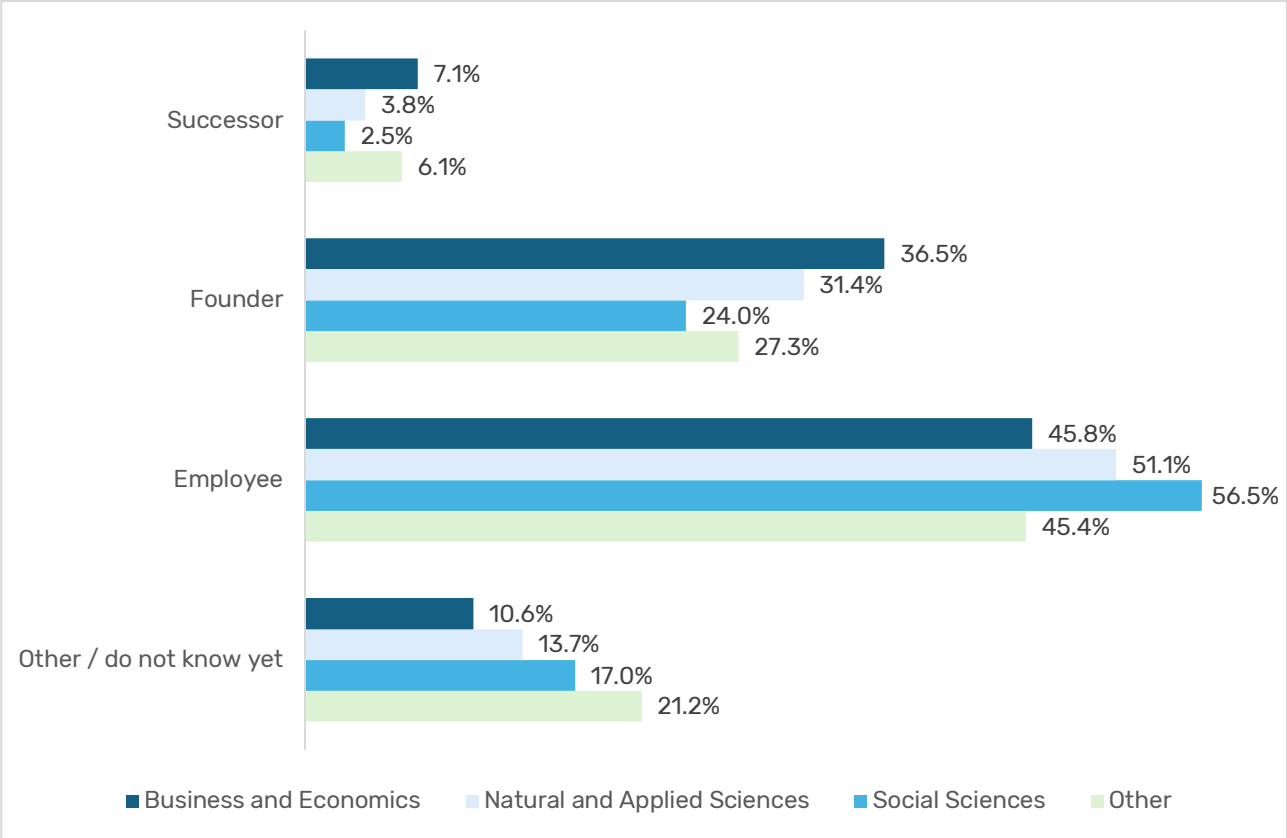

Figure 22. Students' career choice intentions five years after studies divided by field of study. (Valid responses: Social Sciences = 658; Natural and Applied Sciences = 2,207; Business and Economics = 1,344; Other = 165)

4.3. Career Choice Intentions Considering Students' Enterprising Family Background

The career choice intentions for employment and entrepreneurship immediately after studies vary between students with and without an enterprising family (Figure 23). Students without self-employed parents and/or majority owners of a business have a higher preference to become employees immediately after studies (69.2%; 1,977 students out of 2,857).

In Figure 24, the percentage of students without self-employed parents and/or majority owners of a business with a preference to become employees decreases when asked about their career choice intentions five years after studies (1,531 students out of 2,857; 53.6%).

However, students with both parents self-employed and/or majority owners of a business demonstrate the strongest intention to pursue careers as founders or

successors, compared to those with only one parent in such roles, both immediately after studies and five years later.

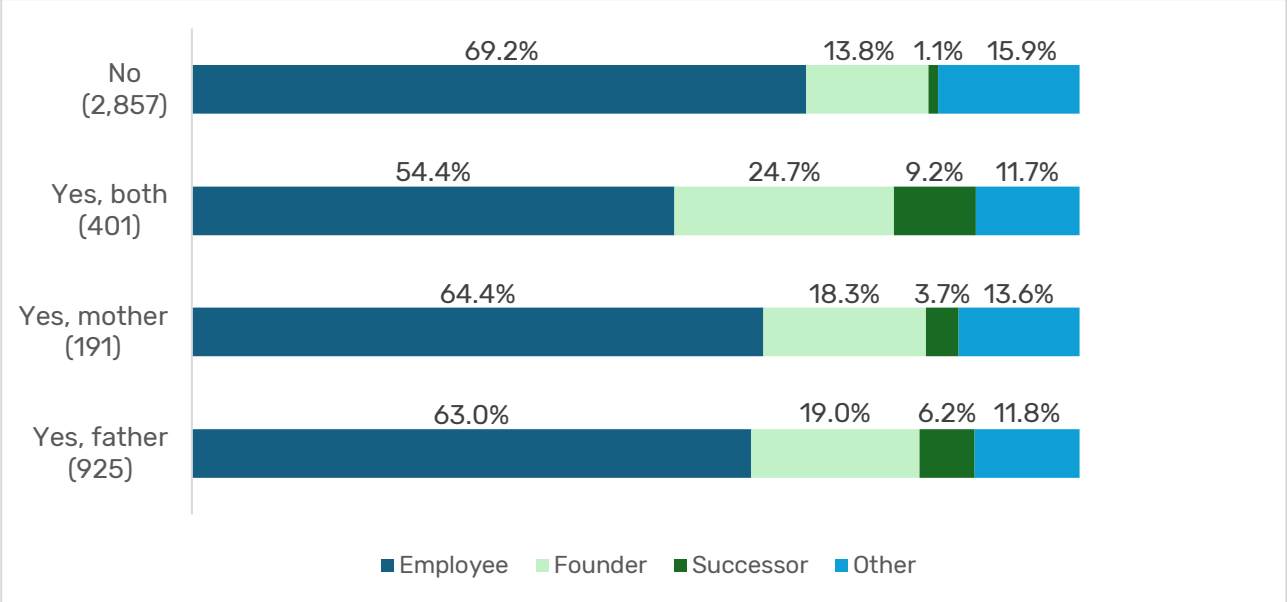

Figure 23. Students' career choice intentions right after studies divided by the presence of an enterprising family. (Valid responses: Employee = 2,901; Founder = 704; Successor = 133; Other = 636)

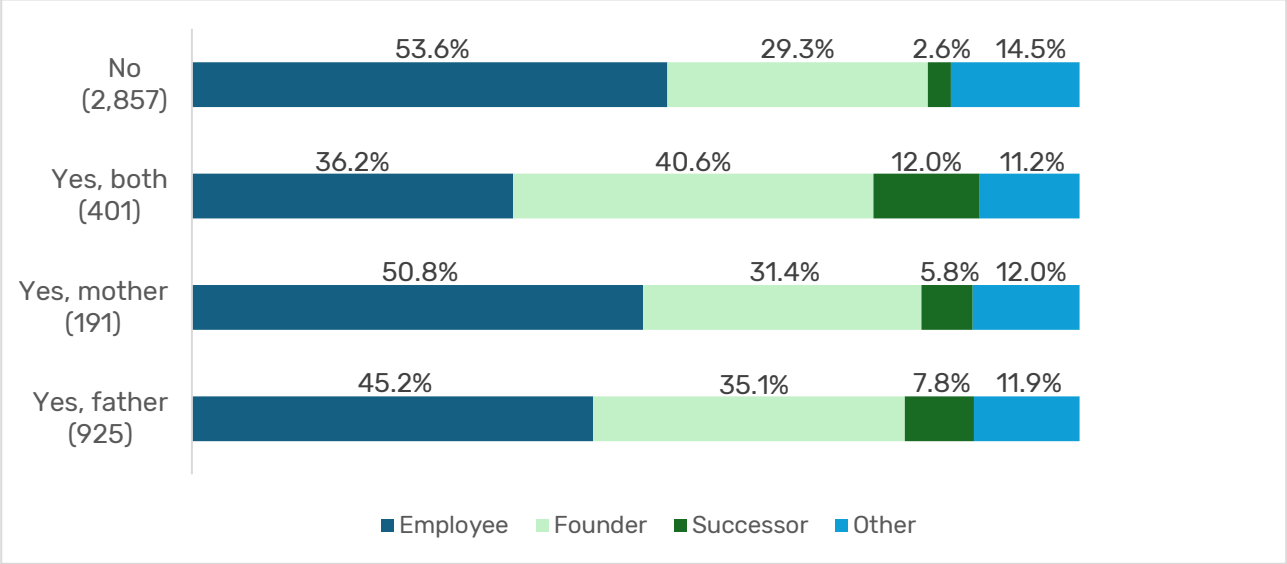

Figure 24. Students' career choice intentions five years after studies divided by the presence of an enterprising family.
(Valid responses: Employee = 2,191; Founder = 1,385; Successor = 204; Other = 594)

5. Nascent Entrepreneurs

This section focuses on Italian respondents of GUESSS who are currently in the process of starting a business or becoming self-employed, commonly referred to as “nascent entrepreneurs”.

