Sweden
Sverige

GUESSS REPORT SWEDEN 2023

GUESSS
Global University Entrepreneurial Spirit Students' Survey

JÖNKÖPING UNIVERSITY
Jönköping International Business School

CeFEO
Centre for Family Entrepreneurship and Ownership

Author

Marie Madeleine Meurer

Contact

Centre for Family Entrepreneurship and Ownership (CeFEO)
Jönköping International Business School (JIBS)
Box 1026 – SE 551 11 Jönköping (Sweden)

email: infocefeo@ju.se

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Preface

Creating a new venture involves many dynamic and engaging elements. Becoming an entrepreneur demands creativity, experimentation, uncertainty, and the potential for both success and failure. Among students, entrepreneurship is particularly multi-dimensional, vibrant, and intriguing. Consequently, it is essential to thoroughly understand its origins, outcomes, and constraints

The Global University Entrepreneurial Spirit Students' Survey (GUESSS) has been pursuing this mission since 2003. The GUESSS 2023 Global Report, supported by EY as the global project partner, investigates and compares entrepreneurial attitudes and activities of students in 57 countries. In its 10th edition, GUESSS surveyed 226,718 university students, providing a primary source of information on student entrepreneurship worldwide.

This report presents data collected in Sweden, with a sample of 191 students enrolled at Jönköping University in the Fall 2023. Prepared by the Centre for Family Entrepreneurship and Ownership (CeFEO) at Jönköping International Business School (JIBS), this national report contributes to the broader understanding of student entrepreneurship within the GUESSS framework.

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The GUESSS Global Report is available online.

ref. https://www.guesssurvey.org/resources/PDF_InterReports/GUESSS_2023_Global_Report.pdf

Executive summary

Sample profile

- The Swedish national sample includes 191 students enrolled at Jönköping University.
- The average age of these students is 26.2 years.
- The gender distribution in the sample is as follows: 49% of respondents are female, 46.4% are male, and 2% identify as 'other'.
- Of the respondents, 55.1% are Swedish nationals, while 44.9% are from other countries.
- The primary areas of study are Business/Management and Economics (42%), Arts and Social Sciences (6%), Computer Sciences and Engineering (25%), and Human Medicine and Health Sciences (9%).
- A majority of the students, 54%, are pursuing a Bachelor's degree, whereas 38.8% are at the Master's level.

Regarding students' entrepreneurial activities

- Consistent with trends observed in previous GUESSS reports, "first employee, then entrepreneur," 8.1% of the students aim to become entrepreneurs immediately after graduation, while 35.2% have entrepreneurial aspirations five years post-graduation.
- 13.3% of the students are currently in the process of starting their own businesses (nascent entrepreneurs).
- 7.7% of the students already own and operate their businesses (active entrepreneurs).
- Females constitute 50% of nascent entrepreneurs and 66.7% of active entrepreneurs.
- Males make up 50% of nascent entrepreneurs and 33.3% of active entrepreneurs.

University context

- 6.1% of the students are studying in a specific program on entrepreneurship and 36.2% have attended at least one course on entrepreneurship as a compulsory course, moreover 9.7% have attended at least one elective course on entrepreneurship.
- The highest participation in entrepreneurial courses is amongst students of Economics, Business and Management, and Computer Sciences and IT.

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1 Introduction

1.1 The GUESSS project: key information

The GUESSS (Global University Entrepreneurial Spirit Students' Survey) project is an international research initiative started in 2003, coordinated by the Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen. Its primary goal is to understand and analyze the entrepreneurial intentions and activities of university students across different countries and cultural contexts. Conducted every two to three years, the survey gathers data on students' entrepreneurial intentions, business activities, motivational factors, and the role of university environments in fostering entrepreneurship. This data is analyzed at both national and international levels, allowing for comprehensive comparisons and benchmarking. Participating universities worldwide distribute the survey, enabling a diverse dataset that reflects various educational, economic, and cultural settings. The insights gained from the GUESSS project help develop effective educational practices and policies to support and enhance student entrepreneurship globally.

1.2 Aim and purpose of the report

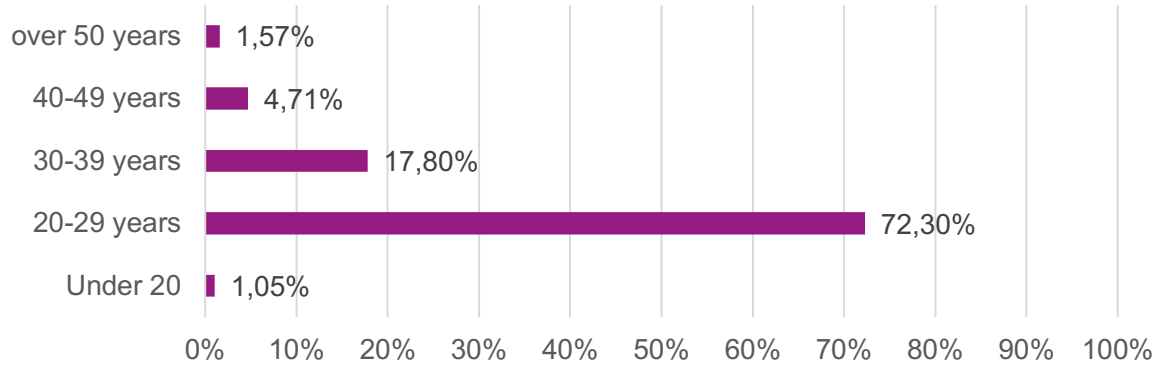
The GUESSS National Report for Sweden aims to understand the entrepreneurial intentions and activities among university students in Sweden. The report evaluates if students want to start their own businesses and their involvement in entrepreneurial activities during and after their studies. It looks at what influences students' decisions to become entrepreneurs, such as personal attitudes, family background, education, and the economic environment. The report also assesses how well Swedish universities support entrepreneurship through education, services, and resources like incubators. By comparing results with other countries, the report identifies strengths and weaknesses in Sweden's approach to supporting student entrepreneurs. The findings help policymakers and educational institutions develop better strategies and policies to support student entrepreneurship. Last, conducted regularly, the survey tracks changes in entrepreneurial intentions and activities over time, showing how student entrepreneurship evolves in Sweden.

2 Description of the sample

2.1 Age

The students surveyed in Sweden have an average age of 26.2 years. As shown in Figure 1, 72,3% of respondents are aged between 20 and 29 years, with just 1,05% under 20. Additionally, 17,8% of the sample falls within the 30-39 age range, 4,71% are between 40 and 49 years old, and 1,57% are over 50.

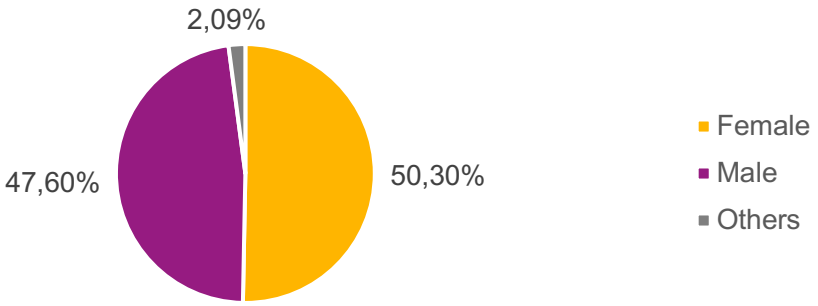
Figure 1: Age (Valid responses N=186)



2.2 Gender

The sample consists of 50.3% females, 47.6% males, and 2.09% identifying as "Others." Figure 2 illustrates the gender distribution of the students surveyed in this report.

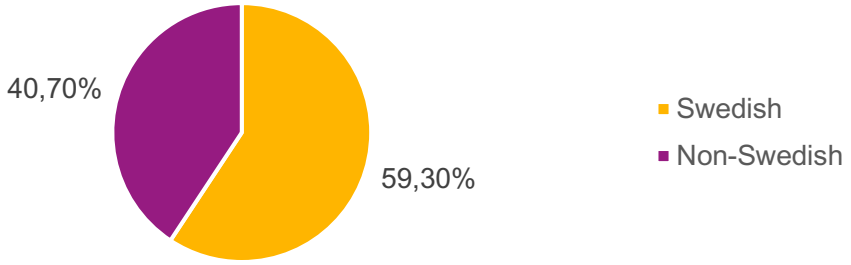
Figure 2: Gender (Valid responses N=191)



2.3 Nationality

As illustrated in Figure 3, the majority of students, constituting 59.3%, are Swedish, whereas 40.7% are international students enrolled in university programs in Sweden.

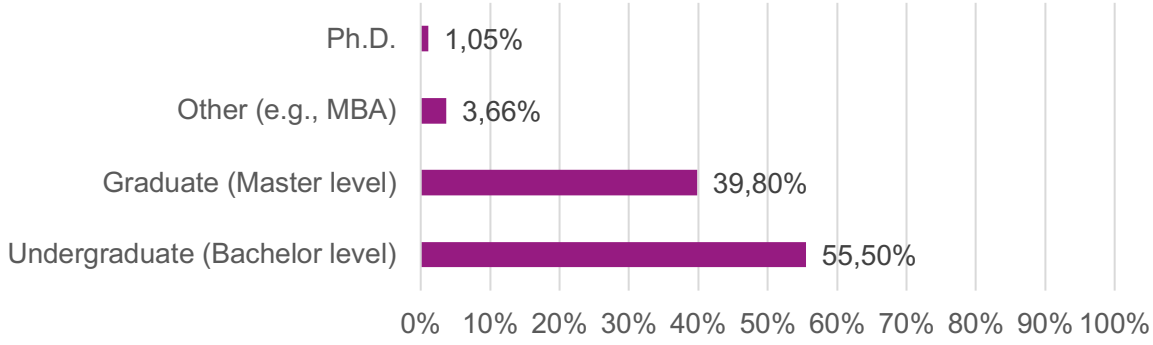
Figure 3 Nationality categories (Valid responses N=182)



2.4 Study level

Figure 5 illustrates the study level among the students in the sample. Undergraduates constitute 55,5% of the sample, with 39,8% being graduate students. PhD students make up 1,05%, and 3,66% are enrolled in other educational programs.

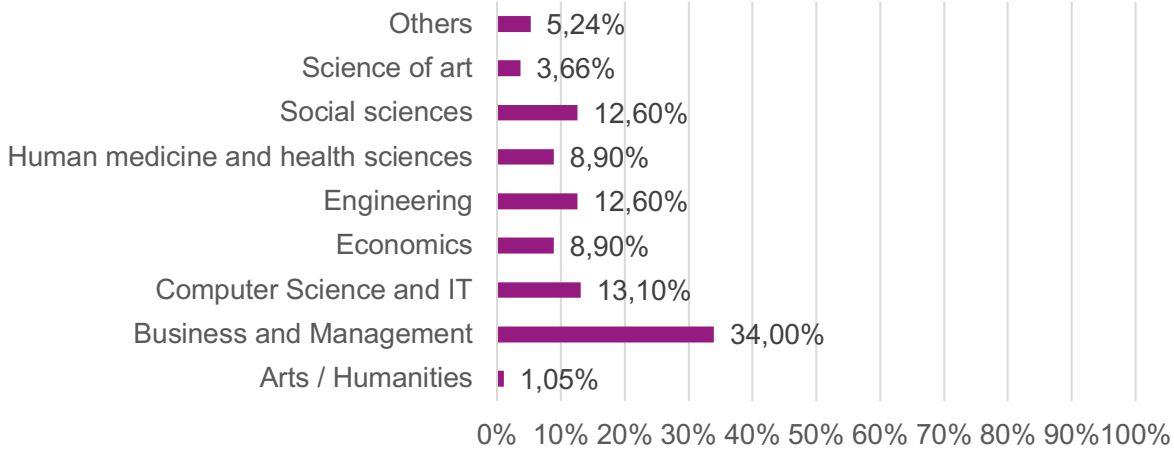
Figure 5: Study level (Valid N=191)



2.5 Main field of study

Figure 6 shows the distribution of students across different fields of study. According to the data, 34% of the students are enrolled in Business and Management programs. Social sciences account for 12.6% of the students, while 12.6% are in engineering, and 8.9% are studying human medicine and health sciences.

Figure 6: Main field of study (Valid responses N=382)



3 Career choice intentions / entrepreneurial intentions

3.1 Career intentions right after studies and after 5 years

The career intentions of students surveyed in Sweden demonstrate a diverse range of aspirations both immediately after graduation and five years into their professional lives. As depicted in the figures, the majority of students intend to pursue employment, with specific preferences varying over time.

Immediately after completing their studies, 79.6% of respondents intend to become employees, with this category including various types of employment across different sectors and business sizes. Meanwhile, 7.33% aim to become founders of their own businesses, showing a modest inclination towards entrepreneurship. Only 1.05% see themselves as successors in existing businesses, which might include family businesses or other established enterprises, while 12% remain uncertain or do not have a clear career path immediately after graduation.

Looking five years into the future, the survey indicates a significant shift in career intentions. The percentage of students aspiring to be employees decreases to 55.5%, reflecting a decline in interest towards conventional employment as they gain more experience and confidence. Conversely, the proportion of students intending to become founders increases significantly to 28.3%, suggesting a growing entrepreneurial spirit over time. The percentage of those planning to succeed in established businesses rises slightly to 13.1%, indicating a potential increase in interest towards taking over existing operations. However, 3.14% of respondents remain uncertain or do not know yet what path they will pursue five years after graduation.

These shifts suggest that as students progress in their careers, there is a notable rise in entrepreneurial ambitions and a slight increase in those considering succession roles, accompanied by a reduction in the desire for traditional employment roles.

Figure 7: Career choice intentions right after studies vs. after 5 years (Valid responses N=191)

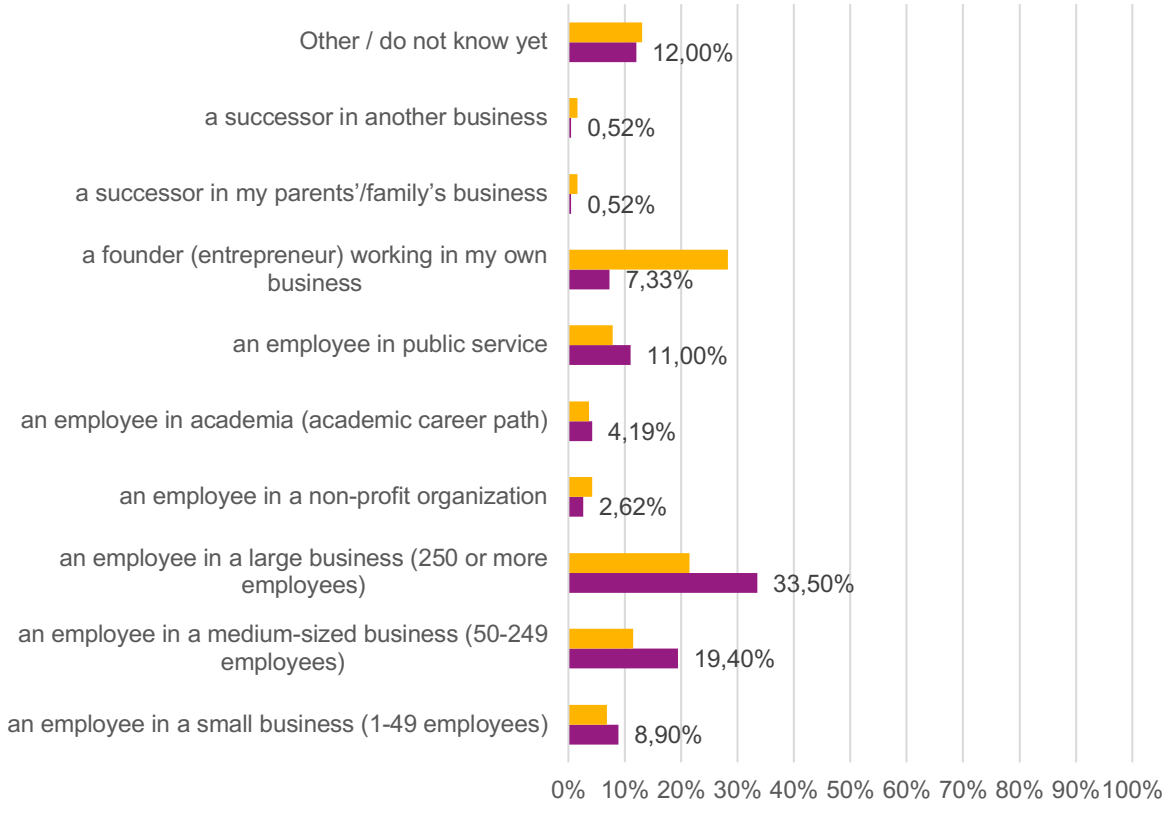
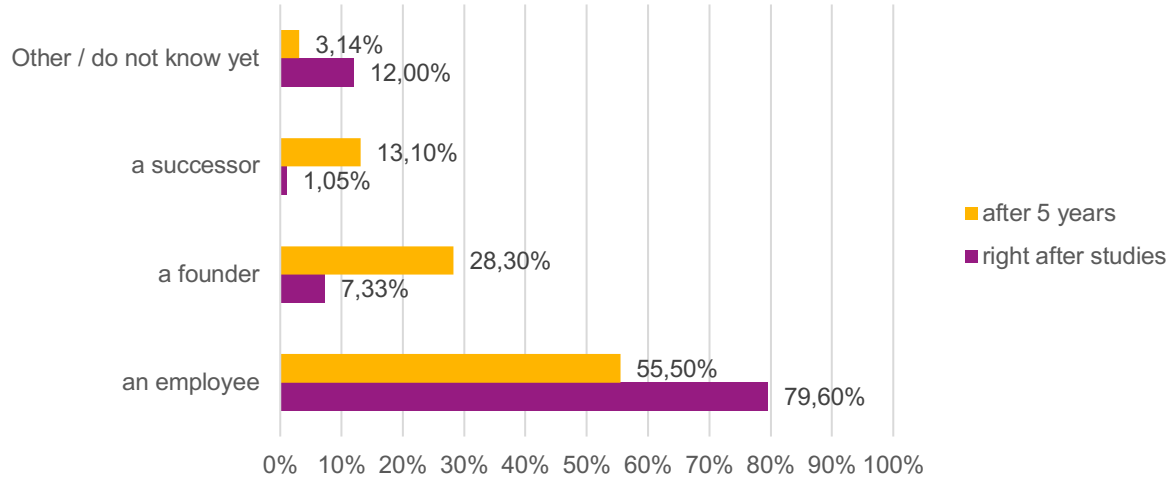