In 2023, 14.9% of the respondents belong to this group (651 students out of 4,374). This represents a decrease compared to 2021 when the number of nascent entrepreneurs was 16.1%, and also lower than in 2018 when it was 17.7%. Moreover, it remains below the international result of 25.7%.

5.1. Gender of Nascent Entrepreneurs

The first distinction depicted in Figure 25 shows that males are the majority in this category, with 382 students out of 651 (58.7%).

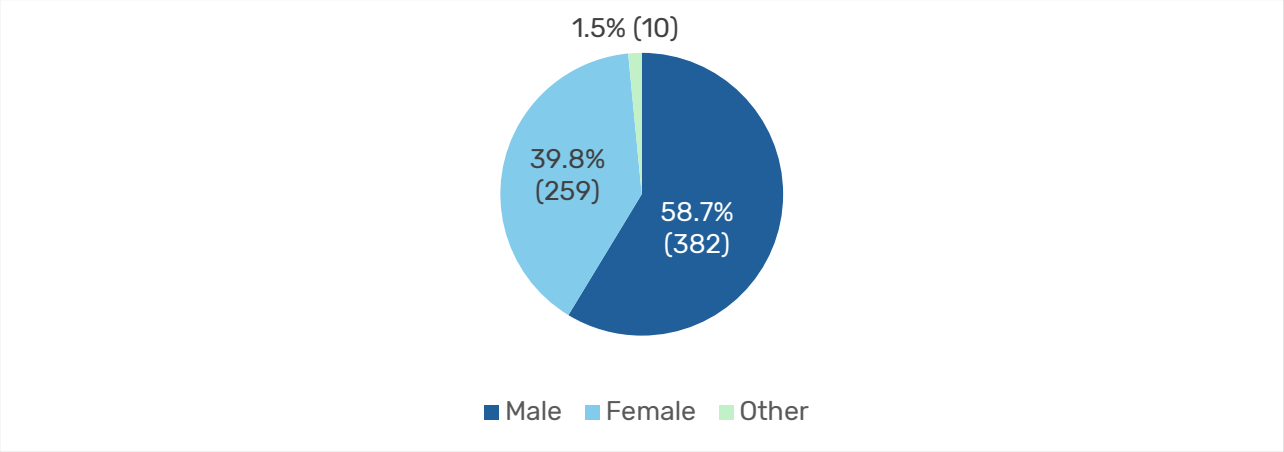

Figure 25. Gender: distribution of nascent entrepreneurs.
(Valid responses: N Nascent Entrepreneurs = 651)

5.2. Fields and Levels of Study of Nascent Entrepreneurs

Considering the field of study of nascent entrepreneurs, Figure 26 indicates that the leading fields include Natural and Applied Sciences (291 students; 44.7%) and Business and Economics (252 students; 38.7%).

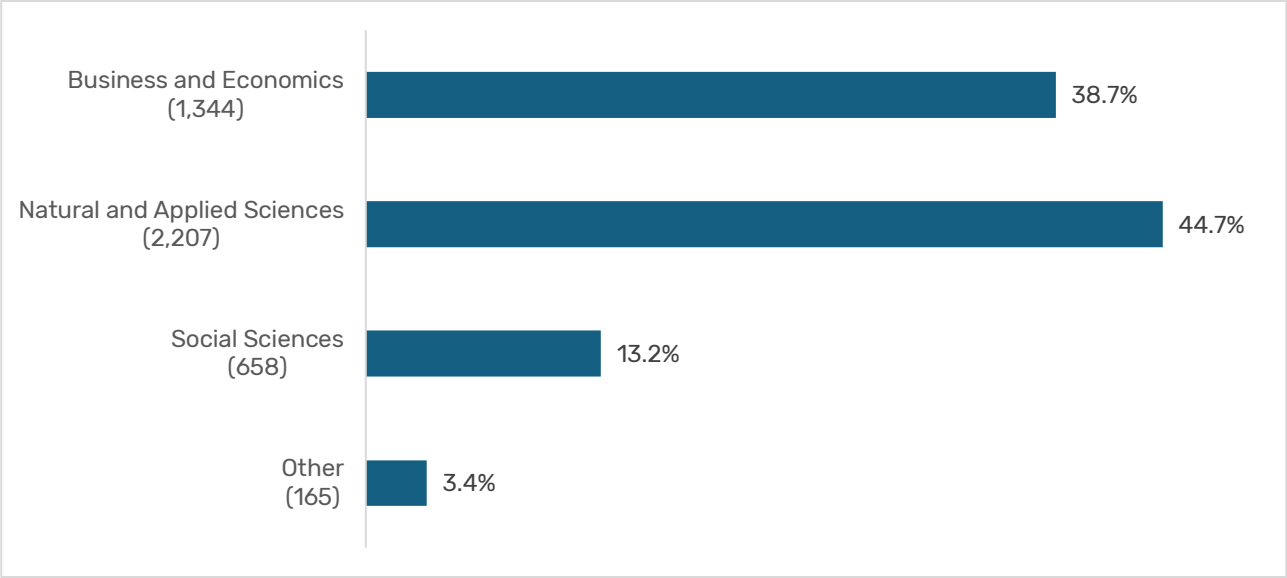

Figure 26. Field of study: aggregated distribution of nascent entrepreneurs.
(Valid responses: N – Nascent Entrepreneurs = 651)

Considering the level of study of nascent entrepreneurs, Figure 27 shows that the majority of them are Bachelor's students (391 students; 60.1%), followed by Master's students (227 students; 34.9%).

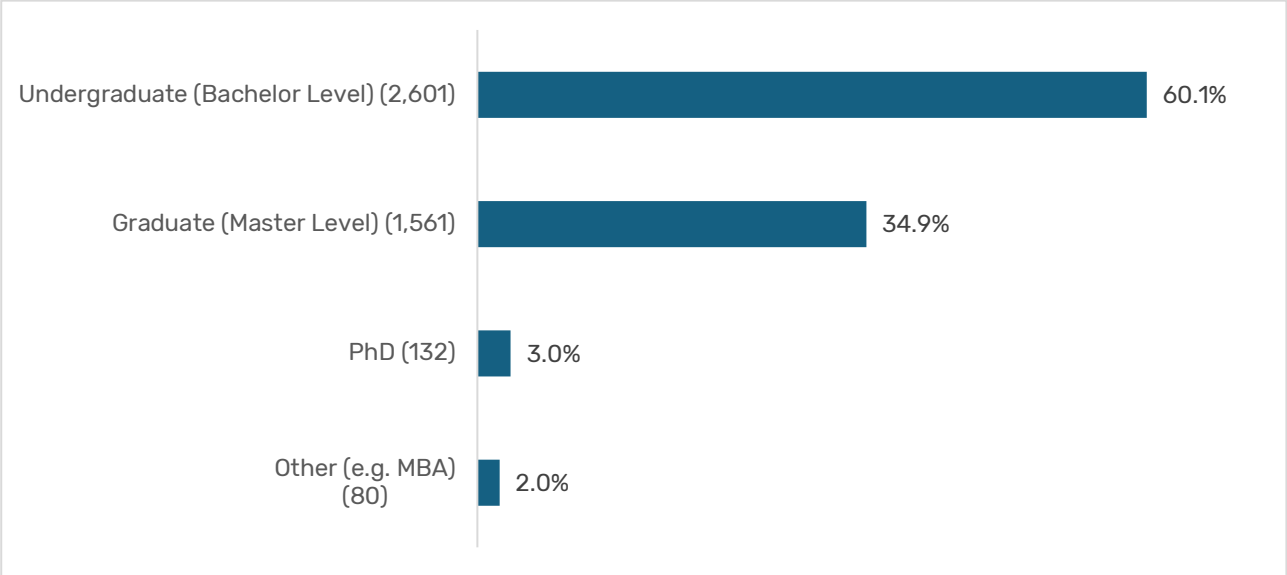

Figure 27. Level of study: distribution of nascent entrepreneurs.
(Valid responses: N – Nascent Entrepreneurs = 651)

5.3. Sector of Nascent Entrepreneurs' Businesses

Considering the sectors where nascent entrepreneurs are planning to found their businesses, the Quaternary sector (intellectual activities, e.g., research, IT, education, consulting, etc.) prevails with 30.3%, followed by the Tertiary sector (providing services; e.g., in tourism, banking, healthcare, legal, etc.) at 29.5%, and the Secondary sector

(producing goods; e.g., manufacturing, processing, construction, etc.) at 18.7% (Figure 28).

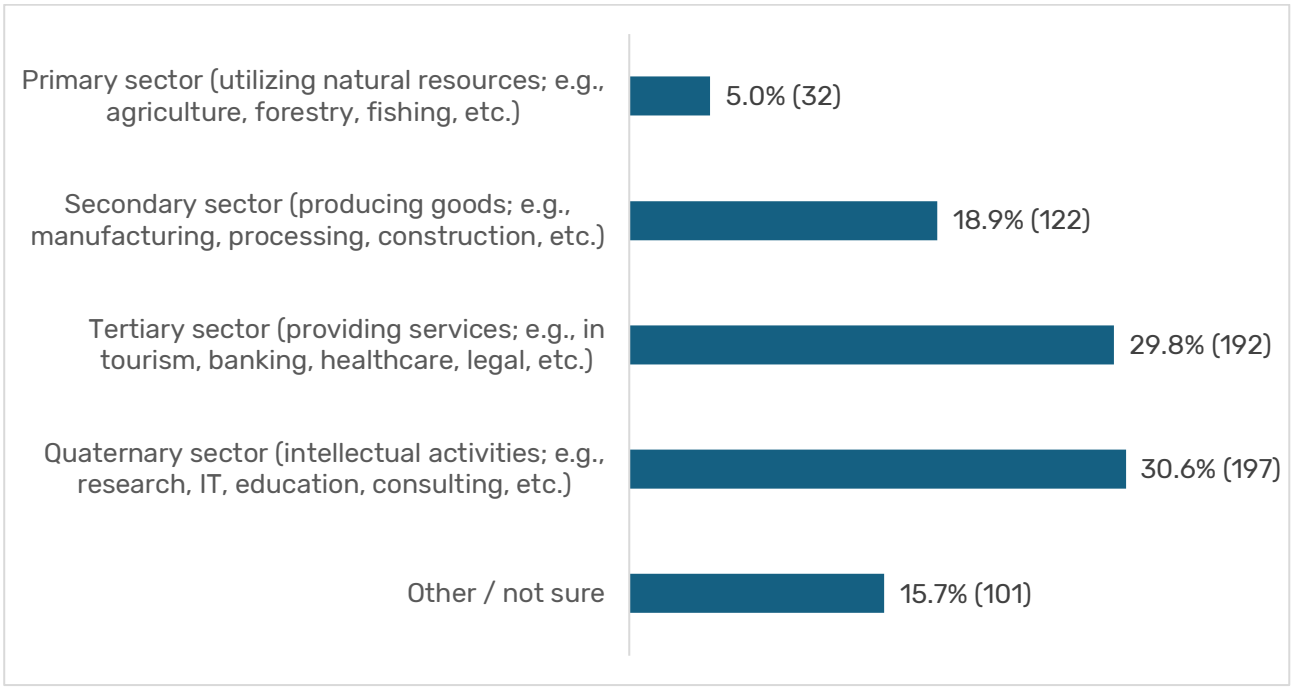

Figure 28. Sectors nascent entrepreneurs' businesses.
(Valid responses: N = 644)

5.4. Entrepreneurial Orientation of Nascent Entrepreneurs

Entrepreneurial orientation captures an organization or individual's being and acting entrepreneurially (Wales et al., 2020). Entrepreneurial orientation here (Figure 29) captures the extent to which nascent entrepreneurs are innovative, proactive, and risk-takers in the process of starting their entrepreneurial activity by means of the 10-item 7-point Likert scale by Bolton and Lane (2012). Generally, new ventures displaying higher entrepreneurial orientation have greater potential in terms of business performance (Rauch et al., 2009). Hence it is important to assess the extent to which nascent entrepreneurs actively engage in innovation, are willing to take calculated risks, and maintain a forward-thinking approach to business development, as their entrepreneurial orientation could lead to the development of more successful businesses (Bolton and Lane, 2012; Clark et al., 2024).

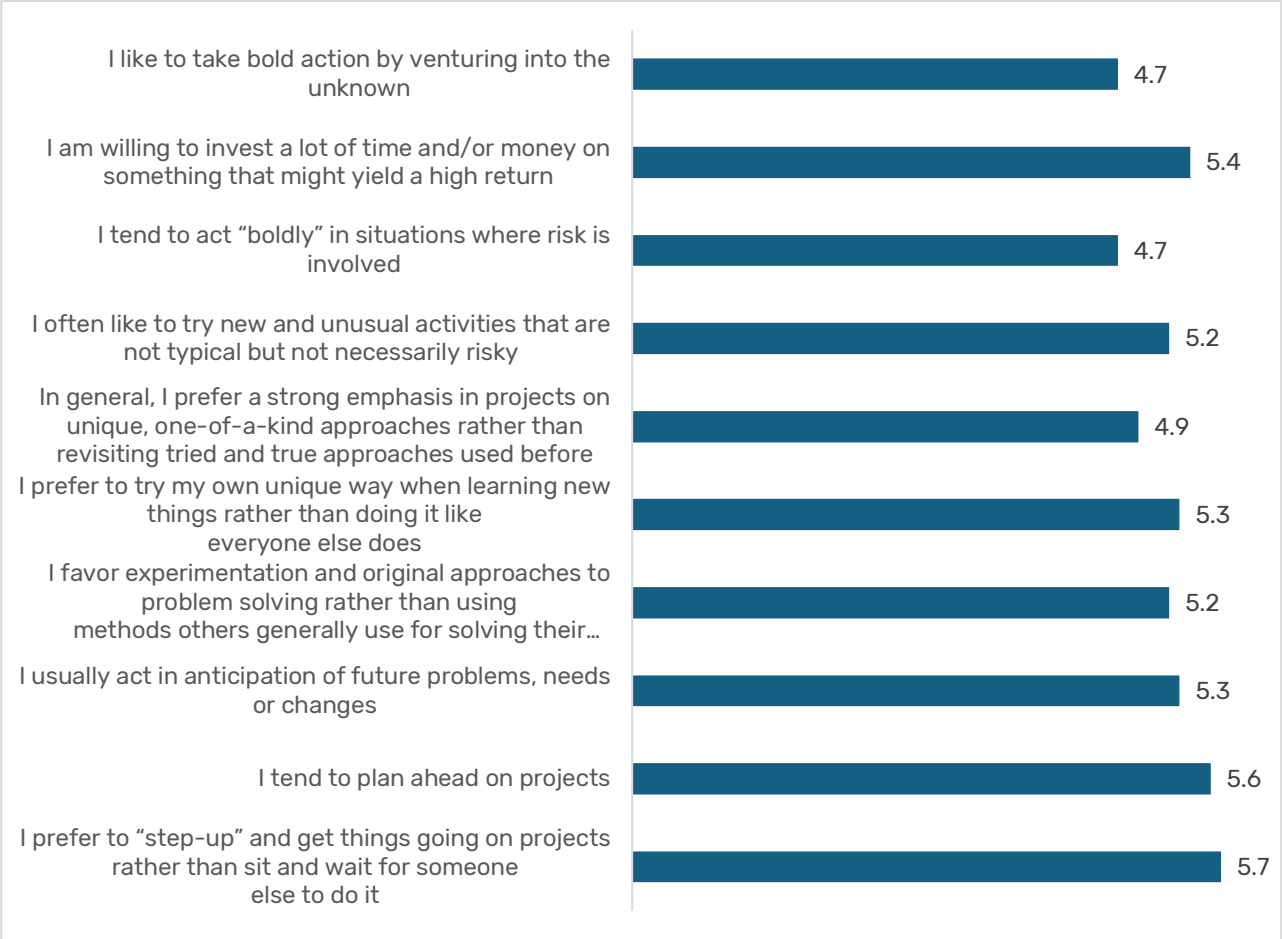

Figure 29. Nascent entrepreneurs' entrepreneurial orientation.
(Valid responses: N = 651)

5.5. Solo vs. Co-Founding among Nascent Entrepreneurs

44.5% of Italian nascent entrepreneurs intend to establish their businesses alone and 55.5% of the students plan to launch a business with one or more co-founders (Figure 30).

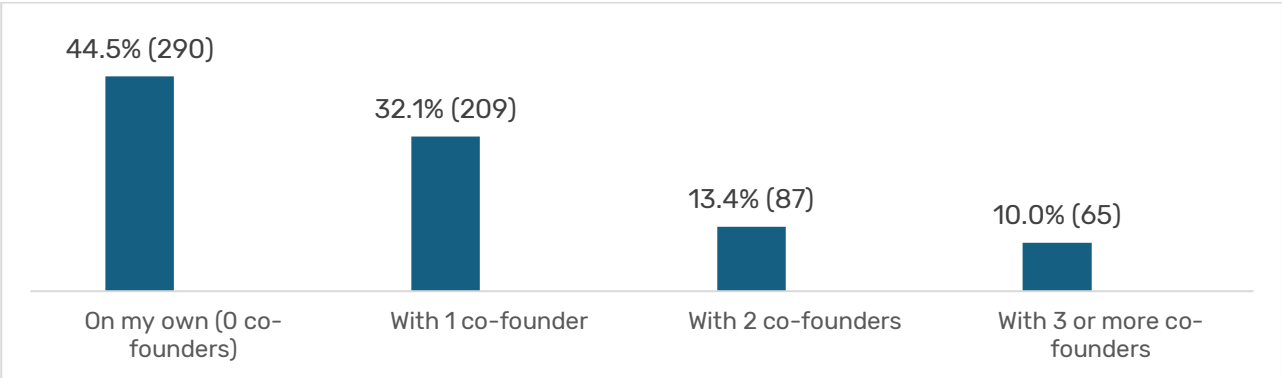

Figure 30. Business creation with co-founders among nascent entrepreneurs.
(Valid responses: N = 651)

Also, the data indicate that less than 50% of the respondents plan to start their business in the same city where they are studying: only 295 out of 651 students (45.3%) intend to do so (Figure 31). This finding is based on the question: “Will your business be located in the same city where you are currently studying?”.