Figure 8: Career choice intentions right after studies vs. after 5 years – aggregated (Valid responses N=191)

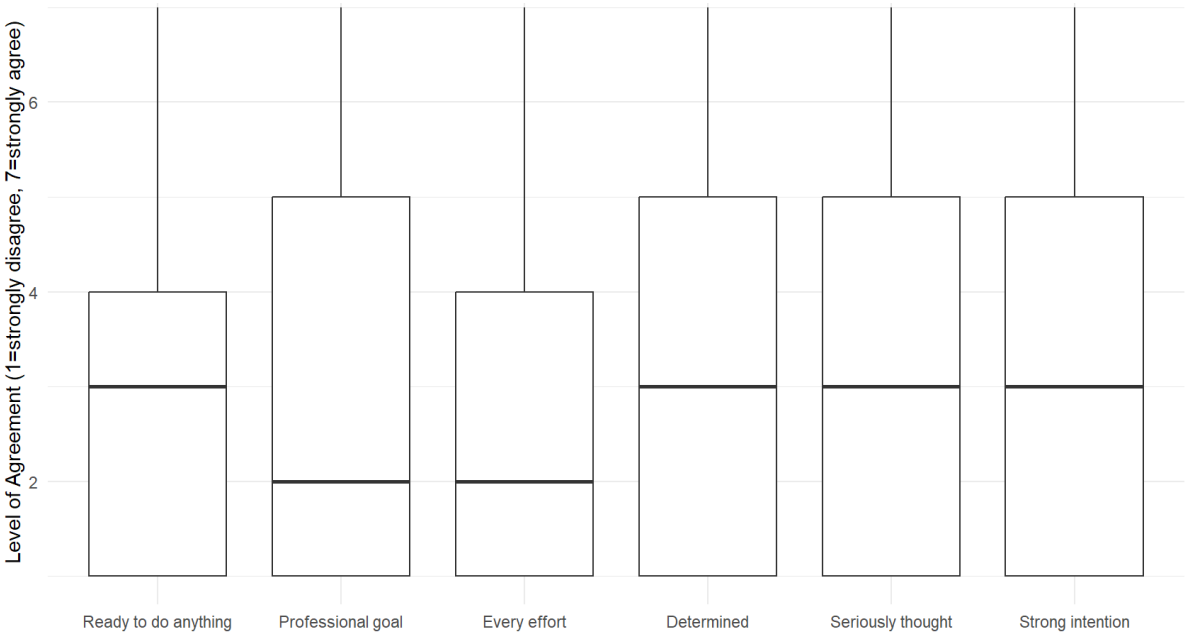


3.2 Entrepreneurial intention

Entrepreneurial intention refers to a person's desire and plan to start a new business (Ajzen, 1991; Krueger & Carsrud, 1993). Understanding entrepreneurial intentions is critical for predicting entrepreneurial behavior and fostering entrepreneurship (Bird, 1988; Shapero & Sokol, 1982). In the GUESSS survey, entrepreneurial intention is captured through a multi-item measure developed by Linan & Chen (2009).

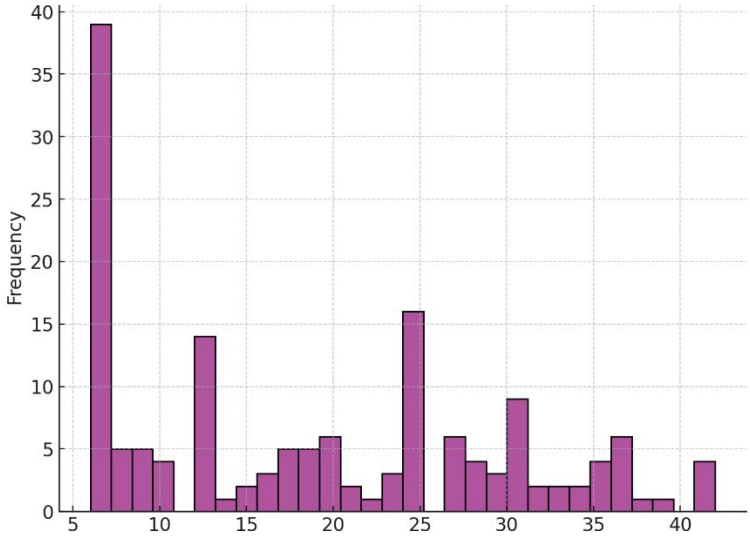
The distribution of responses to the statements measuring entrepreneurial intention shows varying levels of agreement among the students. The boxplots reveal that the median responses for all six statements hover around the midpoint, indicating a moderate level of entrepreneurial intention across the board. For example, the statement "I am ready to do anything to be an entrepreneur" shows a wide interquartile range, reflecting diverse opinions among students, though the overall tendency leans towards agreement. Similarly, statements such as "My professional goal is to become an entrepreneur" and "I have very seriously thought of starting a business" also display a range of responses, with many students expressing a strong intention towards entrepreneurship, while others remain less committed.

Figure 9: Entrepreneurial intention (Valid responses N=182)



When looking at the aggregated entrepreneurial intention scores, the histogram illustrates a broad distribution, with scores spread out across the possible range. A notable feature is the peak at the lower end of the scale, indicating a significant number of respondents with low aggregated entrepreneurial intentions. However, a substantial portion of students also score in the higher ranges, suggesting that while some students are hesitant or uncertain about pursuing entrepreneurship, a considerable number have a strong entrepreneurial intention.

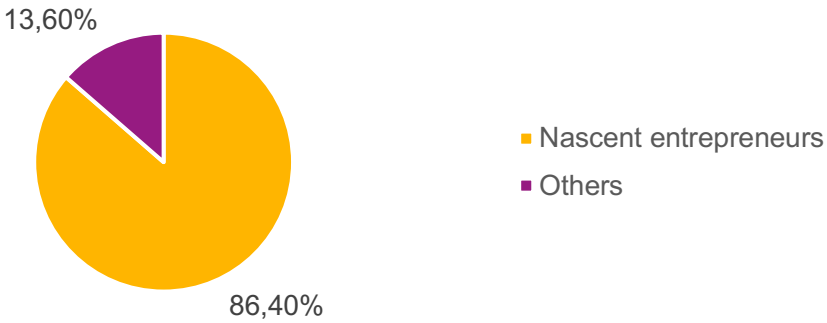
Figure 10: Distribution Aggregated Score Entrepreneurial intention (Valid responses N 182)



3.3 Nascent entrepreneurship

Nascent entrepreneurship refers to individuals who are in the process of starting a new business but have not yet fully established their ventures (Reynolds et al., 2005). This stage involves activities such as planning, organizing resources, and initial business operations. Understanding nascent entrepreneurship is crucial as it provides insights into the early stages of business creation and the factors that influence the transition from intention to action (Davidsson, 2006). 86.4% of the students are classified as nascent entrepreneurs, indicating a strong entrepreneurial spirit among the university population. The remaining 13.6% of respondents fall into the "Others" category, which includes those who are not currently engaged in entrepreneurial activities.

Figure 11: Nascent entrepreneurs (Valid responses N=191)

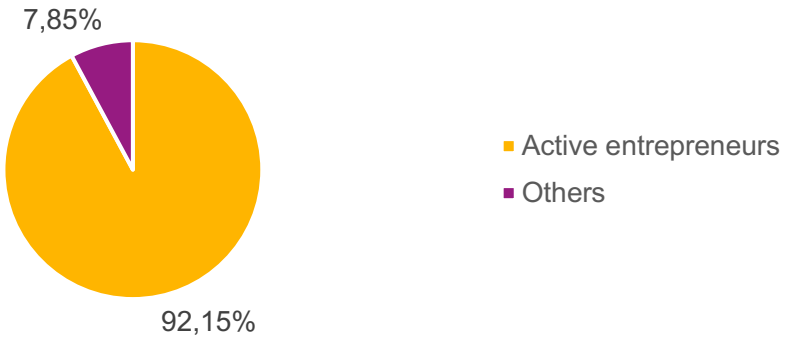


3.4 Active entrepreneurship

Active entrepreneurship refers to individuals who are currently running their own businesses. This stage represents the implementation and operational phases of entrepreneurial activity, where business owners are engaged in managing, growing, and sustaining their ventures. Understanding active entrepreneurship is

essential for gaining insights into the realities of business operations and the factors contributing to entrepreneurial success and challenges (Aldrich & Martinez, 2001). 92.15% of the students are classified as active entrepreneurs, indicating that a significant portion of the student population is engaged in entrepreneurial activities. The remaining 7.85% fall into the "Others" category, which includes those who are not currently involved in running a business.

Figure 12: Active entrepreneurs (Valid responses N=191)



4 Drivers of entrepreneurial intentions

4.1 The university context

Given the strong evidence of the importance of a university's context in supporting student entrepreneurship (Bergmann et al., 2016), it is crucial to analyze the universities' environment. This environment is essential because entrepreneurship does not happen in isolation (Autio et al., 2014) and depends on the surrounding context (Baker & Welter, 2018). Furthermore, students often lack the necessary experience to start their own businesses, making the university's context even more important (Bergmann et al., 2016). Therefore, universities can boost students' motivation and abilities to start businesses by providing a supportive environment (Walter et al., 2013).

The boxplots reveal that students generally agree that their university environment positively impacts their entrepreneurial development. For example, the statement "The courses and events I attended increased my understanding of the attitudes, values, and motivations of entrepreneurs" shows a wide interquartile range, indicating that while many students agree with the statement, there is still significant variability in responses. Similarly, statements related to understanding the actions necessary to start a business, enhancing practical management skills, and developing networks also show diverse responses, with median scores around the midpoint, reflecting moderate agreement.

Figure 13: University environment (Valid responses N=191)

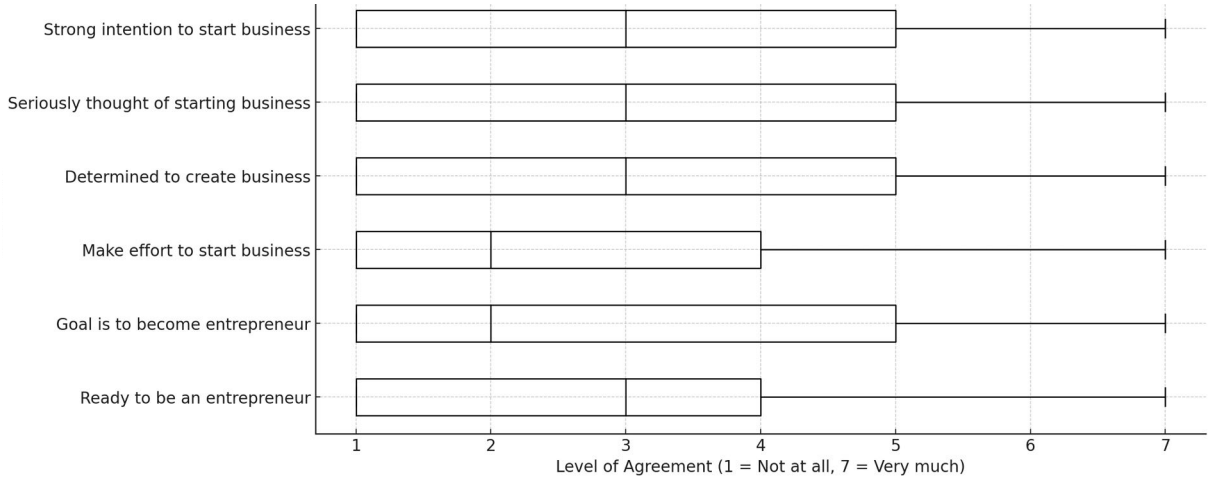
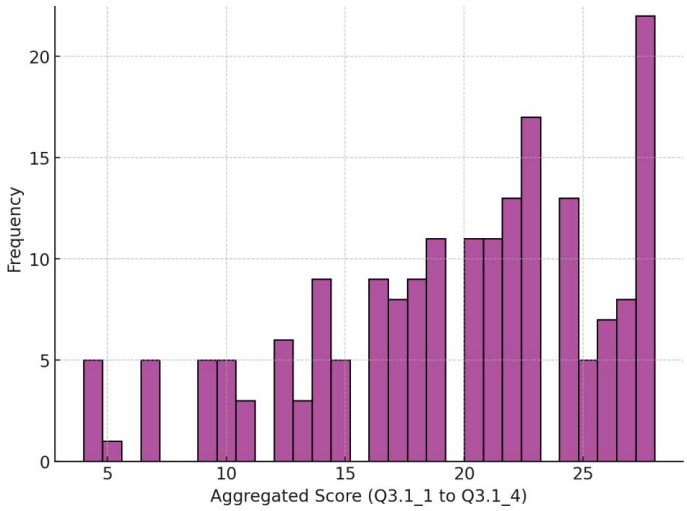


Figure 14: University environment Aggregated Score (Valid responses N=191)



The aggregated score distribution, reveals a broad range of scores, with peaks at both the lower and higher ends of the scale. This indicates that while a significant number of students perceive the university environment as highly supportive of entrepreneurship, others are less convinced of its impact. The distribution suggests a diverse student body with varying levels of engagement and perception regarding the entrepreneurial support provided by their university.

These findings highlight the importance of tailoring entrepreneurial support to meet the needs of all students, ensuring that those who are less engaged can also benefit from the resources and opportunities available.

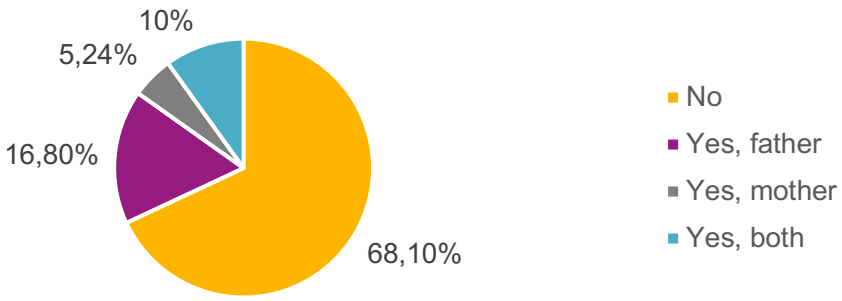
4.2 Family background

Family background plays a significant role in shaping students' entrepreneurial intentions and capabilities. The influence of self-employed family members, exposure to business operations, and entrepreneurial values within the family environment can profoundly affect students' motivation and confidence to pursue their own business ventures (Aldrich & Cliff, 2003; Carr & Sequeira, 2007).

Figure 15 illustrates the distribution of self-employment among the parents or guardians of the surveyed students. The data reveals that 45.5% of students reported that neither parent was self-employed, indicating no direct entrepreneurial influence from their family. Meanwhile, 27.3% of students indicated that their father was self-employed, 13.6% reported that their mother was self-employed, and another 13.6% indicated that both parents were self-employed.

These findings highlight the varying degrees of entrepreneurial influence within students' family backgrounds. The significant proportion of students with at least one self-employed parent suggests that these individuals may have a greater inclination towards entrepreneurship, possibly due to their early exposure to business environments and practices (Matthews & Moser, 1995; Fairlie & Robb, 2007).

Figure 15: Self-employment of family members (Valid responses N=191)



4.3 Political perspectives

4.3.1 Political ideologies

Understanding the political ideologies of students helps to contextualize their views on entrepreneurship, regulation, and social responsibility. The GUESSS survey included questions to assess students' political ideologies, particularly their views on social and political conservatism. In particular, the survey used a seven-point Likert scale to measure students' agreement with various statements related to political conservatism. The statements covered topics such as business regulation, environmental protection, social issues, and economic policies.

The boxplots in Figure 16 provide a detailed view of the students' responses to statements associated with social and economic policies. The responses indicate significant variation in students' political beliefs. For instance, the statement "There is no need for tougher regulations on business to protect

the environment" shows a broad range of responses, with the interquartile range suggesting a moderate level of disagreement overall. The statement "Companies should not be required to give minorities preference in hiring to reduce discrimination" similarly shows a diverse range of opinions, with a median response leaning towards slight disagreement.

In terms of environmental regulation, the statement "Regulations to protect the environment are too much of a burden on business" had a median response suggesting moderate disagreement, with a considerable number of students strongly opposing this view. The statement "The best way to reduce crime is to make sure that criminals are caught, convicted, and punished" was met with stronger agreement, reflecting a more conservative stance on crime reduction.

Regarding economic policies, the statement "Government should redistribute income from the better off to the less well off" had a slightly positive median response, indicating support for income redistribution among many students. Similarly, the statement "Ordinary working people do not get their fair share of the nation's wealth" received considerable agreement, reflecting a perception of economic inequality. The notion that "Big business owners benefit at the expense of workers" also garnered substantial support, highlighting concerns about the fairness of wealth distribution.