On the contrary, considering the international sample (Sieger et al., 2024), 58.5% of students plan to start their businesses located in the same city where they are studying.

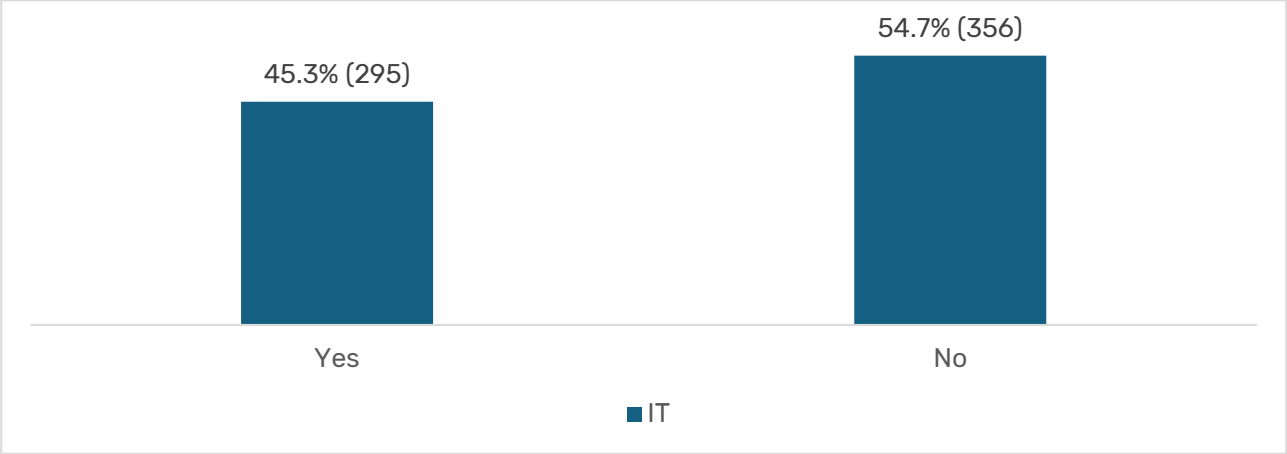

Figure 31. Business location in relation to current city of study in Italian and international samples. (Valid responses: IT = 651)

6. Active Entrepreneurs

This section focuses on Italian respondents of GUESSS who are already self-employed or managing an active business, commonly referred to as “active entrepreneurs.”
In 2023, 8.3% of the respondents belong to this group (362 students). This represents an increase compared to 2021 when the number of active entrepreneurs was 6.9%, and also slightly higher than in 2018 when it was 7.2%. However, it remains below the international result of 11.1%.

6.1. Gender of Active Entrepreneurs

As described in Figure 32, the male active entrepreneurs prevail in numbers (with 215 out of 362 active entrepreneurs) compared to females.

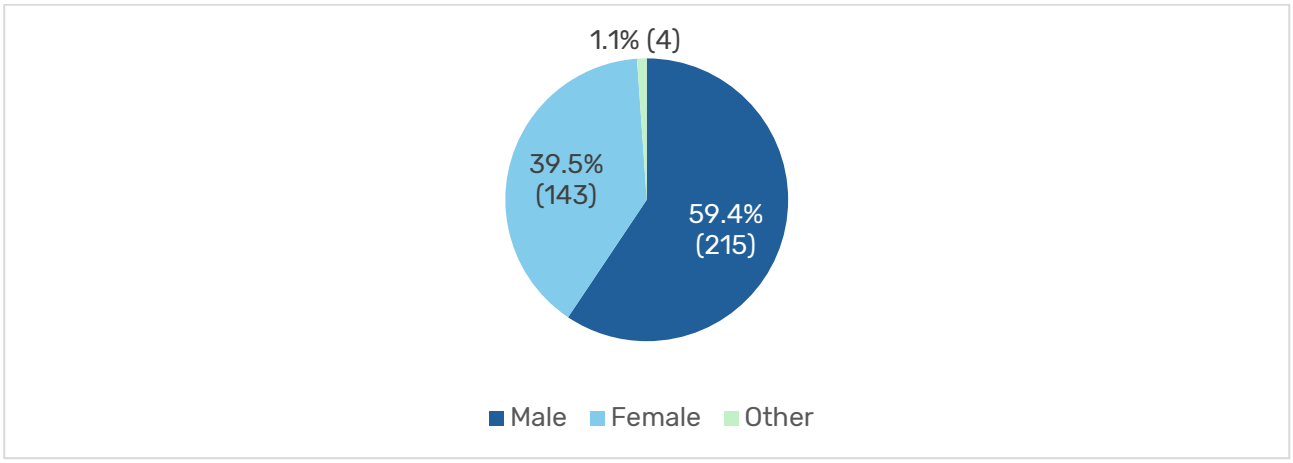

Figure 32. Gender: distribution of active entrepreneurs.
(Valid responses: N Active Entrepreneurs = 362)

6.2. Fields and Levels of Study of Active Entrepreneurs

As depicted in Figure 33, the majority of active entrepreneurs come from the Business and Economics field of study, with 40.1% (145 students), and from the Natural and Applied Sciences (40.1%; 145 students), followed by 15.2% of students from the Social Sciences (55 students). Furthermore, most active entrepreneurs are enrolled in a Bachelor’s level with 214 students (59.1%) as highlighted in Figure 34, as reflected in the whole sample.

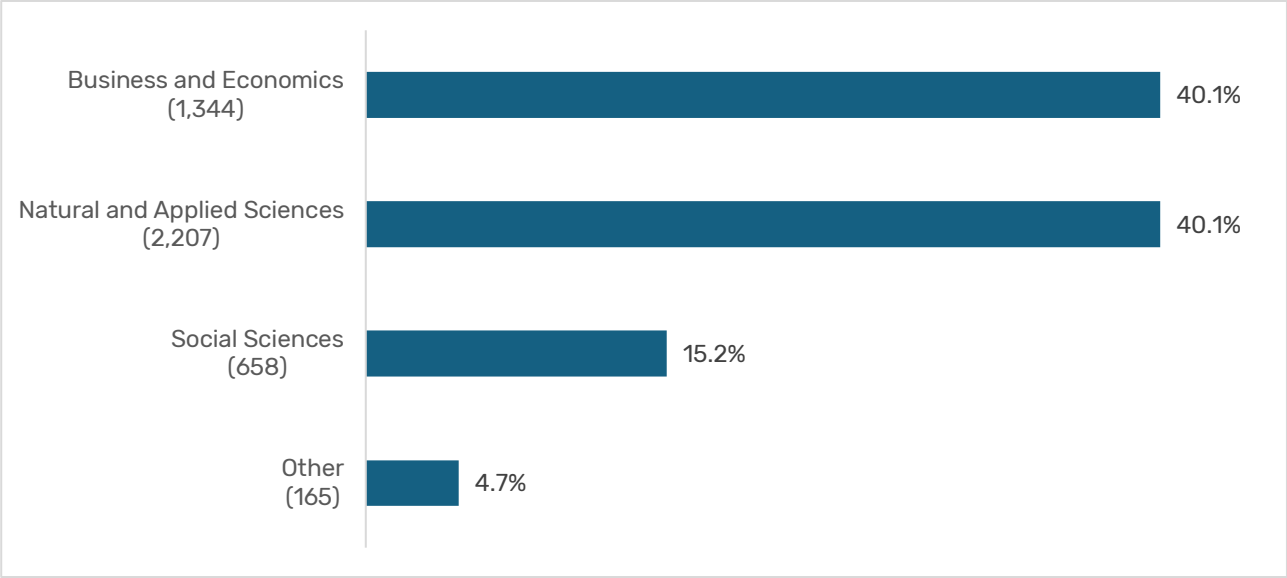

Figure 33. Field of study: aggregated distribution of active entrepreneurs.
(Valid responses: N – Active Entrepreneurs = 362)

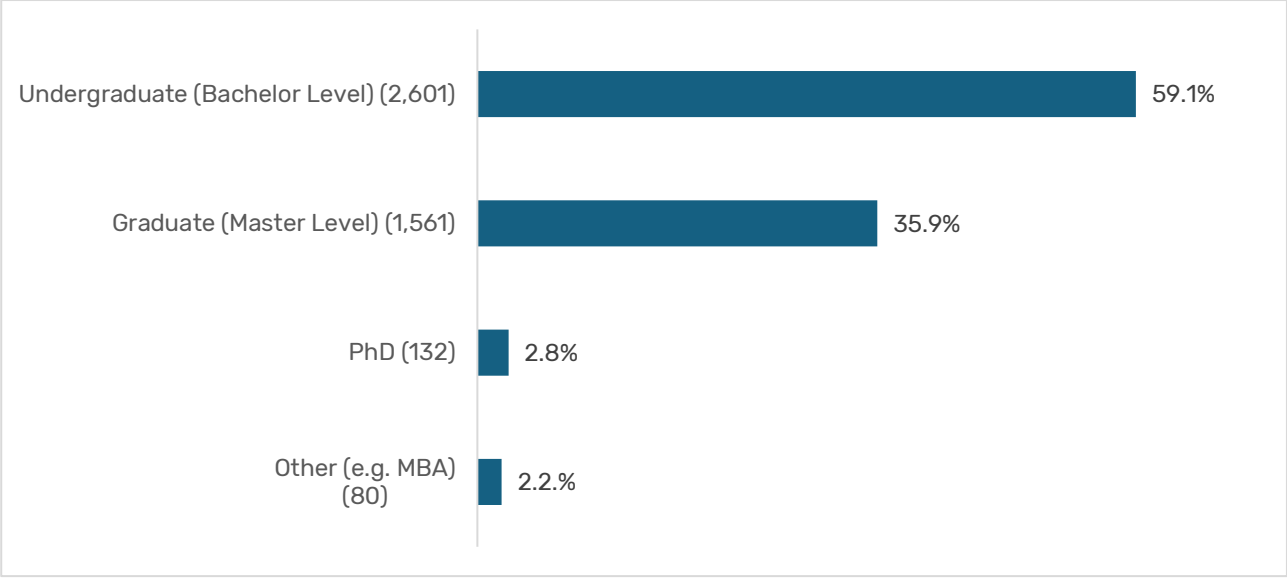

Figure 34. Level of education: distribution of active entrepreneurs.
(Valid responses: N – Active Entrepreneurs = 362)

6.3. Sector of Active Entrepreneurs' Businesses

As represented in Figure 35, most of the active entrepreneurs' businesses have been created in the past five years, about 62% (225 out of 362 valid responses). Additionally, the majority of the active entrepreneurs' businesses can be classified as small businesses (99.2%) since the number of employees does not exceed 50 employees.

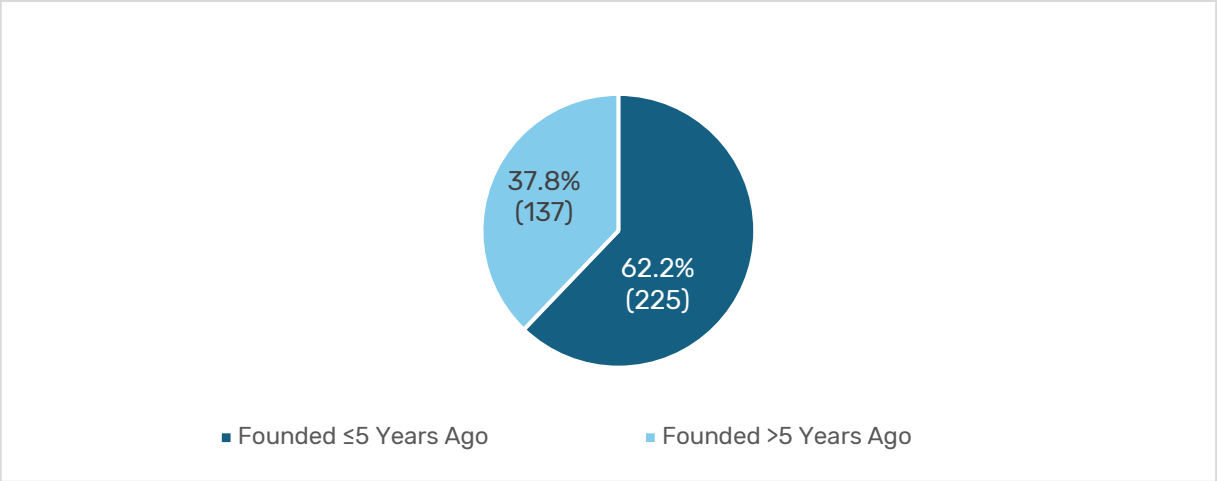

Figure 35. Age of active entrepreneurs' businesses.
(Valid responses: N = 362)

The sectors in which Italian active entrepreneurs have established their businesses over the past five years are as follows. The largest one is the Tertiary sector (providing services, e.g., in tourism, banking, healthcare, legal, etc.) with 33.4% and the Quaternary sector (intellectual activities, e.g., research, IT, education, consulting, etc.) with 24.0% (Figure 36).

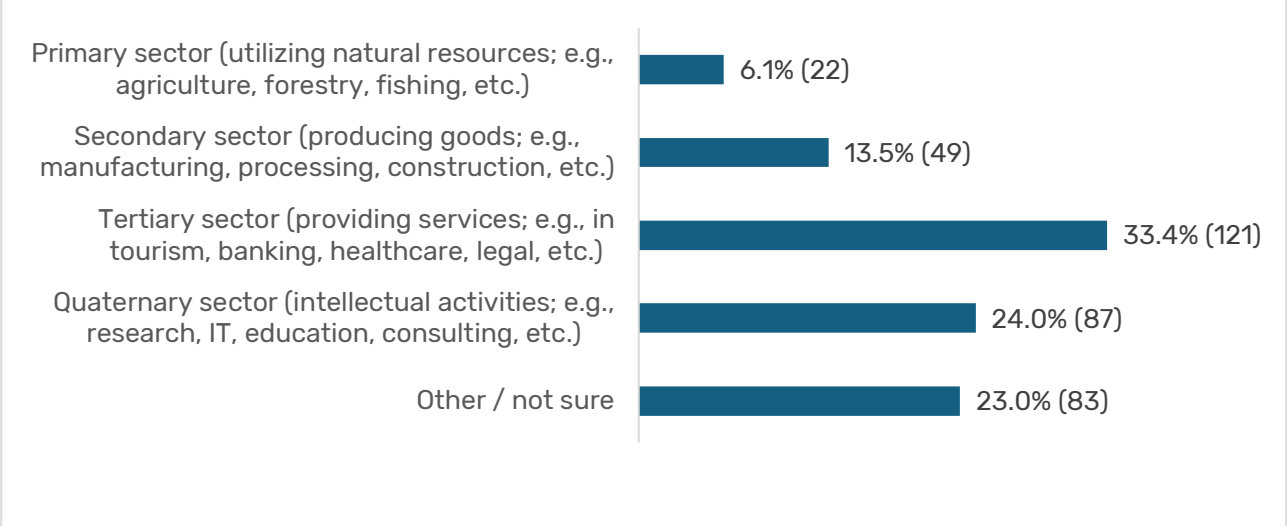

Figure 36. Sectors of active entrepreneurs' businesses.
(Valid responses: N = 362)

6.4. Ownership Structure and Performance of Active Entrepreneurs' Businesses

As shown in Figure 37, 43.8% of Italian active entrepreneurs (148 respondents) hold an ownership share exceeding 50% and 21.9% of Italian active entrepreneurs possess a minority ownership stake.

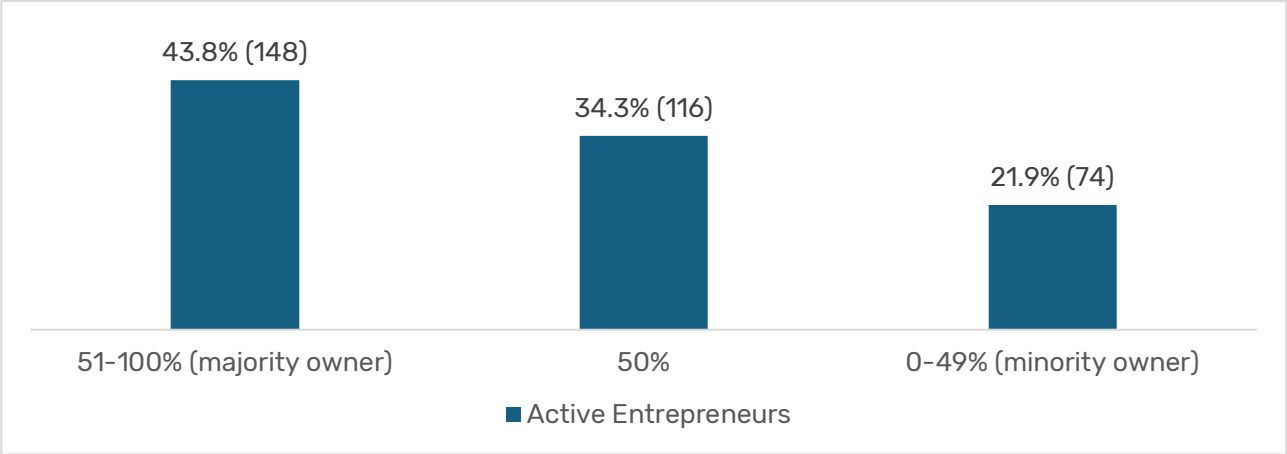

Figure 37. Number of majority and minority owners among active entrepreneurs. (Valid responses: N = 338)

Active entrepreneurs are asked to assess their business performance compared to competitors across various dimensions using a 5-item 7-point Likert scale (Eddleston et al., 2008). The question asked is: "How do you rate the performance of your business compared to its competitors since its establishment in the following dimensions (1=much worse, 7=much better)?". The dimension "innovativeness" obtained the highest score of 5.3, showing that on average active entrepreneurs in the sample consider their businesses generally more innovative compared to their competitors (Figure 38).