Figure 16: Political ideology (Valid responses N=191)

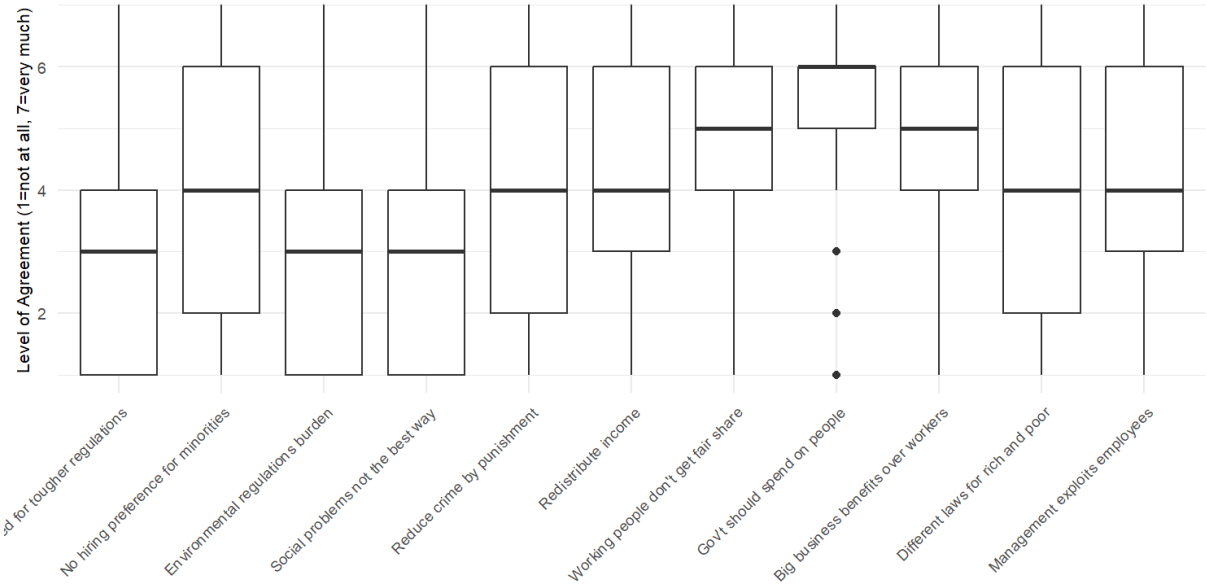
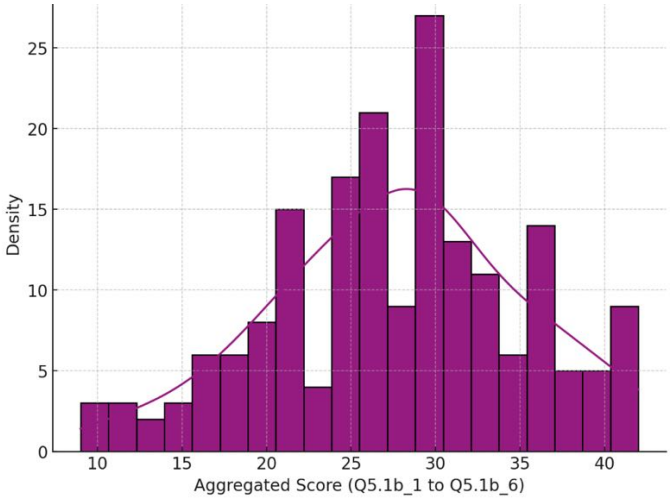


Figure 17: Political ideology aggregated score (Valid responses N=187)

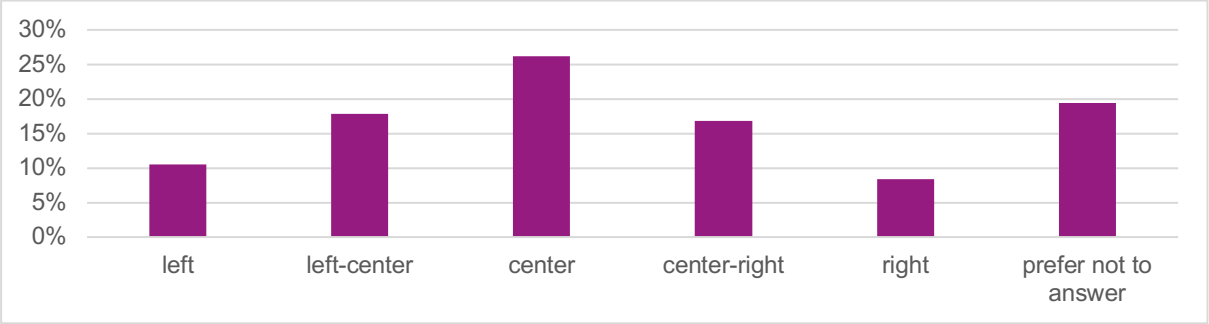


The aggregated scores shown in Figure 17 depict the overall distribution of students' political ideology scores across all the statements. The distribution is relatively wide, with scores spanning from the lower to the upper ends of the scale, indicating that while some students hold more conservative views, others lean towards more progressive or liberal ideologies.

4.3.2 Political orientation

In addition to measuring specific aspects of political conservatism, the survey also asked students to indicate their overall political orientation on a spectrum from left to right. The results, depicted in Figure 18, show a relatively balanced distribution with a slight concentration in the center and moderate leanings towards both ends of the spectrum. Approximately 21% of students placed themselves on the left (1 on the scale), 26.3% identified as centrist (3 on the scale), 15.8% leaned towards the right (5 on the scale), and the remaining students were distributed evenly across the intermediate positions (2 and 4 on the scale). These findings suggest that while there is a diversity of political views among the students, the majority tend to cluster around the center of the political spectrum, with some leaning slightly left or right.

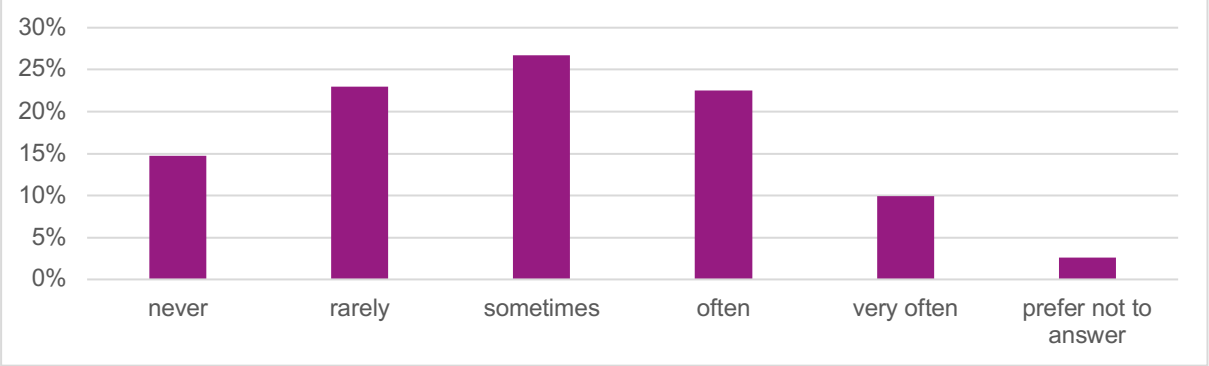
Figure 18: Political orientation (Valid responses N=189)



4.3.2 Expression of opinion

Figure 19 illustrates the frequency with which students express their opinions on social, economic, or environmental issues. The data shows that approximately 15% of students report that they never express their opinions publicly. In contrast, about 25% of students rarely express their views, and around 27% sometimes share their opinions. Additionally, 20% of students often express their views, while 10% very often do so. A small percentage, around 3%, chose not to disclose how frequently they express their opinions. These results indicate a varied level of engagement in public discourse among students, with the majority engaging at least occasionally in expressing their views, while a smaller segment either rarely or very often participates in such discussions.

Figure 19: Frequency of expression of opinion (Valid responses N=190)



4.4 Psychological traits

4.4.1 Subjective well-being / Life satisfaction

Subjective well-being refers to a person's overall evaluation of their life satisfaction and emotional well-being. It is measured using a scale developed by Diener et al. (1985), consisting of several statements evaluated on a 7-point Likert scale, where 1 represents strong disagreement and 7 represents strong agreement. The survey results reveal varying levels of subjective well-being among students, as shown in the figures. The boxplots in Figure 20 indicate that most students report moderate to high life satisfaction across the various statements. For the statement "In most ways, my life is close to my ideal," the responses are generally positive, with many students agreeing or strongly agreeing, as reflected by the median score around 5.5. The statement "The conditions of my life are excellent" also shows a favorable response distribution, with a median close to 5. Similarly, the statement "I am satisfied with my life" received strong agreement from a significant portion of students, with the median response at 6. "So far, I have gotten the important things I want in life" also reflects high satisfaction, with a median around 5.5. However, the statement "If I could live my life over, I would change almost nothing" shows a slightly lower median response, indicating that while many students are content with their lives, some still express a desire for change. The aggregated distribution of life satisfaction scores, depicted in Figure 21, shows that most students fall within the middle to upper ranges of life satisfaction. The distribution is somewhat skewed towards higher scores, indicating that overall, students tend to evaluate their life satisfaction positively.

Figure 20: Subjective well-being / life satisfaction (Valid responses N=191)

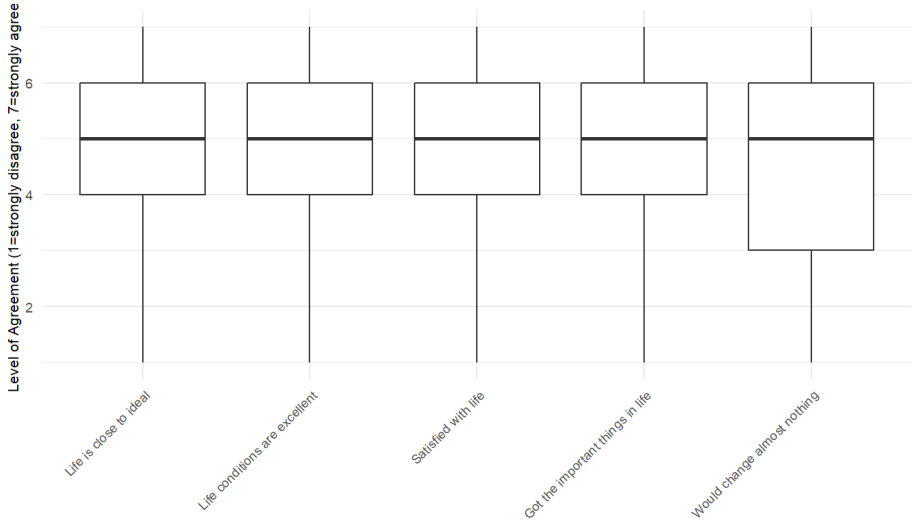
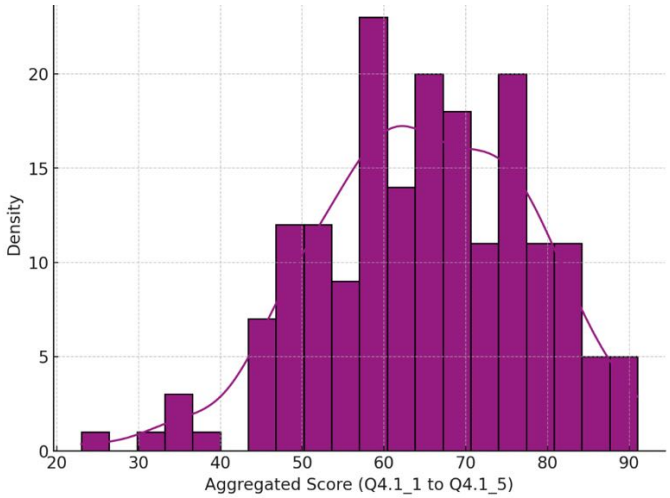


Figure 21: Subjective well-being / life satisfaction aggregated score (Valid responses N=191)



4.4.2 Entrepreneurial self-efficacy

Entrepreneurial self-efficacy is an individual's belief in their ability to perform entrepreneurial tasks successfully. It is measured using a scale developed by Zhao et al. (2005). The GUESSS survey uses several statements rated on a 7-point Likert scale, with 1 indicating strong disagreement and 7 indicating strong agreement.

The survey results show that many students feel confident in their entrepreneurial abilities, as depicted in the figures. For the statement "I can successfully discover new business opportunities," the mean response was 5.6, with 35% of students rating it at 7 (strong agreement) and 5% at 1 (strong disagreement). The statement "I can successfully create new products" received a mean score of 5.4, with 30% of students giving it a 7 and 7% giving it a 1. The statement "I can think creatively" had the highest mean score of 6.0, with 45% of students rating it at 7 and only 3% at 1, indicating strong confidence in their creative abilities. Finally, the statement "I can successfully commercialize ideas" showed a mean score of 5.5, with 33% rating it at 7 and 6% at 1.

These findings suggest that a high number of students have confidence in their entrepreneurial abilities, which is a strong predictor of their intention to start new ventures. The aggregated score distribution in Figure 23 further supports this, showing a concentration of scores in the higher range, indicating overall high entrepreneurial self-efficacy among the students surveyed.

Figure 22: Entrepreneurial self-efficacy (Valid responses N=188)

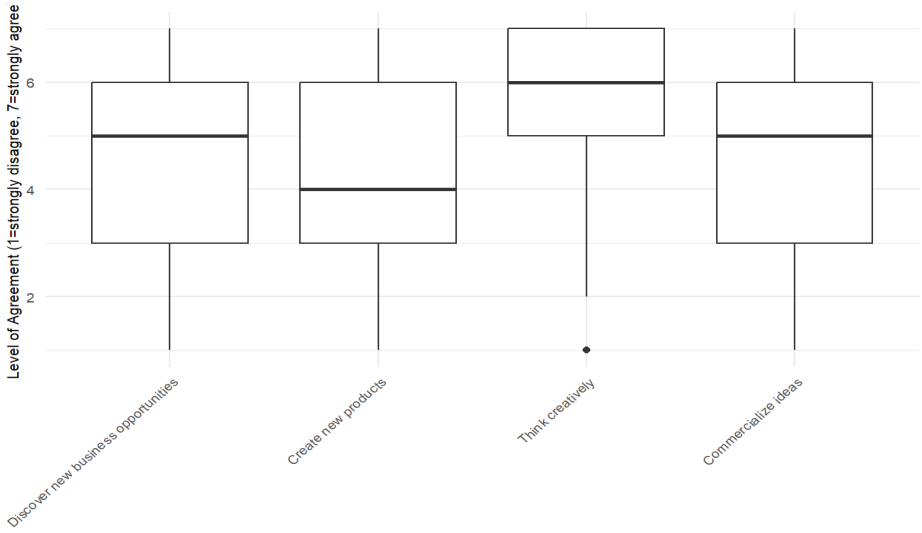
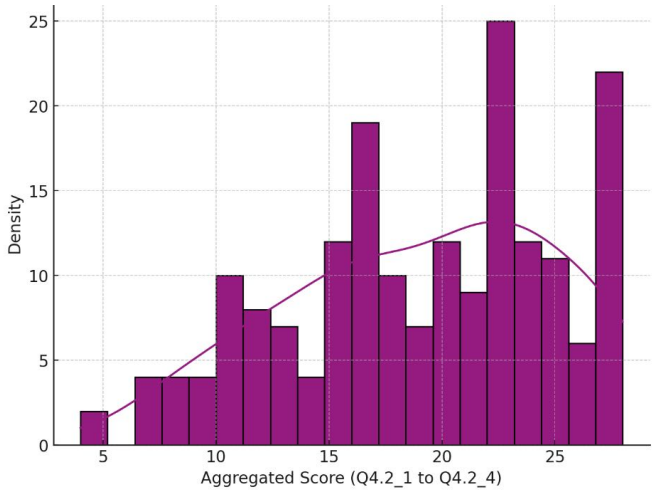


Figure 23: Entrepreneurial self-efficacy aggregated score (Valid responses N=188)



4.4.3 Resilience

Resilience is the ability to recover from setbacks and adapt to challenging circumstances. It is measured using a scale developed by Sinclair & Wallston (2004). The GUESSS survey uses several statements rated on a 7-point Likert scale, with 1 indicating strong disagreement and 7 indicating strong agreement.

Figure 24: Resilience (Valid responses N=187)

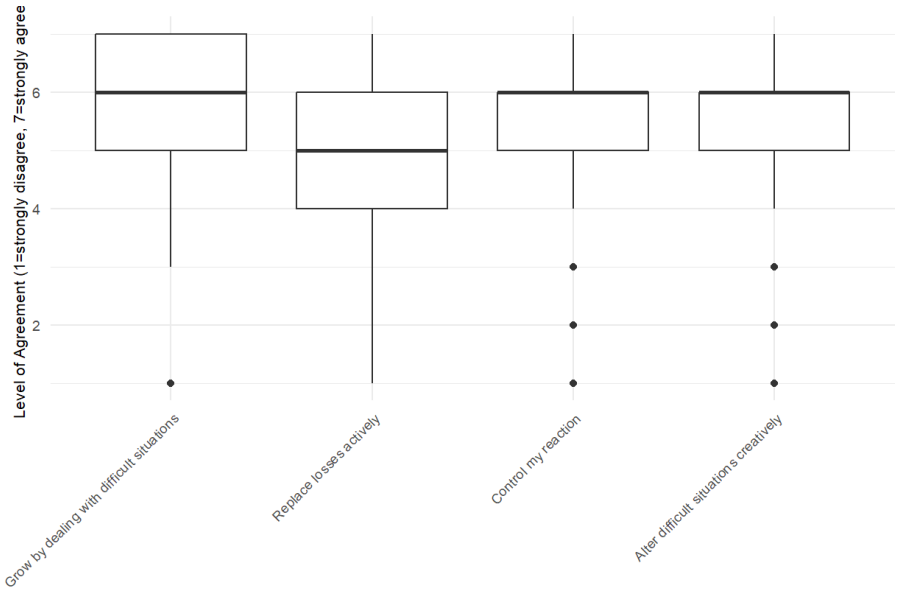
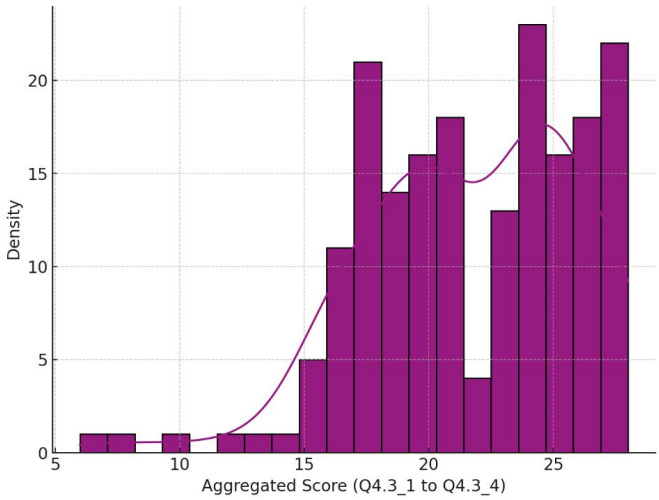


Figure 25: Resilience aggregated score (Valid responses N=187)



The survey results indicate high levels of resilience among students, as depicted in the figures. The statement "I believe I can grow in positive ways by dealing with difficult situations" had a mean score of 5.7, with 38% of students rating it at 7 (strong agreement) and 4% at 1 (strong disagreement). The statement "I actively look for ways to replace the losses I encounter in life" received a mean score of 5.3, with 28% of students giving it a 7 and 10% giving it a 1. The statement "Regardless of what happens to me, I believe I can control my reaction to it" had a mean response of 5.8, with 40% of students rating it at 7 and 5% at 1. Finally, the statement "I look for creative ways to alter difficult situations" showed a mean score of 5.5, with 35% rating it at 7 and 8% at 1. These results suggest that the majority of students exhibit high resilience, an essential trait for entrepreneurial success, as it enables them to overcome challenges and persist in their entrepreneurial endeavors. The aggregated resilience score, shown in Figure 25, indicates that most students have high resilience, with a concentration of scores in the upper range.

5 Nascent entrepreneurs

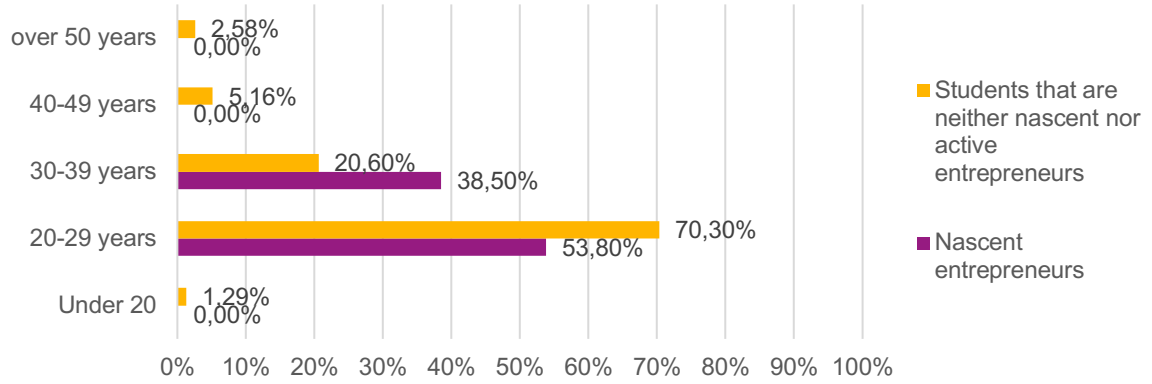
The GUESSS survey also systematically captures the distinct characteristics and profiles of students who are nascent entrepreneurs, providing insights into various demographic, educational, familial, political, and psychological dimensions.

5.1 Descriptives

5.1.1 Age

The age distribution of nascent entrepreneurs compared to students who are neither nascent nor active entrepreneurs is shown in Figure 26. The majority of nascent entrepreneurs (53.8%) are between 20-29 years old, which is lower than the 70.3% representation in the other sample. The 30-39 years age group constitutes 38.5% of nascent entrepreneurs, significantly higher than the 20.6% in the other sample. In the 40-49 years category, 5.16% of students who are neither nascent nor active entrepreneurs are represented, while there are no nascent entrepreneurs in this age group. Additionally, 2.58% of the students who are neither nascent nor active entrepreneurs are over 50 years old, whereas this age group is not represented among nascent entrepreneurs. The under 20 years group has a small representation among the non-entrepreneurial students at 1.29%, with no representation among nascent entrepreneurs.

Figure 26: Age of nascent entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses N=155 for students that are neither nascent nor active entrepreneurs, N=26 for nascent entrepreneurs)



5.1.2 Gender

Figure 27 illustrates the gender distribution among nascent entrepreneurs and non-entrepreneurial students. Males and females are equally represented among nascent entrepreneurs, with each group constituting 50% of the nascent entrepreneurial population. This contrasts with the general student population, where females and males show different shares in entrepreneurial activities.

In Figure 28, we see that 14.13% of females are involved in nascent entrepreneurial activities, while 85.87% are not involved in entrepreneurship. Similarly, Figure 29 shows that 15.29% of males are nascent entrepreneurs, while 84.71% are not involved in entrepreneurial activities. Finally, Figure 30 indicates that none of the students identifying as "Other" are nascent entrepreneurs, suggesting that diverse gender identities are not represented in nascent entrepreneurship within this sample.

These distributions highlight that both male and female students have similar levels of participation in nascent entrepreneurship. However, there is a noticeable absence of diverse gender identities in entrepreneurial activities.

Figure 27: Gender of nascent entrepreneurs (Valid responses N=26)

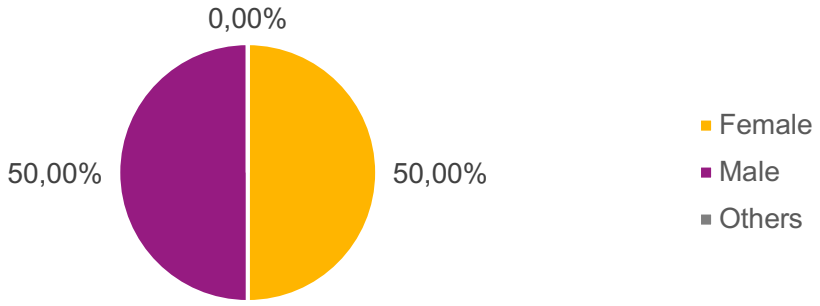


Figure 28: Share female nascent entrepreneurs (Valid responses N=92)

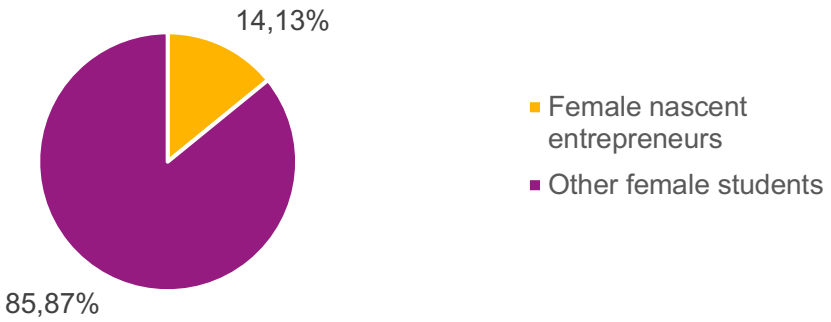


Figure 29: Share male nascent entrepreneurs (Valid responses N=91)

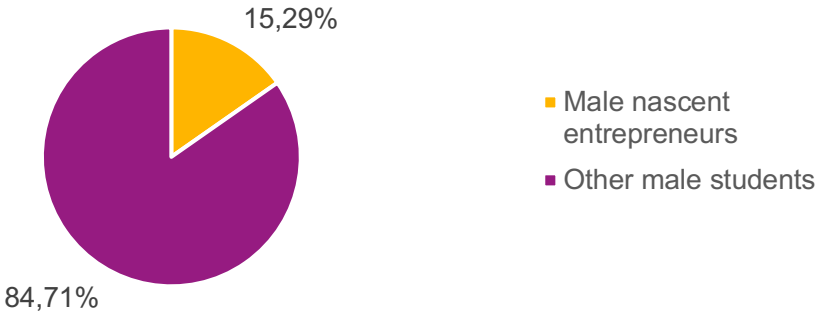
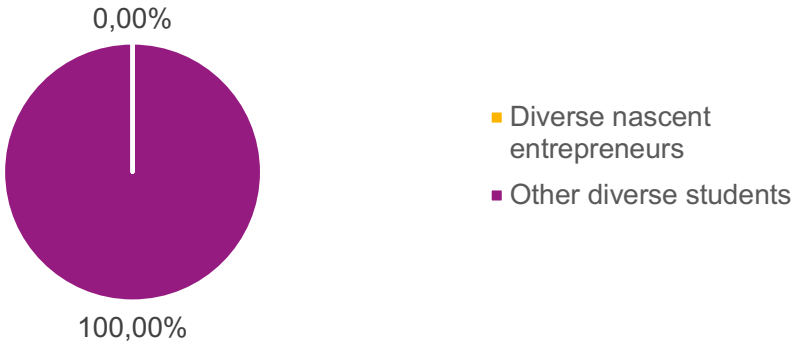


Figure 30: Share diverse nascent entrepreneurs (Valid responses N=3)



5.1.3 Nationality

Figure 27 shows that the share of nascent entrepreneurs among Swedish students is relatively low, with only 1.85% of the local student population engaged in entrepreneurial activities. This suggests that a small fraction of the Swedish student body is actively pursuing entrepreneurship. In contrast, 28.38% of nascent entrepreneurs come from other nationalities, indicating a substantial presence of international students in the entrepreneurial community. This significant proportion of international students reflects a diverse and culturally rich entrepreneurial environment at Swedish universities, contributing to a dynamic mix of ideas and innovations. These findings highlight the relatively lower engagement in entrepreneurship among Swedish students compared to their international peers at the same institutions.

Figure 27: Share nascent entrepreneurs among Swedish students (Valid responses N=108)

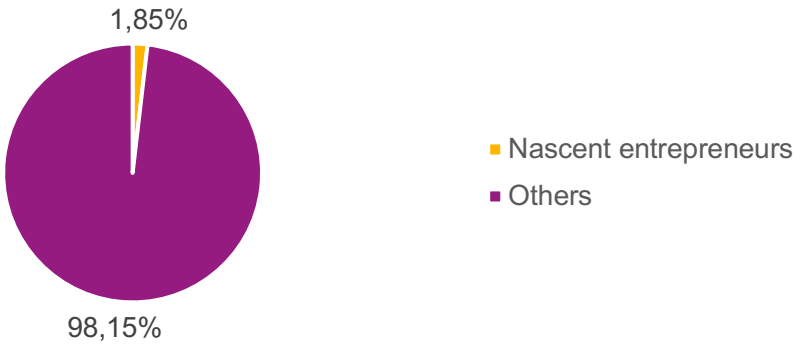
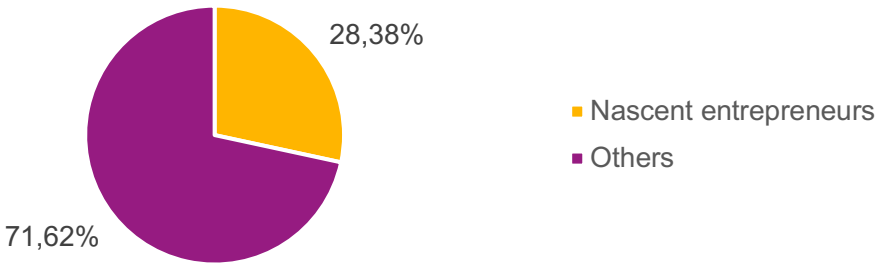


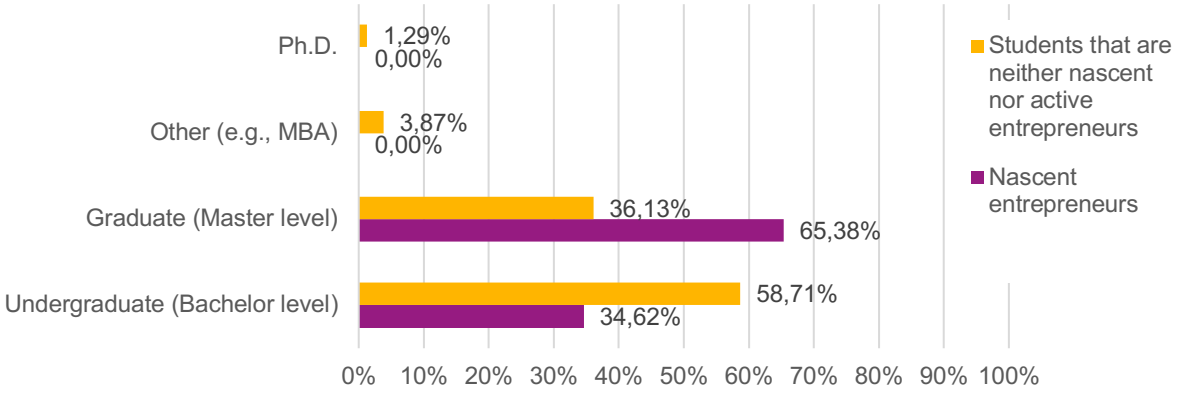
Figure 28: Share nascent entrepreneurs among other nationalities (Valid responses N=74)



5.1.4 Study level

The majority of nascent entrepreneurs (65.38%) are undergraduate students, followed by graduate (master level) students at 36.13%. Only 1.29% of nascent entrepreneurs are Ph.D. students, and 3.87% are categorized under other educational levels, such as MBA programs. This distribution suggests that entrepreneurial activities are most common among students at the undergraduate level, with a significant representation at the master's level as well.

Figure 29: Study level - nascent entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses N=155 for students that are neither nascent nor active entrepreneurs, N=26 for nascent entrepreneurs)



5.2 Characteristics

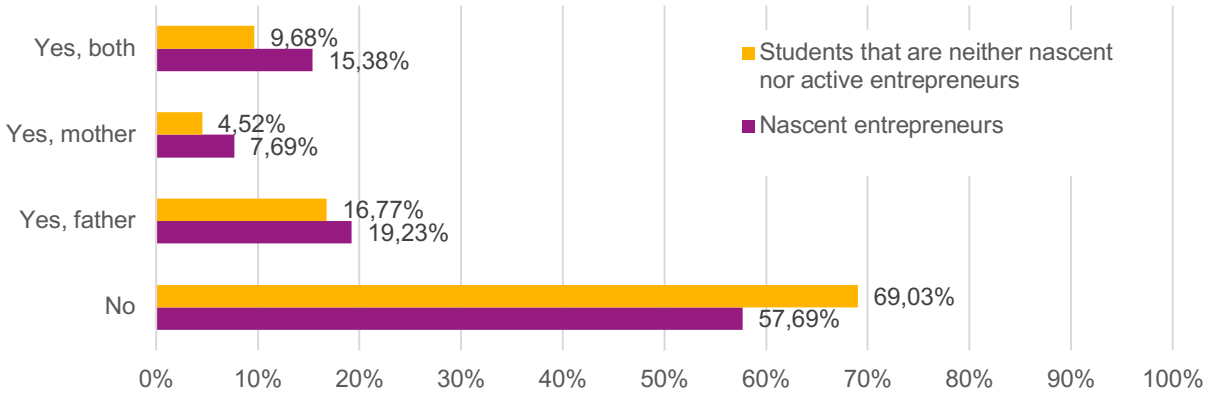
This section examines the characteristics of nascent entrepreneurs and provides insights into their backgrounds, perspectives, and psychological traits.

5.2.1 Family background

Family background, particularly the self-employment status of parents, plays a crucial role in shaping entrepreneurial aspirations. Research indicates that having self-employed parents can significantly increase the likelihood of entrepreneurial behavior in their children, providing both motivational and resource-based support (Carr & Sequeira, 2007; Dyer & Handler, 1994).

The comparison between nascent entrepreneurs and students who are neither nascent nor active entrepreneurs reveals notable differences in the self-employment status of family members. The data shows that nascent entrepreneurs are more likely to have parents who are self-employed. Specifically, 19.23% of nascent entrepreneurs reported that their father is self-employed, compared to 16.77% in the other sample. Additionally, 15.38% of nascent entrepreneurs have both parents self-employed, which is higher than the 9.68% in the other group. Conversely, 57.69% of nascent entrepreneurs reported that neither of their parents is self-employed, compared to 69.03% in the other sample. This suggests that having self-employed parents, especially both parents, may inspire or influence individuals to pursue entrepreneurial activities.

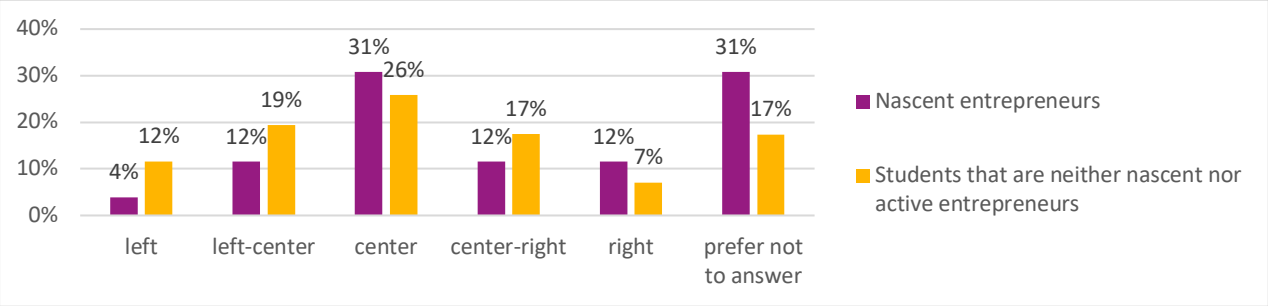
Figure 31: Self-employment of family members – nascent entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses N=155 for students that are neither nascent nor active entrepreneurs, N=26 for nascent entrepreneurs)



5.2.2 Political perspectives

The comparison between nascent entrepreneurs and students who are neither nascent nor active entrepreneurs reveals notable differences in political orientation. Nascent entrepreneurs are more evenly distributed across the political spectrum, with 12% identifying as left and 19% as left-center, compared to 4% and 12% respectively in the other group. Interestingly, 31% of nascent entrepreneurs identify as centrist, slightly higher than the 26% in the comparison group. Furthermore, nascent entrepreneurs show less concentration in the center-right category (12%) compared to 17% among the other students. This diverse political orientation among nascent entrepreneurs suggests a wide range of perspectives and approaches to entrepreneurship.