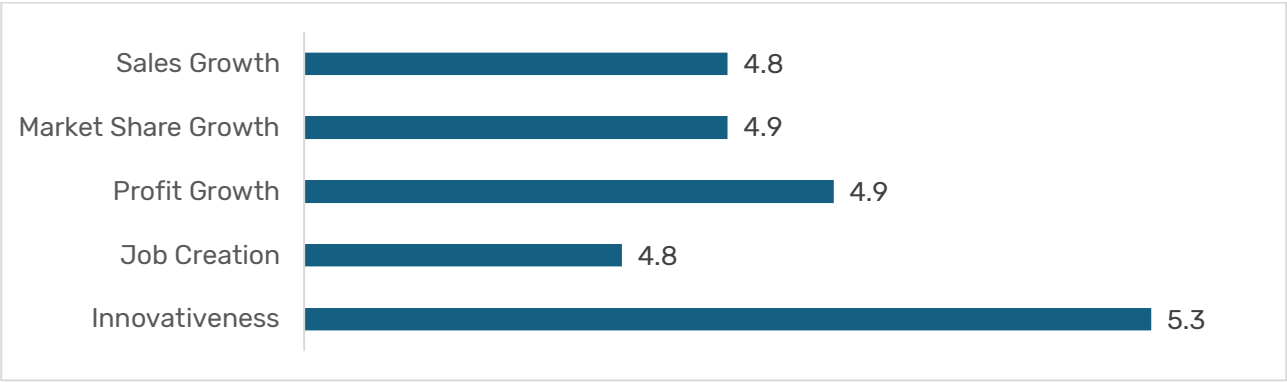

Figure 38. Performance of active entrepreneurs' businesses. (Valid responses: N= 362)

7. Well-being of Students

Subjective well-being is defined as an individual's subjective experience of happiness and pleasure, and it includes elements such as positive emotions and overall life satisfaction (Pathak & Muralidharan, 2021). To measure this, students are asked to evaluate their level of agreement concerning different subjective well-being statements on a 7-point Likert scale (Diener et al., 1985), as shown in Table 4. Specifically, the table reports the well-being scores for (i) the total sample; (ii) the sub-sample of students that are not entrepreneurs (neither nascent nor active); (iii) the sub-sample of only active entrepreneurs; (iv) the sub-sample of only nascent entrepreneurs.

	Average score Italian sample	**Average score students non-entrepreneurs**	**Average score nascent entrepreneurs**	**Average score active entrepreneurs**
In most ways my life is close to my ideal	4.4	4.4	4.5	4.8
The conditions of my life are excellent	4.5	4.5	4.6	4.8
I am satisfied with my life	4.7	4.7	4.7	4.8
So far, I have gotten the important things I want in life	4.4	4.3	4.5	4.7
If I could live my life over, I would change almost nothing	4.2	4.2	4.3	4.5
Average	**4.4**	**4.4**	**4.5**	**4.7**

Table 4. Average of students' subjective well-being.
(Valid responses: N = 4,374; N Non-entrepreneurs = 3,361; N Nascent Entrepreneurs = 651; N Active Entrepreneurs = 362)

The result for the total Italian sample, obtained from the average of the five items, is 4.4 out of 7 (4,374 respondents); 4.4 out of 7 for students that are not involved in any entrepreneurial activities (3,361 out of 4,374); 4.5 out of 7 for nascent entrepreneurs (651 out of 4,374); and 4.7 out of 7 for active entrepreneurs (362 out of 4,374). It suggests that entrepreneurial students (i.e., active and nascent entrepreneurs) generally experience slightly higher levels of well-being compared to non-entrepreneurial students (i.e., students who are not involved in any entrepreneurial activities, thus who are not nascent or active entrepreneurs). The results suggest a positive correlation between entrepreneurial activity and self-reported well-being, with higher engagement linked to greater well-being.

8. Potential Successors

The potential successors are defined as students (i) with at least one parent who is self-employed and/or holds the majority of a business, and (ii) who are not nascent or active entrepreneurs. The potential successors are in total 1,086 students, which is 24.8% of the total sample. Out of them, 384 students (35.4%) have already worked for their parents' business, while 702 students (64.6%) have never done so.

8.1. Gender of Potential Successors

As shown in Figure 39, females are the majority in this category, comprising 556 out of 1,086 students (51.2%).

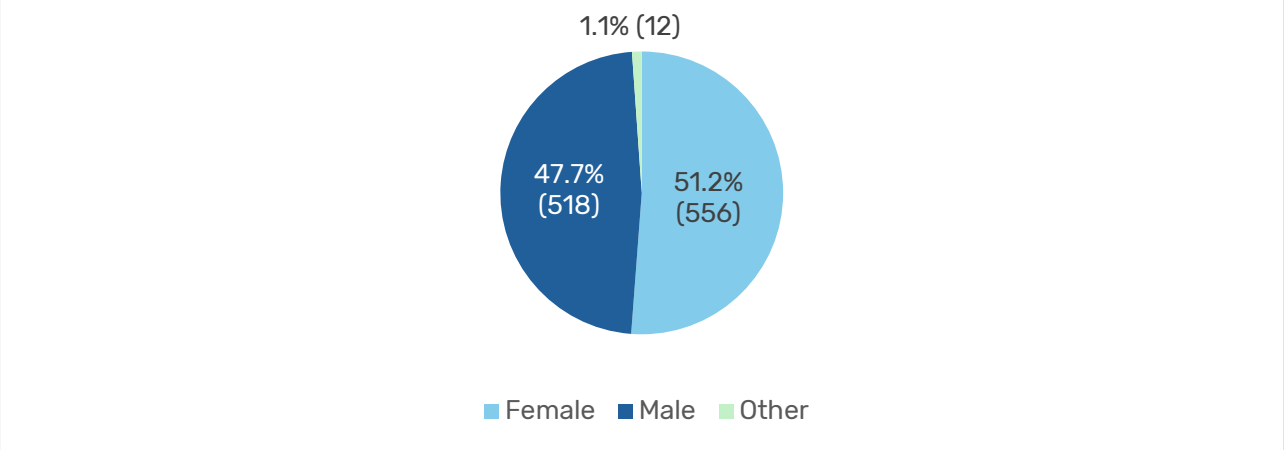

Figure 39. Gender: distribution of potential successors. (Valid responses: N = 1,086)

8.2. Fields and Levels of Study of Potential Successors

Figure 40 shows that the highest number of potential successors are enrolled in Natural and Applied Sciences, with 561 students out of 1,086 (51.7%), and Business and Economics, with 333 students out of 1,086 (30.7%).

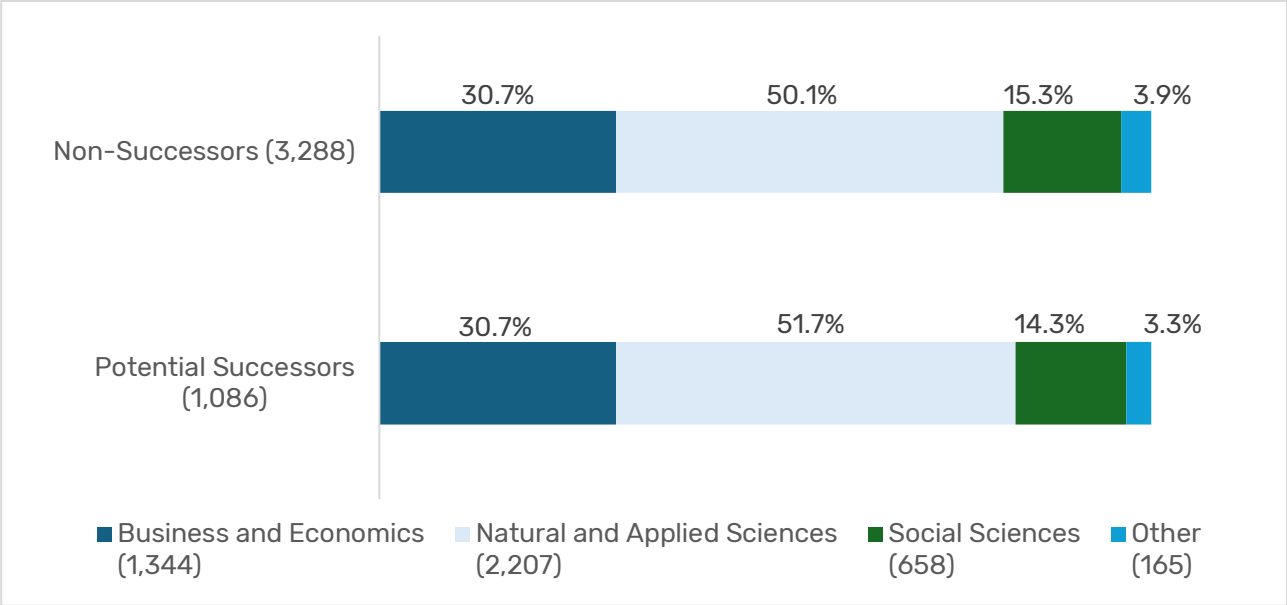

Figure 40. Field of study: aggregated distribution of potential successors.
(Valid responses: N – Potential Successors = 1,086 ; N – Non-Successors = 3,288)

Once again, the majority of the potential successors are at the Bachelor's level of study 665 students out of 1,086 (61.2%), while 368 students out of 1,086 (33.9%) are enrolled in a Master's level of study (Figure 41).