Figure 32: Political orientation – nascent entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses N=153 for students that are neither nascent nor active entrepreneurs, N=26 for nascent entrepreneurs)



5.2.3 Psychological traits

Psychological traits, including life satisfaction, entrepreneurial self-efficacy, and resilience, are critical for understanding the mindset of nascent entrepreneurs. High levels of self-efficacy and resilience are associated with increased entrepreneurial success, as they drive individuals to overcome challenges and persist in their ventures (Bandura, 1997; Luthans, Youssef, & Avolio, 2007).

The psychological traits of nascent entrepreneurs show significant variations when compared to students that are neither nascent nor active entrepreneurs. First, nascent entrepreneurs report higher levels of life satisfaction and well-being. They are more likely to feel that their life conditions are excellent and that they have achieved important life goals. This indicates that nascent entrepreneurs generally have a positive outlook on their lives, which can be a motivating factor in their entrepreneurial pursuits. Second, ascent entrepreneurs exhibit higher confidence in their ability to discover new business opportunities, create new products, think creatively, and commercialize ideas. This heightened self-efficacy is crucial for entrepreneurial success, as it drives individuals to take risks and pursue innovative ventures. Third, nascent entrepreneurs demonstrate greater resilience. They believe in their ability to grow positively by dealing with difficult situations, actively seek ways to mitigate losses, and maintain control over their reactions to adverse events. This resilience is vital for overcoming the challenges and setbacks commonly faced in entrepreneurial endeavors.

Figure 33: Psychological traits – nascent entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses N=153 for students that are neither nascent nor active entrepreneurs, N=26 for nascent entrepreneurs)

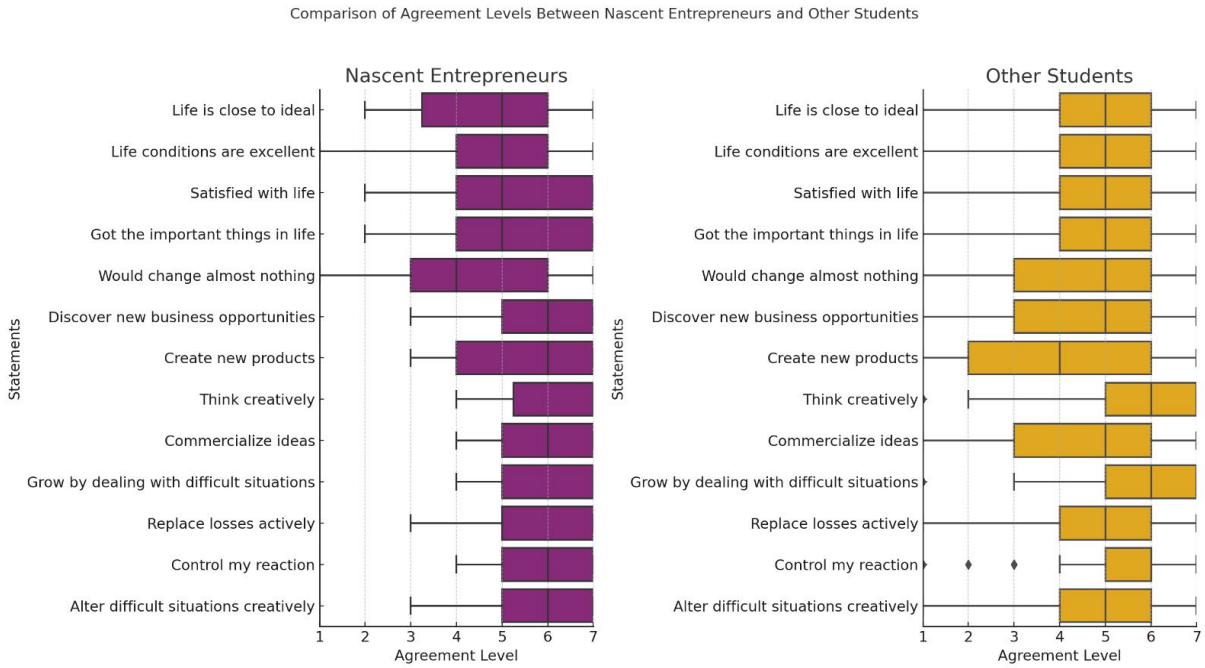
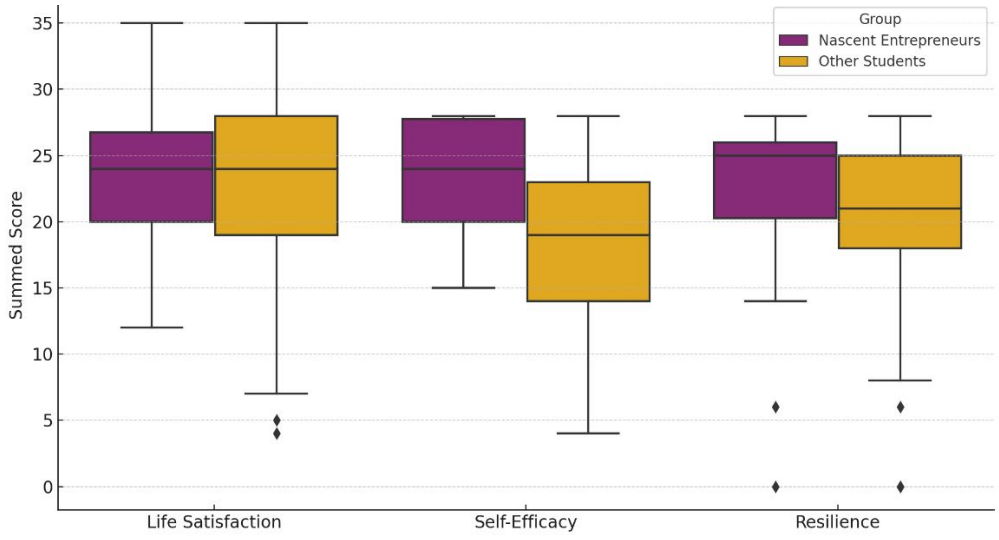


Figure 33: Psychological traits aggregated – nascent entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses N=153 for students that are neither nascent nor active entrepreneurs, N=26 for nascent entrepreneurs)



5.3 General information about the business

Figure 34 shows the distribution of nascent entrepreneurs' plans for completing their business ventures. The majority of nascent entrepreneurs plan to complete the founding process within two years after completing their studies (26.9%). A smaller proportion intends to complete the process during their studies (19.2%), and 7.69% plan to do so right after their studies. Additionally, 11.5% are unsure about when they will complete the founding process.

Figure 34: Completion plan (Valid responses N=17, NA=9)

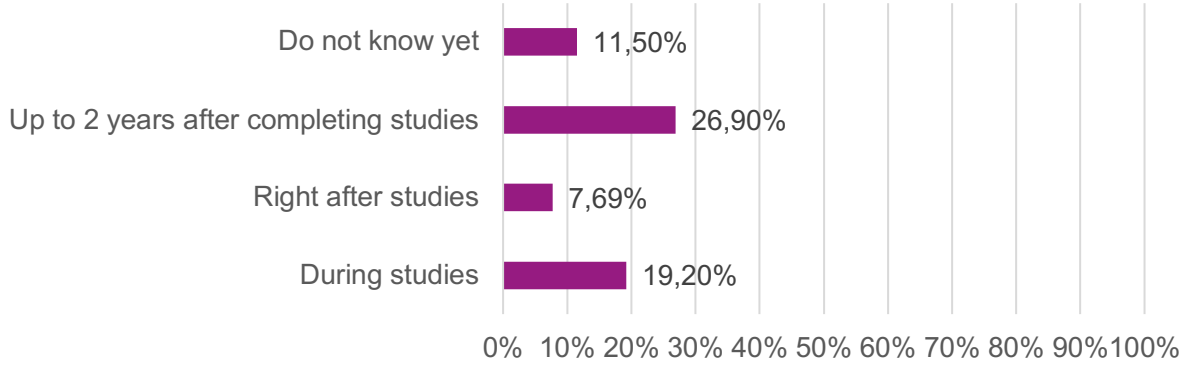


Figure 35 illustrates the main occupation plans of nascent entrepreneurs. Only 7.69% of nascent entrepreneurs intend for their business to become their primary occupation after graduation. A notable 34.60% do not plan to make it their main occupation, while 23.10% are still uncertain about their future plans.

Figure 35: Main occupation plan (Valid responses N=17, NA=9)

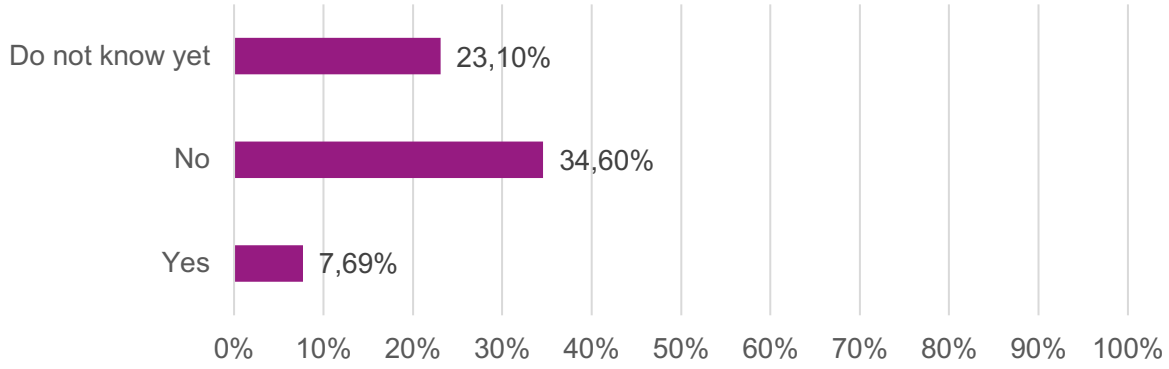


Figure 36 highlights whether nascent entrepreneurs have previously created another business. The majority (64.7%) have not created another business before, indicating that many are first-time entrepreneurs, while 35.3% have prior entrepreneurial experience.

Figure 36: Created another business before (Valid responses N=17)

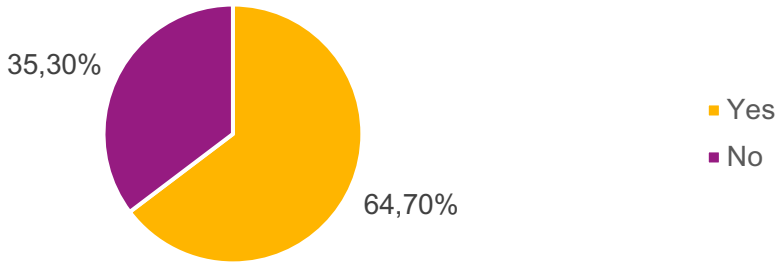


Figure 37 illustrates the ownership share that nascent entrepreneurs plan to have in their new ventures. The majority (64.71%) plan to hold a controlling share of 51-100% ownership, indicating a strong preference for maintaining significant control over their businesses. A smaller portion (23.52%) intends to hold exactly 50% ownership, suggesting a desire for equal partnership in their ventures, while 11.76% plan to have a minority share (0-49%).

Figure 37: Ownership share (Valid responses N=17)

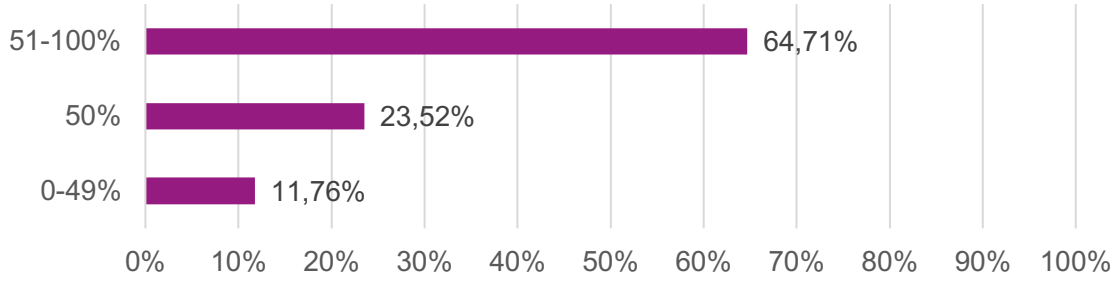


Figure 38 shows the number of co-founders that nascent entrepreneurs plan to have. Most (47.06%) plan to have one co-founder or no co-founder (35.29%), with smaller percentages planning for two co-founders (5.88%), or three or more co-founders (11.76%).

Figure 38: Number of co-founders (Valid responses N=17)

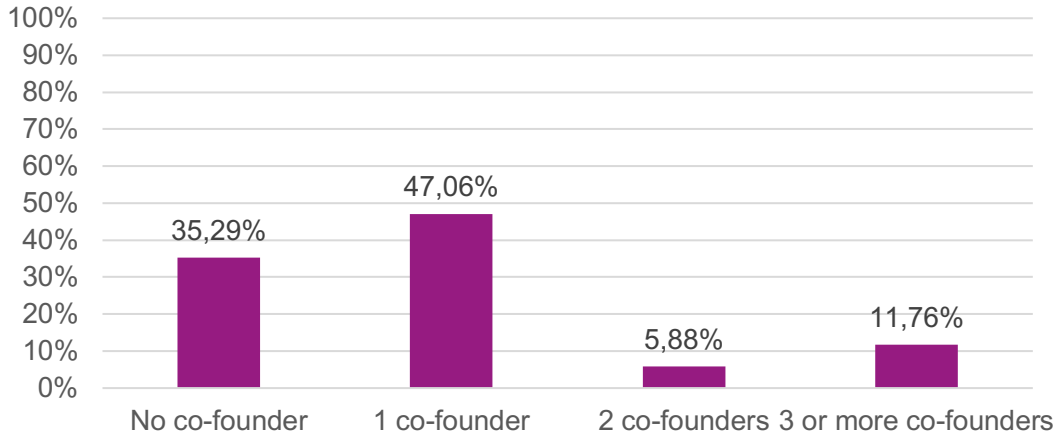
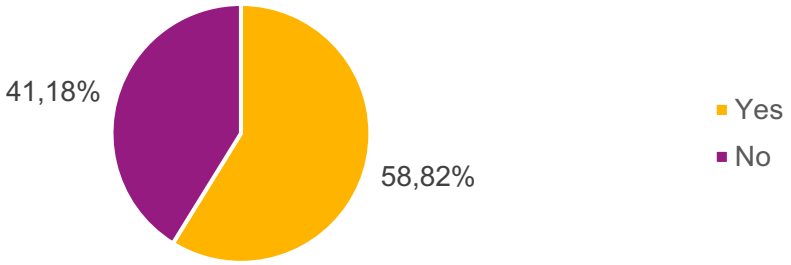


Figure 39 indicates the preferred business location of nascent entrepreneurs. A majority (58,82%) plan to locate their business in their study city, leveraging familiar environments and existing networks, while 41,18% plan to locate their business elsewhere.

Figure 39: Located in study city (Valid responses N=17)



5.4 External enablers

External enablers (EEs) refer to changes in the business environment, such as new technologies, regulatory shifts, demographic and sociocultural trends, macroeconomic changes, and natural environmental shifts, that can trigger, shape, or enhance entrepreneurial activities. These changes can be strategically leveraged by entrepreneurs to initiate, develop, and succeed in their ventures (Davidsson, 2020).

Figure 40 presents the responses from nascent entrepreneurs regarding the impact of various external enablers on their entrepreneurial activities. Among the most influential enablers, access to new technologies, favorable regulatory changes, and significant demographic trends stand out as major factors driving the business ideas of nascent entrepreneurs.

Figure 40: External enablers (Valid responses N=17)

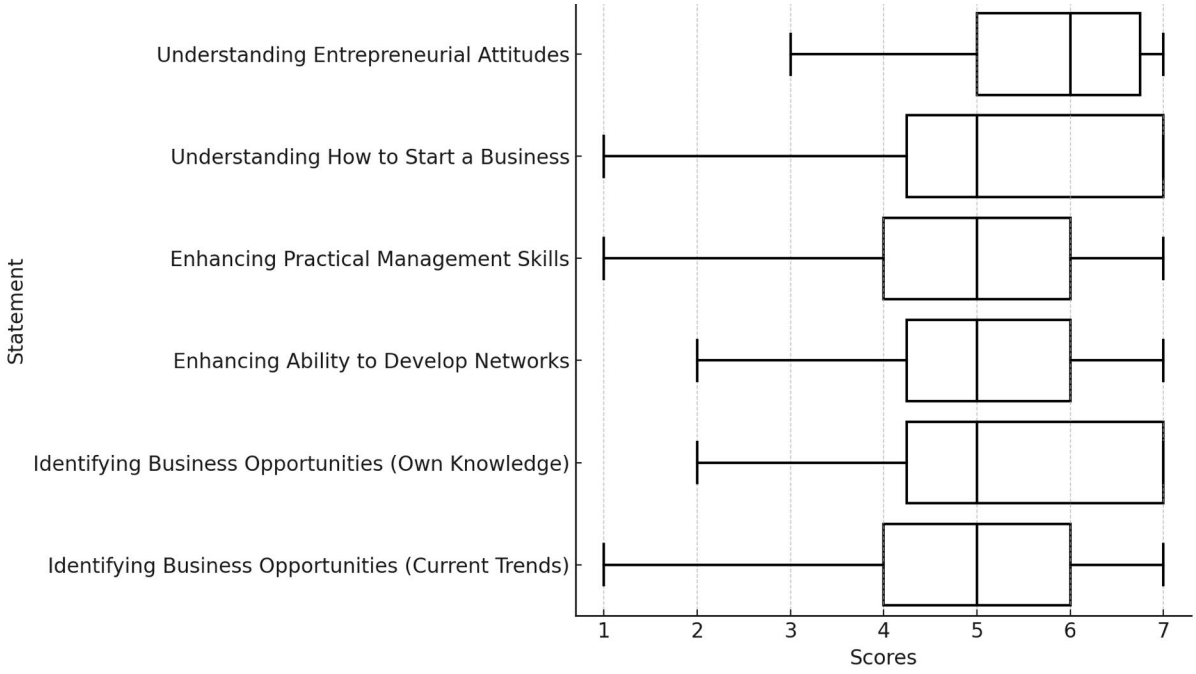
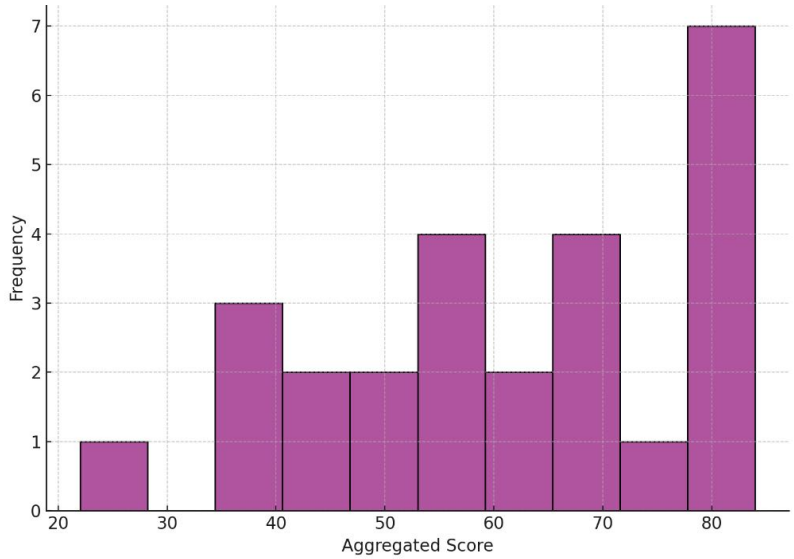


Figure 41 provides an aggregated view of how these various external enablers combine to influence entrepreneurial initiatives. The distribution suggests that while certain enablers are more dominant, such as new technologies and regulatory changes, nascent entrepreneurs often experience multiple external factors simultaneously impacting their ventures. This aggregation indicates the complex and multifaceted nature of the external environment in which nascent entrepreneurs operate.

Figure 41: External enablers aggregated (Valid responses N=17)



6 Active entrepreneurs

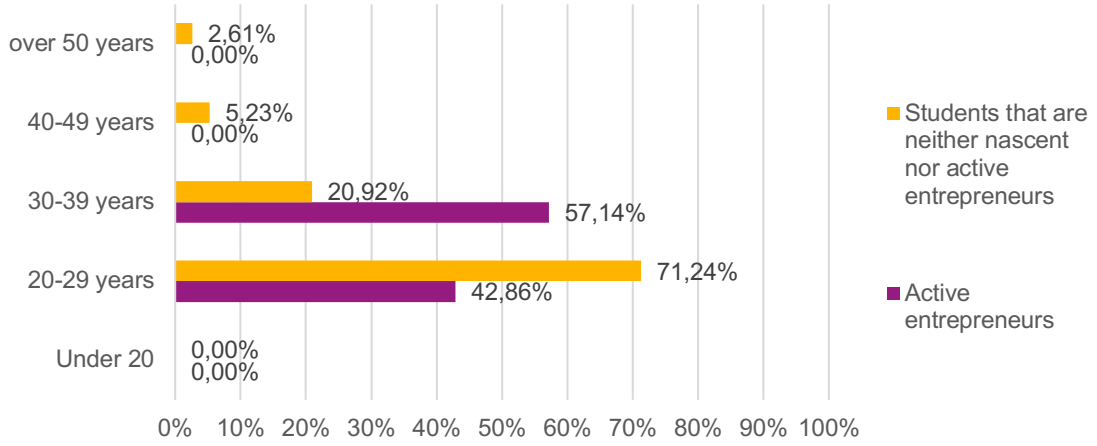
This section provides a detailed examination of students who are active entrepreneurs, defined as those who currently own and operate their own business ventures. The purpose of this analysis is to understand the demographic, educational, and socio-economic characteristics of these individuals, as well as the motivations and challenges they face.

6.1 Descriptives

6.1.1 Age

The age distribution of active entrepreneurs compared to students who are neither nascent nor active entrepreneurs is shown in Figure 45. The majority of active entrepreneurs (42.86%) are between 20-29 years old, which is lower than the 71.24% representation in the other sample. The age group 30-39 years makes up 57.14% of active entrepreneurs, compared to 20.92% in the other sample. There is no representation in the 40-49 years or over 50 years categories among active entrepreneurs, while these age groups are represented at 5.23% and 2.61% respectively in the other sample.

Figure 45: Age of active entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses active entrepreneurs N=15, students that are neither nascent nor active entrepreneurs N=155)



6.1.2 Gender

Figure 46 illustrates the gender distribution among active entrepreneurs. Females constitute the majority with 66.7%, while males make up 33.3%. This distribution indicates a higher representation of females among active entrepreneurs compared to the general student population, suggesting strong female participation in entrepreneurial activities.

Figure 46: Gender of active entrepreneurs (Valid responses N=15)

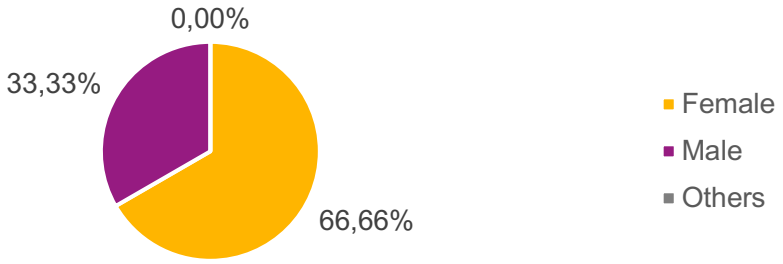


Figure 47: Share female active entrepreneurs (Valid responses N=15)

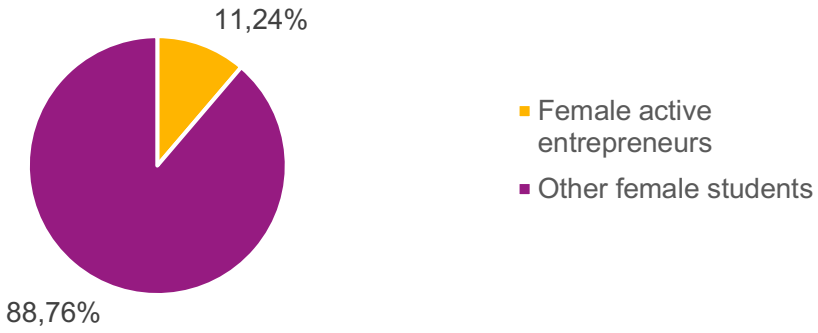


Figure 48: Share male active entrepreneurs (Valid responses N=15)

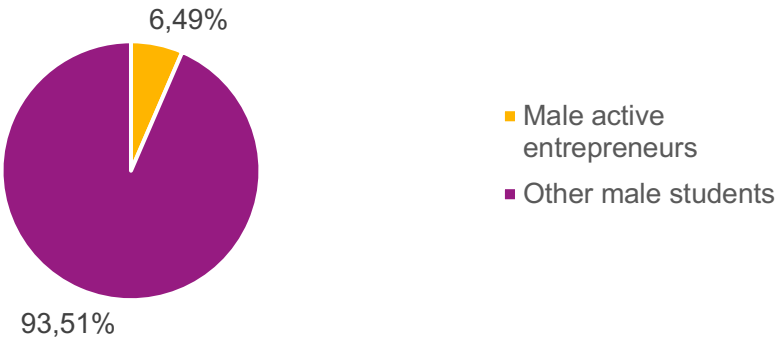
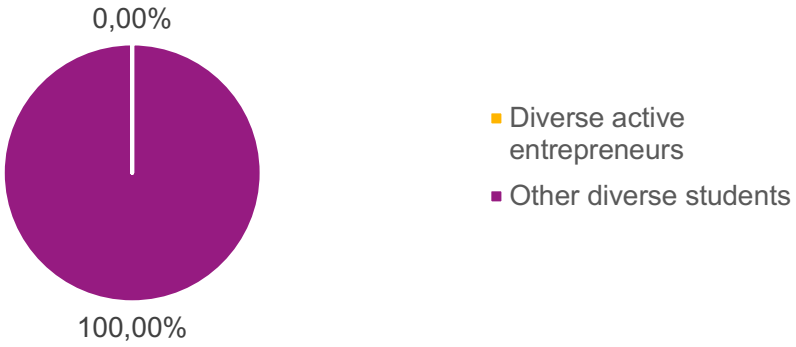


Figure 49: Share diverse active entrepreneurs (Valid responses N=15)



6.1.3 Nationality

Figure 50 shows that 4.63% of Swedish students are active entrepreneurs, indicating a significant portion of the local student population is engaged in entrepreneurial activities. Figure 51 indicates that 12.05% of non-Swedish students are active entrepreneurs, highlighting a substantial presence of international students among the entrepreneurial community.

Figure 50: Share active entrepreneurs among Swedish students (Valid responses N=191)

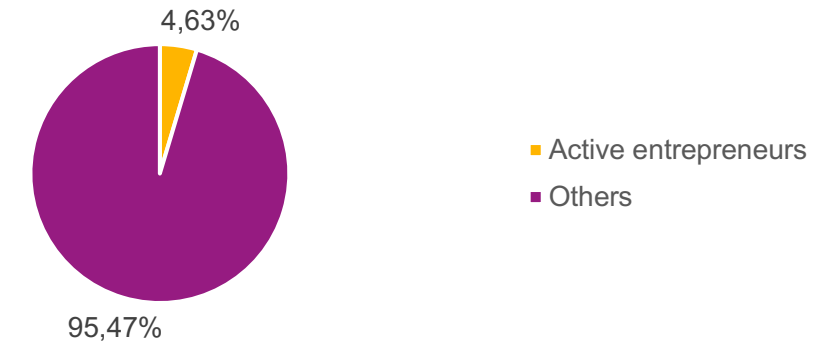
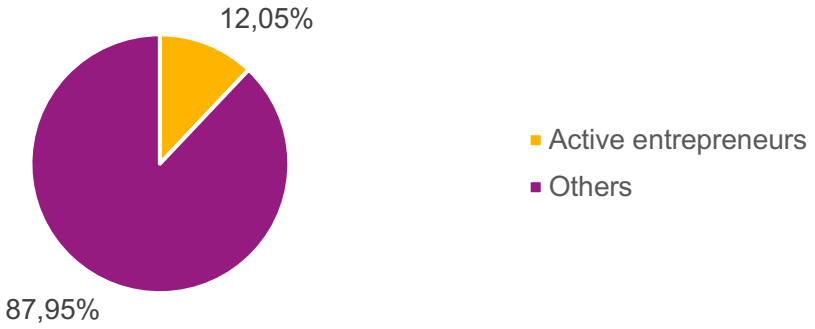


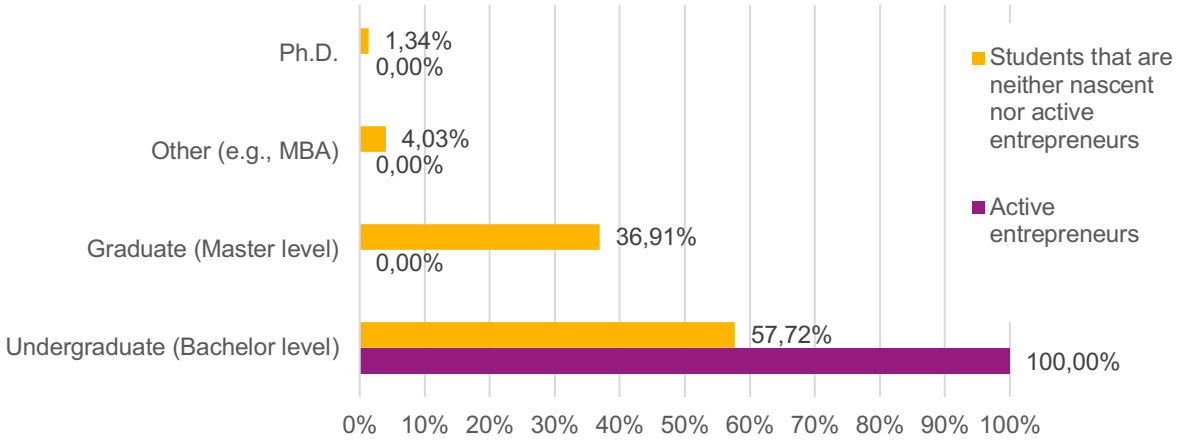
Figure 51: Share active entrepreneurs among other nationalities (Valid responses N=191)



6.1.4 Study level

Among active entrepreneurs, 100% are at the undergraduate (Bachelor) level, indicating that entrepreneurial activity is concentrated among students earlier in their academic journey. In contrast, the group of students who are neither nascent nor active entrepreneurs shows a more varied distribution. Specifically, 57.72% are at the undergraduate (Bachelor) level, 36.91% are at the graduate (Master) level, 4.03% are enrolled in other programs like MBA, and 1.34% are pursuing a PhD. This suggests that entrepreneurial pursuits are more prevalent among undergraduate students, while those at more advanced study levels tend to engage less in entrepreneurship.

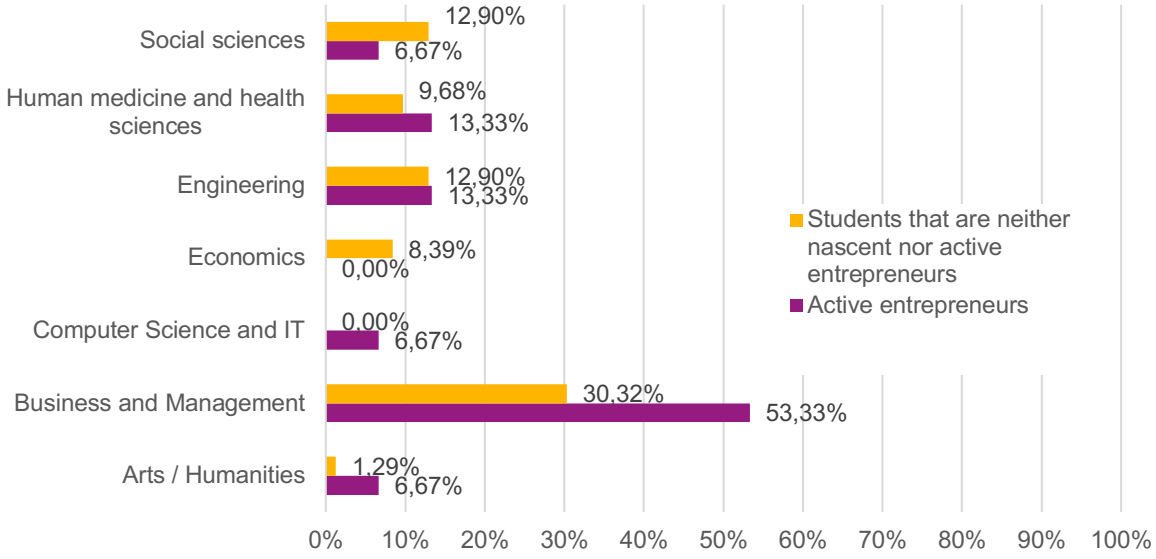
Figure 52: Study level - active entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses active entrepreneurs N=15, students that are neither nascent nor active entrepreneurs N=155)



6.1.5 Main field of study

Figure 53 shows that among active entrepreneurs, 53.33% are from business/management, 13.33% each from human medicine/health sciences and engineering (including architecture), and 6.67% each from arts/humanities, computer sciences/IT, and social sciences. In contrast, students who are neither nascent nor active entrepreneurs have a more diverse distribution across fields of study. The largest group, 30.32%, comes from business/management, followed by 14.84% from computer sciences/IT, and 12.90% each from social sciences and engineering. Only 9.68% are from human medicine/health sciences, which is significantly lower than the representation among active entrepreneurs. Other fields, such as economics (8.39%) and arts/humanities (1.29%), are also represented in this group. This suggests that while active entrepreneurs are highly concentrated in business/management, the general student population not engaged in entrepreneurship is more evenly distributed across various disciplines.

Figure 53: Main field of study – active entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses active entrepreneurs N=5, students that are neither nascent nor active entrepreneurs N=149)

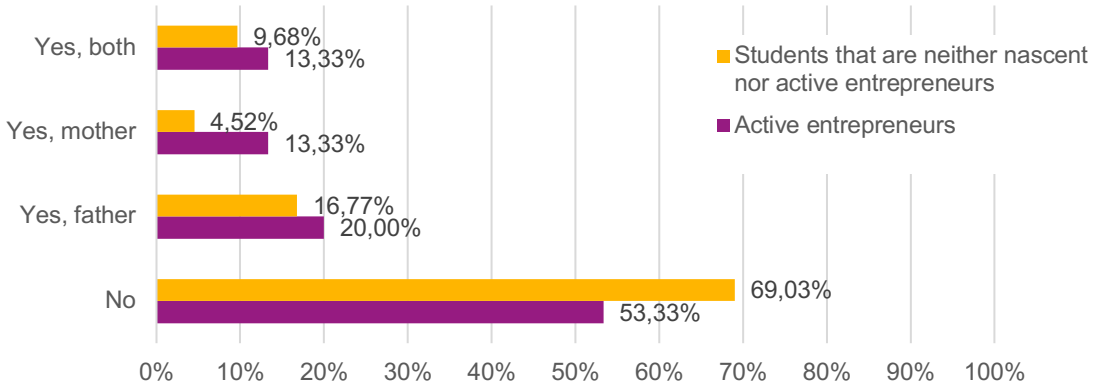


6.2 Characteristics

6.2.1 Family background

Figure 54 illustrates the self-employment status of family members among active entrepreneurs compared to students who are neither nascent nor active entrepreneurs. The data reveals that a higher percentage of active entrepreneurs have self-employed parents, with 20% having a self-employed father, and 13.33% each reporting self-employment of both parents or their mother. In contrast, 69.03% of students who are neither nascent nor active entrepreneurs have no self-employed parents. This suggests that exposure to entrepreneurship within the family, particularly from either parent or both, may significantly influence the decision to pursue entrepreneurial ventures.