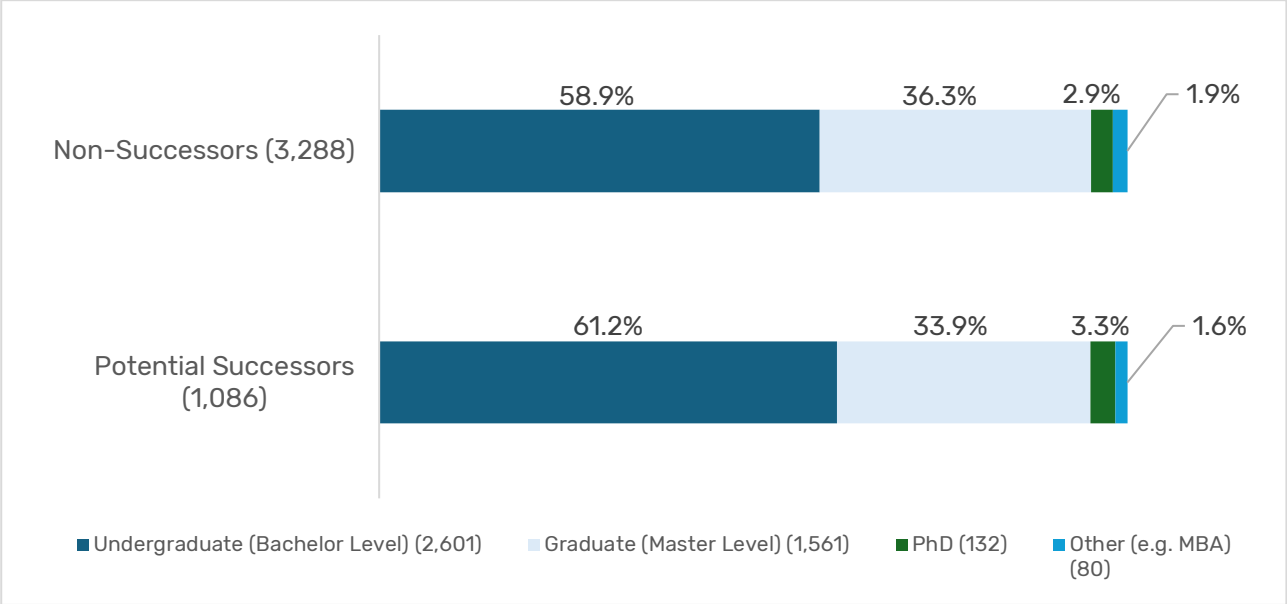

Figure 41. Level of study: distribution of potential successors.
(Valid responses: N – Potential Successors = 1,086 ; N – Non-Successors = 3,288)

8.3. Industry of the Parents' Businesses

Parents' businesses established mostly before the 2000s consist of 69.2% with 751 businesses out of 1,086 valid responses. Meanwhile, 18.0% were established between 2000 and the 2010s with 196 businesses; 12.8% were established between 2011 and 2021 with 139 businesses.

Figure 42 below depicts the industries of parents' businesses. The most prevalent sectors are the Secondary (389 respondents; 35.8%) and Tertiary sectors (347 respondents; 32.0%).

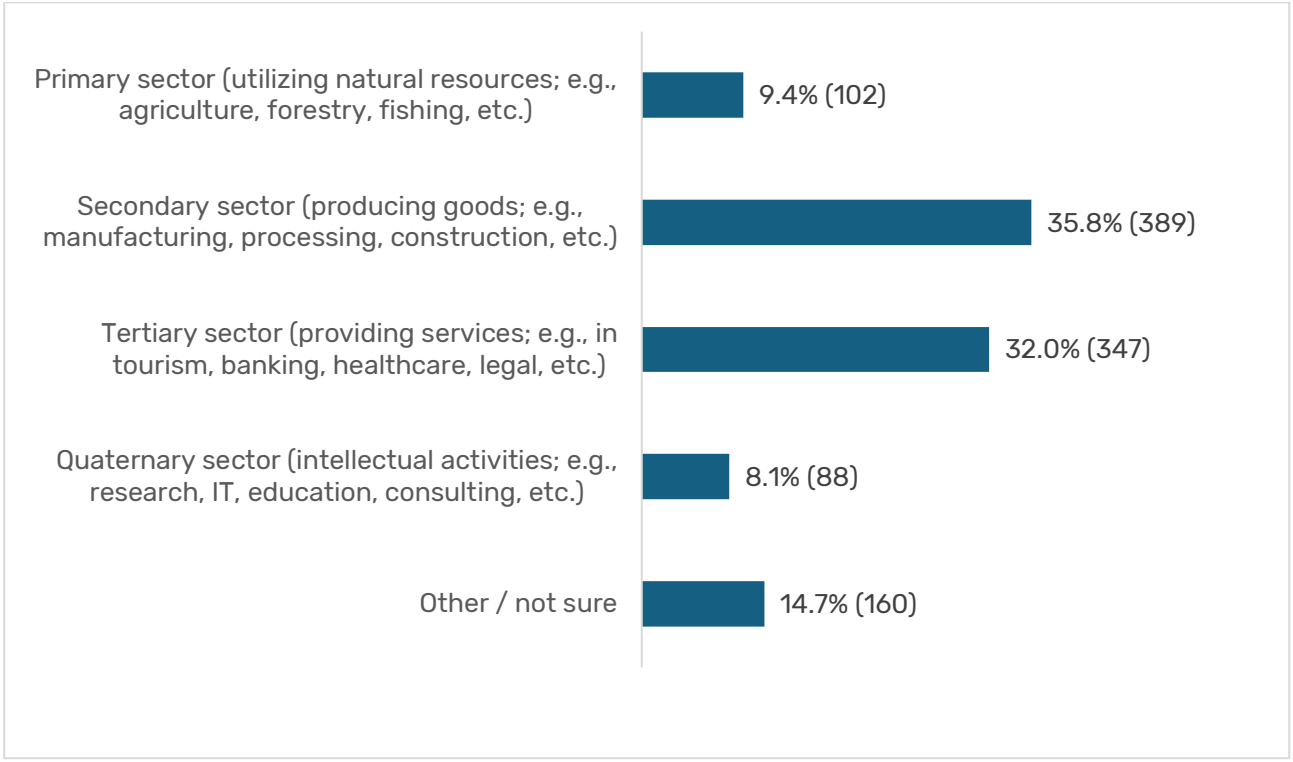

Figure 42. Sectors of parents' businesses.
(Valid responses: N = 1,086)

8.4. Ownership Structure and Performance of Parents' Businesses

The majority of students' parents hold more than 50% ownership of their businesses, accounting for 63.8% (Table 5).

Parents' ownership share	**N**	**%**
0 - 49 %	175	16.1%
50 %	140	12.9%
51 - 100 %	693	63.8%
Not specified	78	7.2%
Total	**1,086**	**100%**

Table 5. Parents' ownership shares.
(Valid responses: N = 1,086)

The majority of respondents do not have any ownership stake in their parents' business (Table 6).

Stake ownership in the parent's business	N	%
Yes	122	11.2%
No	919	84.6%
Not specified	45	4.2%
Total	**1,086**	**100%**

Table 6. Stake ownership in the parents' business.
(Valid responses: N = 1,086)

Then, students are asked about their perceptions of their parents' business performance using a 5-item 7-point Likert scale by Eddleston et al. (2008). The question asked is: "How do you rate the performance of your parents' business compared to its competitors over the last three years in the following dimensions (1=much worse, 7=much better)?". Among these dimensions, the lowest ratings are for Job Creation, followed by Innovativeness (Figure 43).