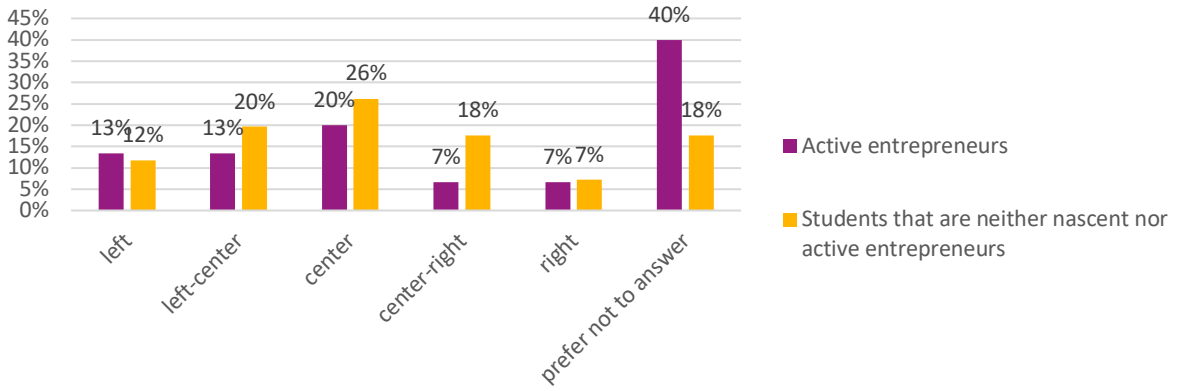
Figure 54: Self-employment of family members – active entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses active entrepreneurs N=15, students that are neither nascent nor active entrepreneurs N=155)



6.2.2 Political perspectives

Figure 55 presents the political orientation of active entrepreneurs compared to their non-entrepreneurial peers. Among active entrepreneurs, 40% prefer not to disclose their political views, while 20% identify in the center (3), and 13.33% each lean to the left (1) and slightly left (2). In contrast, students who are neither nascent nor active entrepreneurs show a more even distribution across the spectrum, with 26.14% identifying in the center (3) and a broader spread across the left and right. This suggests that active entrepreneurs may be less inclined to express strong political opinions publicly, with a higher tendency to refrain from disclosing their views compared to their non-entrepreneurial peers.

Figure 55: Political orientation – active entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses active entrepreneurs N=15, students that are neither nascent nor active entrepreneurs N=153)



6.2.3 Psychological traits

Figures 56-61 compare subjective well-being, entrepreneurial self-efficacy, and resilience between active entrepreneurs and non-entrepreneurs.

Figure 56 presents a boxplot of life satisfaction statements, showing how both groups rate their satisfaction across different dimensions, such as "Life is close to my ideal" and "The conditions of my life are excellent." Active entrepreneurs tend to show less variation in their responses, while non-entrepreneurs exhibit a broader range, especially for statements like "I would change almost nothing."

Figure 56: Subjective well-being / life satisfaction – active entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses active entrepreneurs N=14 or 15, students that are neither nascent nor active entrepreneurs N=154 or 155)

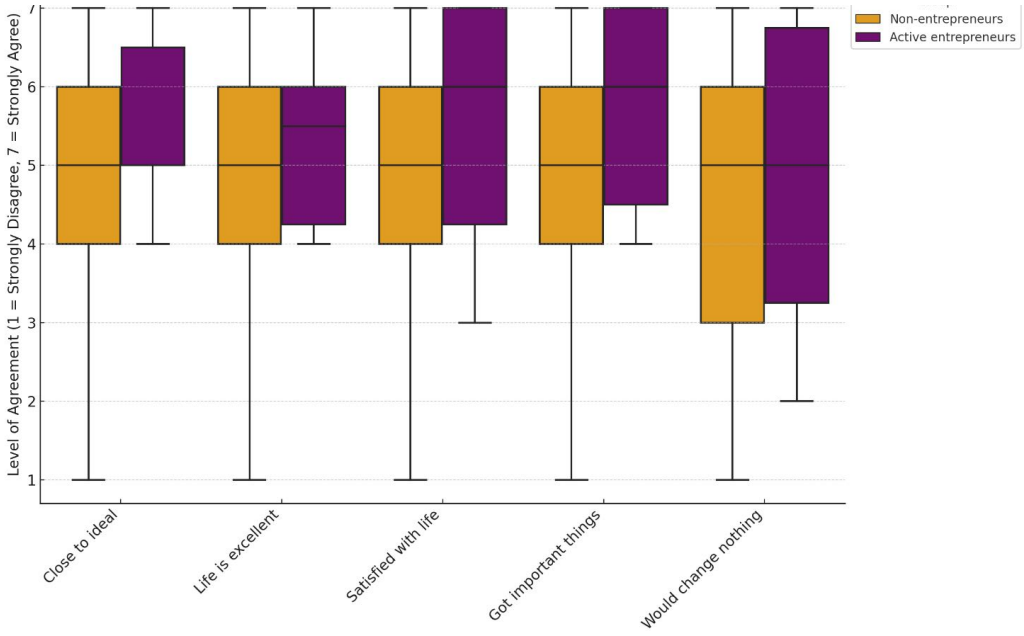


Figure 57 provides the aggregated life satisfaction scores, revealing that active entrepreneurs generally have more compact distributions with slightly higher scores, whereas non-entrepreneurs show a more varied range of overall life satisfaction.

Figure 57: Aggregated life satisfaction – active entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses active entrepreneurs N=14 or 15, students that are neither nascent nor active entrepreneurs N=154 or 155).

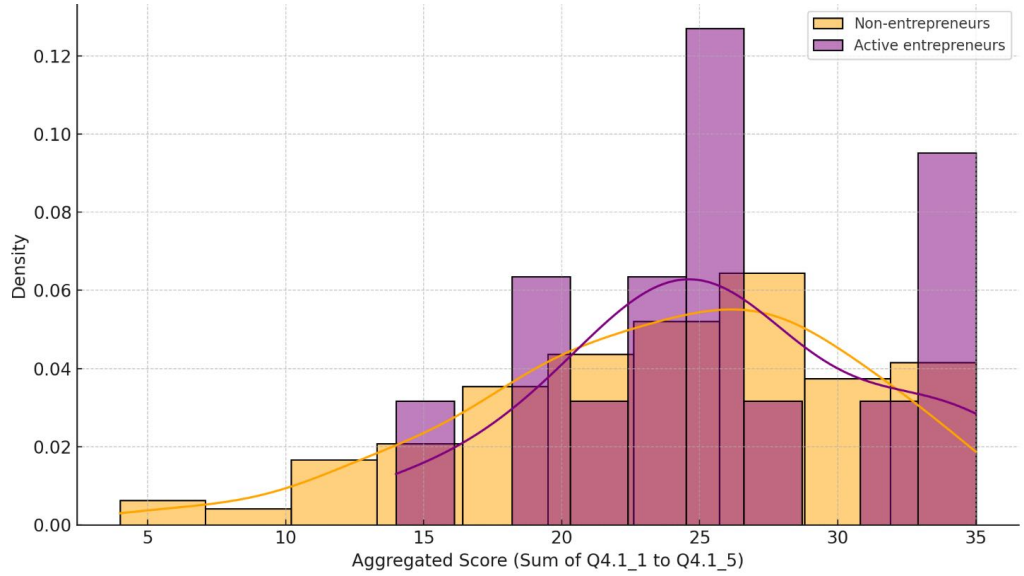


Figure 58 displays a boxplot of entrepreneurial self-efficacy, where active entrepreneurs consistently report higher confidence across skills like discovering business opportunities, creating products, and thinking creatively. Non-entrepreneurs show more variability in their responses, indicating a broader range of confidence in entrepreneurial abilities.

Figure 58: Entrepreneurial self-efficacy – active entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses active entrepreneurs N=14 or 15, students that are neither nascent nor active entrepreneurs N=154 or 155)

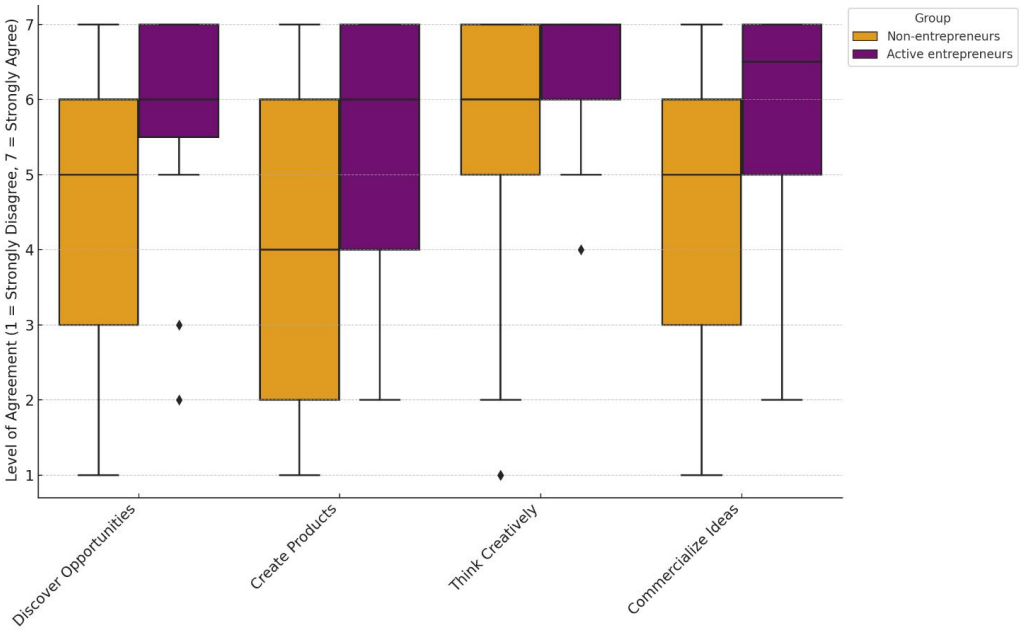
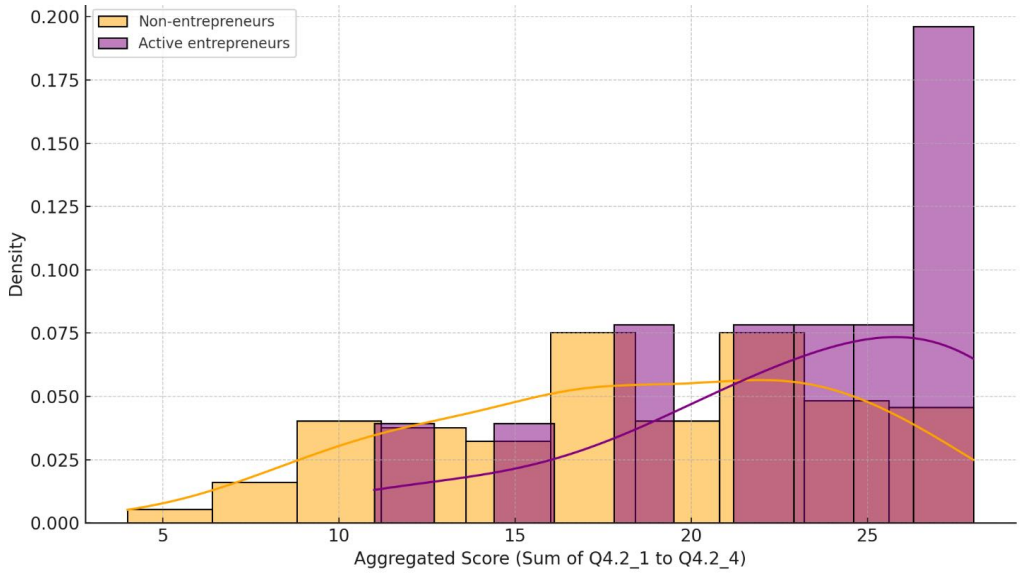


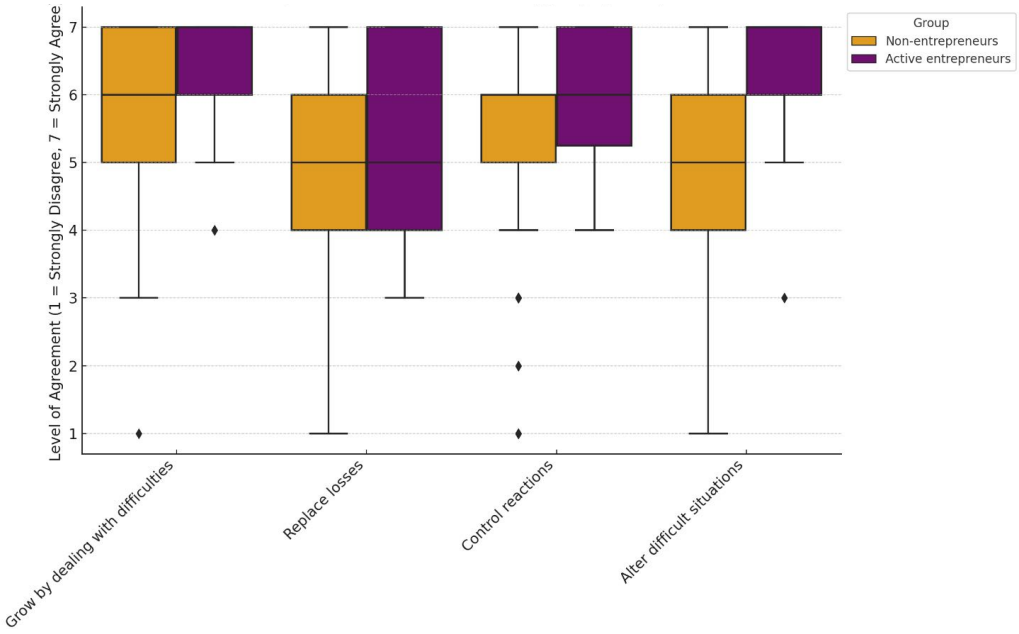
Figure 59 follows with the aggregated entrepreneurial self-efficacy scores, demonstrating that active entrepreneurs tend to have higher overall scores, with a more condensed distribution, while non-entrepreneurs display a more dispersed range of entrepreneurial self-beliefs.

Figure 59: Aggregated entrepreneurial self-efficacy – active entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses active entrepreneurs N=14 or 15, students that are neither nascent nor active entrepreneurs N=154 or 155)



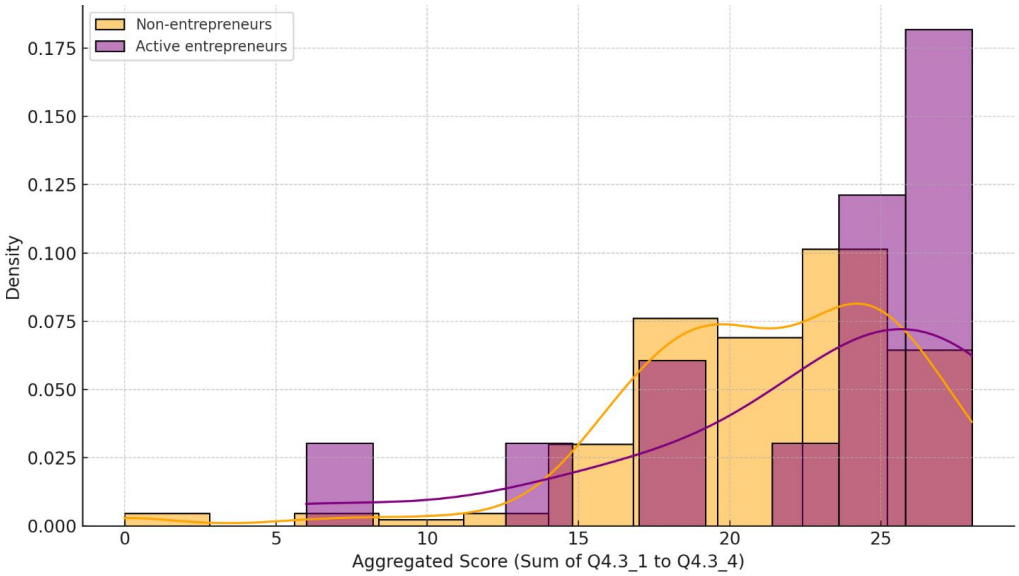
In Figure 60, the boxplot of resilience statements shows that active entrepreneurs report higher and more consistent confidence in their ability to grow from challenges and creatively alter difficult situations, whereas non-entrepreneurs again show more diversity in their responses.

Figure 60: Resilience – active entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses active entrepreneurs N=14 or 15, students that are neither nascent nor active entrepreneurs N=154 or 155)



Finally, Figure 61 presents the aggregated resilience scores, highlighting that active entrepreneurs tend to score higher overall in resilience, with a more compact distribution, while non-entrepreneurs exhibit a wider spread of scores, suggesting more variability in how they perceive their ability to cope with adversity.

Figure 61: Aggregated Resilience – active entrepreneurs vs. students that are neither nascent nor active entrepreneurs (Valid responses active entrepreneurs N=14 or 15, students that are neither nascent nor active entrepreneurs N=154 or 155)



Overall, these figures indicate that while active entrepreneurs demonstrate greater consistency and higher confidence in entrepreneurial self-efficacy and resilience, subjective well-being remains more evenly distributed between the two groups.