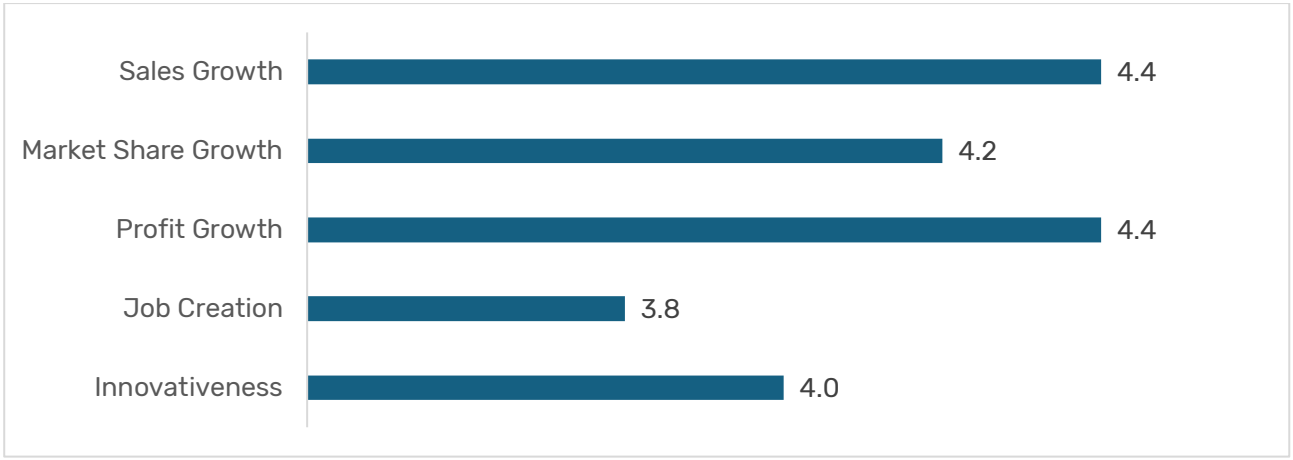

Figure 43. Students' evaluation of parents' business.
(Valid responses: N = 1,086)

8.5. Career Choice Intentions of Potential Successors

Since having parents who are self-employed and/or majority business owners does not automatically mean that potential successors want to pursue a career in their parents' business, it is important to investigate potential successors' career choice intentions. Thus, in Figure 41, which presents career choice intentions among potential successors both immediately after studies and five years later, the classification of career intentions

has been expanded to include five distinct subgroups instead of the previous four (i.e., Successor, Founder, Employee, Other/do not know yet). The previous category of "Successor" has been divided into two subgroups: (i) "Successor in my parents'/family's business", representing individuals intending to continue their parents' business, and (ii) "Successor in another business", referring to those planning to succeed in a business other than their parents'. This differentiation provides a clearer understanding of potential successors' career trajectories, highlighting whether they aim to continue the parents' business or pursue succession opportunities elsewhere.

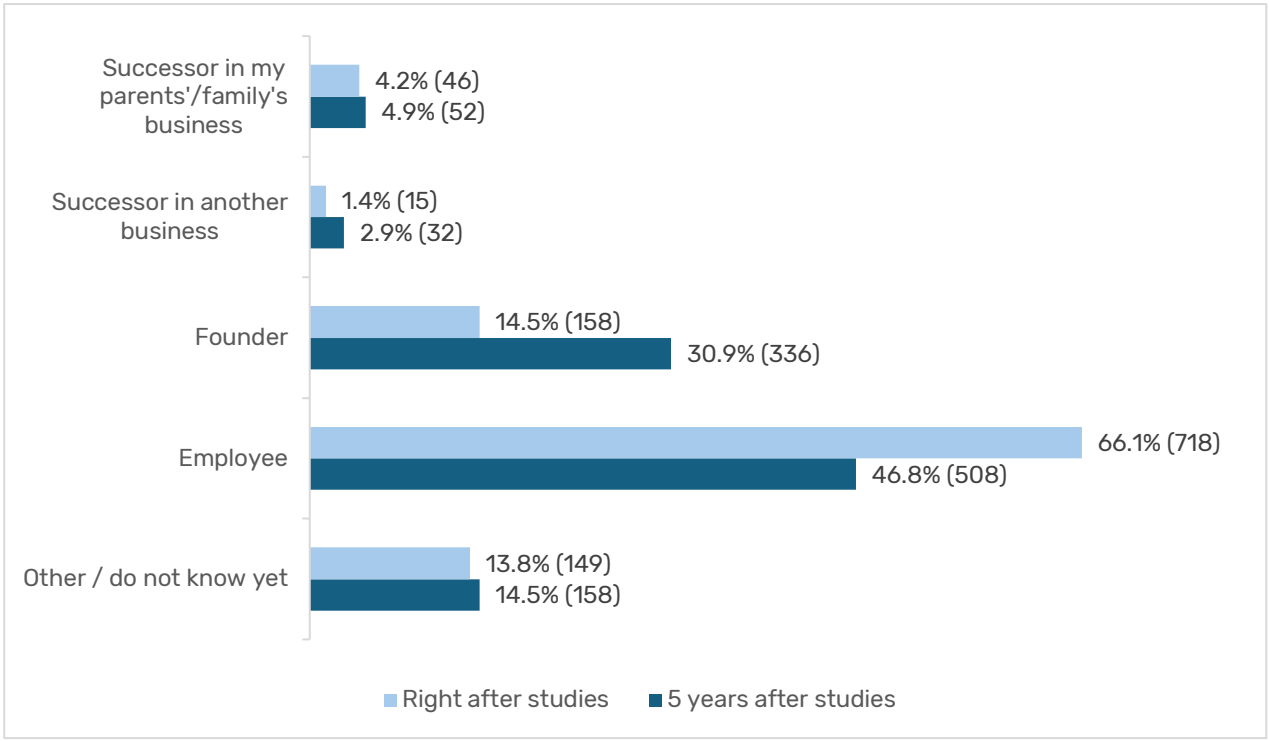

Figure 44. Career choice intentions of potential successors right after studies and five years after studies. (Valid responses: N = 1,086)

66.1% of potential successors express the career choice intentions to become employees (718 students) immediately after studies, while only 14.5% want to become founders (158 students).

To measure the succession intention, in GUESSS is used a 6-item 7-point Likert scale adapted from Linan & Chen (2009) that directly measures the intensity of the intention to take over their parents' business. Figure 45 shows that the average succession

intentions (2.6 out of 7) in this dataset are similar to those measured in 2021 (with an average of 2.5 out of 7)[3].

Figure 45. Succession intention.

(Valid responses: N = 1,086)

[3] The succession intentions shown in Figure 44 are based on a dichotomous (yes/no) response to the question about the willingness to take over the family business, while Figure 45 uses a 7-point Likert scale (6 items), adapted from Liñán & Chen (2009), which allows for capturing the intensity of succession intention.

9. Conclusion

The Italian GUESSS report offers a comprehensive analysis of the entrepreneurial learning, intentions, behaviors, and roles of family and university environments experienced by university students across the country.

Drawing on responses from 4,374 students from more than 26 Italian universities, this report highlights the evolving interest of students in entrepreneurial careers.

The findings reveal an interest in entrepreneurship among students in Italian universities, particularly as short- to medium-term career goals. Right after studies, only a modest number of students intend to start their own business. However, this career choice intention increases substantially when students are asked to indicate their career choice intentions five years after studies. This might indicate that many students prefer to gain work experience before pursuing an entrepreneurial career. Across all fields of study, the majority of students express a strong preference for employment both immediately after completing their studies and five years after studies. However, students pursuing degrees in Business and Economics exhibit the highest founding aspirations compared to those from other fields.

Both males and females show a preference for pursuing careers as employees immediately after studies and five years later. However, males exhibit a stronger inclination toward founding careers compared to females in both time frames (right after studies and five years later). These findings highlight possible gender differences in entrepreneurial aspirations, emphasizing the need for researchers to understand the possible causes of this gender gap. Understanding these dynamics is critical for designing university programs, policies, and support systems that foster entrepreneurial confidence and opportunities, particularly for females, to create a more inclusive entrepreneurial ecosystem.

The majority of students report that they have not taken any entrepreneurship courses during their academic journey, indicating a possible limited availability of such courses. Overall, respondents report a high perception of the entrepreneurial climate, with a notable increase compared to the previous two waves of Italian GUESSS (2018 and 2021). Students in the Business and Economics field of study consistently rate this climate more favorably than their peers from other fields of study. Additionally, while university offerings seem effective in fostering students' understanding of

entrepreneurial attitudes, values, and motivations, they seem less effective in equipping students with the practical management skills needed to start a business. This suggests a potential gap in the practical application of entrepreneurship education that could be addressed to better support students' transition into entrepreneurship.

Most of the students report having no parents as self-employed and/or majority owners of a business. Students who have a parent who is self-employed and/or a majority owner of a business tend to exhibit higher levels of entrepreneurial self-efficacy, potentially making them more inclined to pursue entrepreneurial careers. However, despite this, the succession intentions of these students remain relatively low. Additionally, even potential successors prefer to pursue a career as employees both right after studies and five years later, and only a small portion declare to want to pursue a career as a successor in the parents'/family's business.

The number of active entrepreneurs has increased compared to previous Italian waves of GUESSS, but remains below the international benchmark. The number of nascent entrepreneurs, on the other side, has decreased compared to earlier Italian GUESSS waves and remains below the international benchmark highlighting a potential gap in transitioning from intent to action. Entrepreneurial activity is primarily driven by male, undergraduate students, studying Business and Economics or Natural and Applied Sciences.

The findings presented here should be interpreted with caution, as the sample is not representative of the Italian population and is based on descriptive statistics, necessitating further research to obtain deeper insights and identify mechanisms that explain the entrepreneurial outcomes of university students. A number of future research directions and opportunities, as well as policy and university management recommendations, could emerge from these preliminary findings. We invite scholars, policy-makers, and practitioners who are interested in gaining further knowledge and contributing to a debate on student entrepreneurship to contact the Italian GUESSS team (guesss@unibg.it) to discuss the current analyses or design future waves of data collection.

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