6.3 Business-related information

6.3.1 General information

Figure 62 shows that most businesses were established in more recent years, with a noticeable concentration between 2010 and 2020. There are fewer businesses founded in earlier years, with only a small percentage established before 2000. The distribution also indicates a gradual increase in business establishments up until around 2020, after which there is a slight decline. This suggests that a significant portion of active entrepreneurs in the dataset have relatively young businesses, with a majority founded in the last decade.

Figure 62: Founding year (Valid responses N=15)

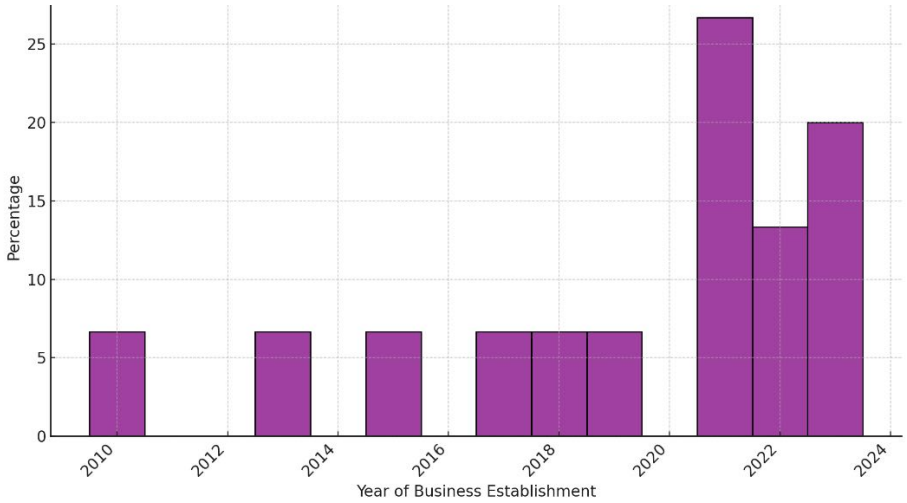


Figure 63 reveals that a significant majority of businesses have a small number of employees, with most having no employees. This suggests that many of the businesses in the dataset are small-scale operations, solo entrepreneurs or businesses with just a few staff members. The distribution shows a sharp decline as the number of employees increases, indicating that larger businesses with a higher number of employees are much less common among active entrepreneurs in this group.

Figure 63: Number of employees (Valid responses N=15)

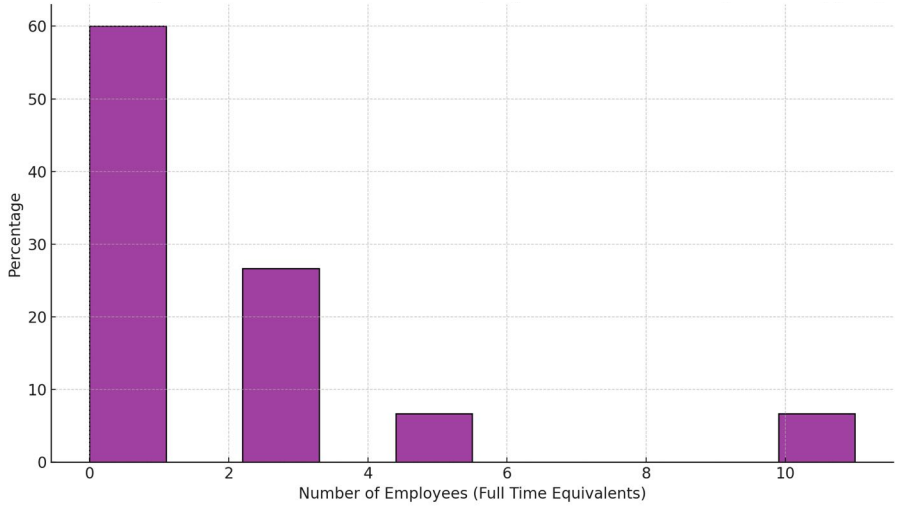


Figure 64 presents the economic sectors in which these businesses operate. The majority of businesses (47%) are concentrated in the tertiary sector, indicating that a significant portion of respondents are involved in service-related industries such as retail, education, and health care. A notable percentage (27%) operates in the quaternary sector, which includes knowledge-based industries such as IT and research. Meanwhile,

smaller proportions of businesses are in the secondary sector (13%), which includes manufacturing and construction, and other sectors (13%). No businesses are found in the primary sector, reflecting the low level of involvement in industries like agriculture or mining.

Figure 64: Economic sector (Valid responses N=15)

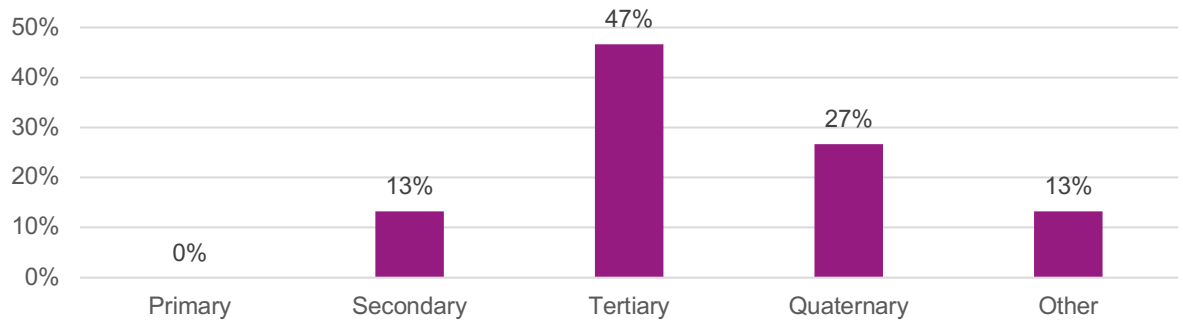


Figure 65 addresses students' main occupation plans after graduation. The data shows that a large percentage (73.33%) of respondents do not plan to create their own business immediately after graduation, while 26.66% have entrepreneurial intentions. This suggests that while many students are interested in entrepreneurship, the majority still prefer to seek employment or pursue other opportunities in the short term.

Figure 65: Main occupation plans (Valid responses N=15)

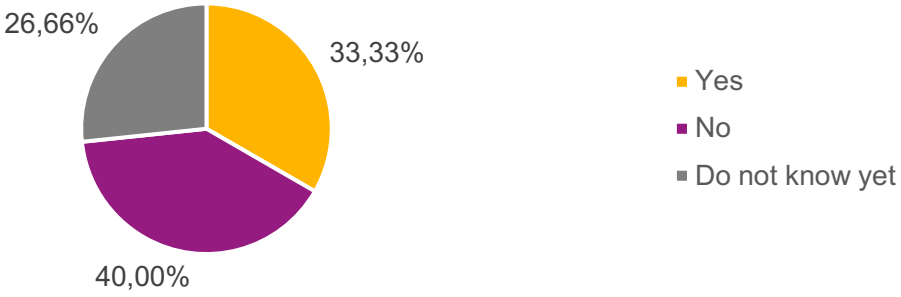


Figure 66 explores the business creation history of the respondents. Here, 40% of the respondents indicated that they have not created a business, while 33.33% have done so. Meanwhile, 26.66% remain uncertain about their plans. This division highlights the fact that while a good portion of students are already entrepreneurs, a significant number are still undecided, reflecting a mixture of entrepreneurial readiness and uncertainty.

Figure 66: Business creation history (Valid responses N=15)

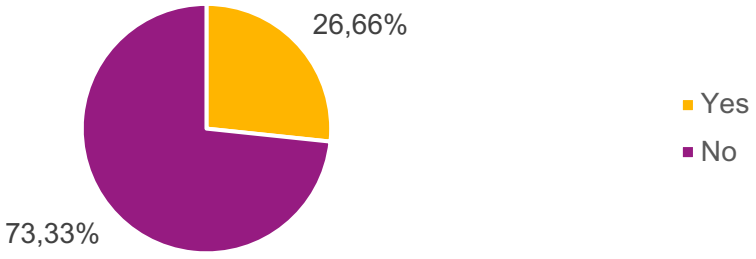
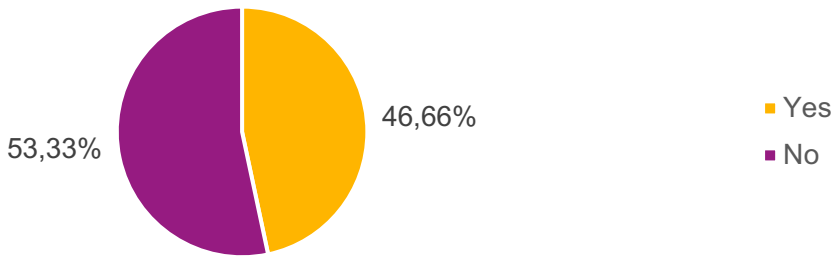


Figure 67 shows that 46.66% of businesses are located within the respondents' home country, while 53.33% are situated outside the country. This distribution indicates a relatively balanced split between local and international business locations, demonstrating that a number of entrepreneurs are thinking globally or tapping into international markets.

Figure 67: Business location (Valid responses N=15)



6.3.2 Financial aspects and evolvement

Figure 68 displays the ownership share distribution among active entrepreneurs. The largest group, representing 46.7%, holds a minority ownership share of 0-49%. The remaining respondents are split evenly between those who have an equal ownership share of 50%, accounting for 26.7%, and those who have a majority ownership share of 51-100%, also representing 26.7%. This suggests that nearly half of the respondents have a minority stake in their business, while the rest are evenly divided between equal and majority ownership.

Figure 68: Ownership share (Valid responses N=15)

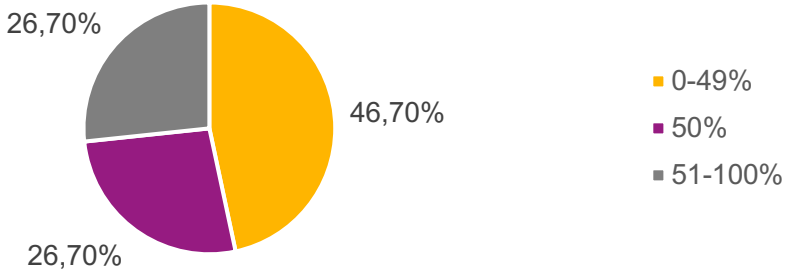


Figure 69 illustrates the reception of venture capital funding among active entrepreneurs. The overwhelming majority, 93.33%, reported that they have not received venture capital funding for their business. A small minority, 6.66%, indicated that they have secured venture capital funding. This suggests that venture capital funding is relatively uncommon among this group of active entrepreneurs.

Figure 69: Reception of venture capital funding (Valid responses N=15)

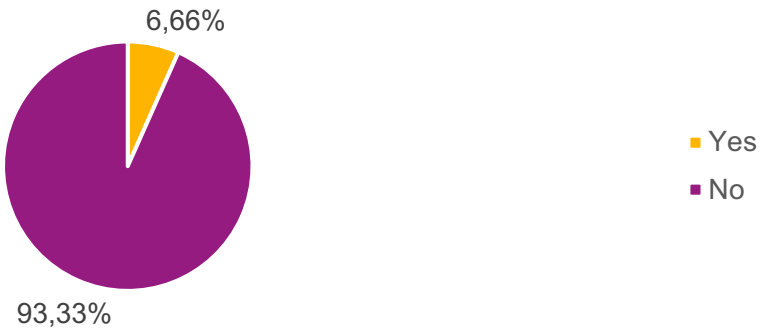


Figure 70 illustrates the degree of change in business ideas among active entrepreneurs. The chart shows that 27% of respondents indicated that their business idea has "changed very little," while another 27% reported that their idea "changed" and an equal 27% said their idea "changed very much." Interestingly, no respondents indicated that their idea "changed little," while 13% reported that their business idea has "changed much." This distribution suggests that a majority of entrepreneurs experienced some level of significant change in their business idea, with relatively few reporting minimal changes.

Figure 70: Degree of business idea change (Valid responses N=15)

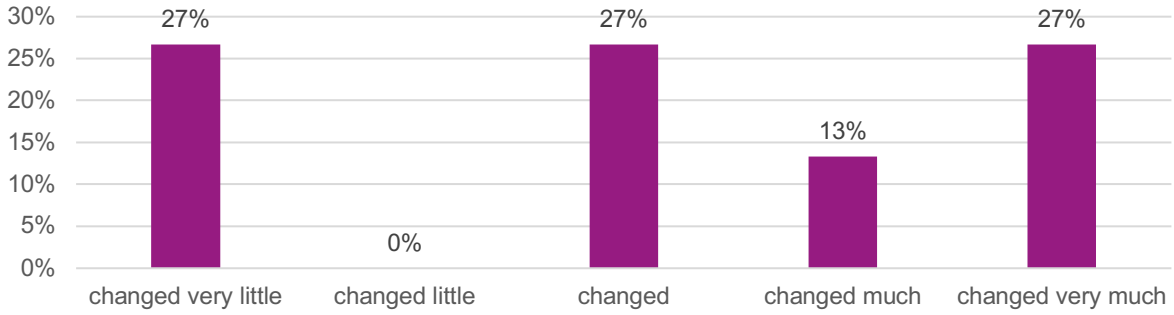
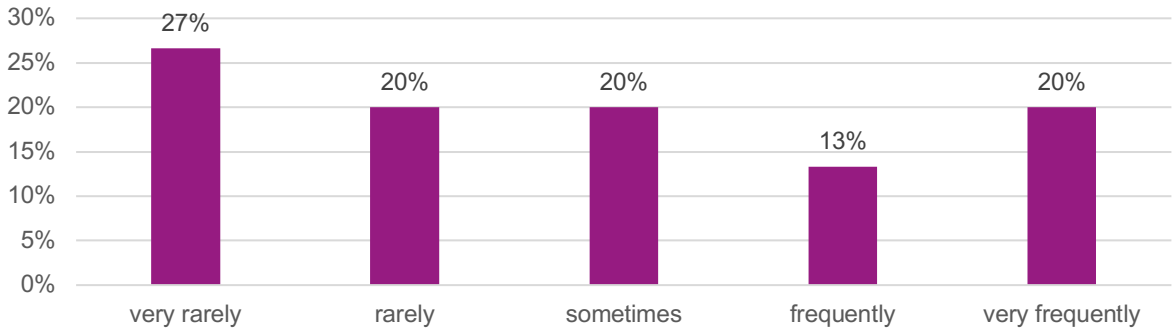


Figure 71 shows the frequency of business idea changes among respondents. The largest group, 27%, reported that they change their business idea "very rarely." Another 20% indicated that they "rarely" or "sometimes" change their idea, while 13% reported changing their business idea "frequently." Additionally, 20% of respondents stated that they change their business idea "very frequently." This distribution indicates a broad range of approaches to modifying business ideas, with a notable portion of respondents changing their ideas either infrequently or frequently.

Figure 71: Frequency of business idea change (Valid responses N=15)



6.3.3 Business outcomes

Figure 72 and Figure 73 examine firm performance using measures adapted from the works of Dess & Robinson (1984) and Eddleston et al. (2008). These well-established frameworks assess five key dimensions:

sales growth, market share growth, profit growth, job creation, and innovativeness. In Figure 72, the boxplot shows how firms rate their performance on a scale from 1 (much worse) to 7 (much better) relative to competitors. The results suggest that most firms view themselves favorably, especially in sales growth and market share growth, where ratings tend to be higher. However, there is more variation in job creation and innovativeness, indicating that these aspects may be more challenging for some firms. Figure 73, which shows the aggregated performance scores, confirms this overall trend. The aggregated scores cluster in the higher range, reinforcing that many businesses believe they are performing well across multiple dimensions, despite some variability in specific areas.

Figure 72: Firm performance compared to competitors (Valid responses N=14)

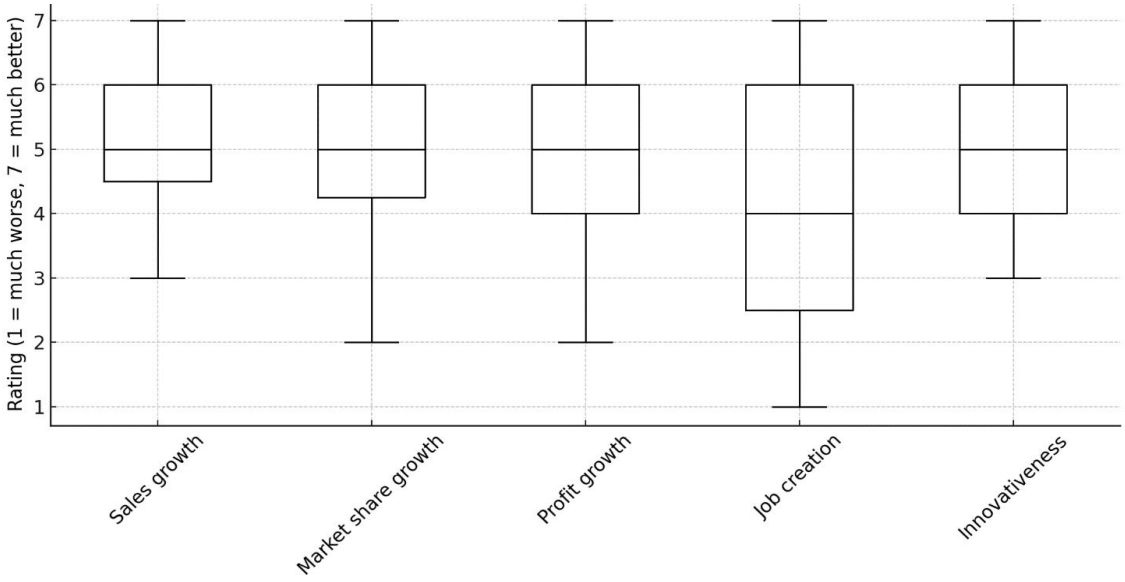


Figure 73: Firm performance compared to competitors aggregated (Valid responses N=14)

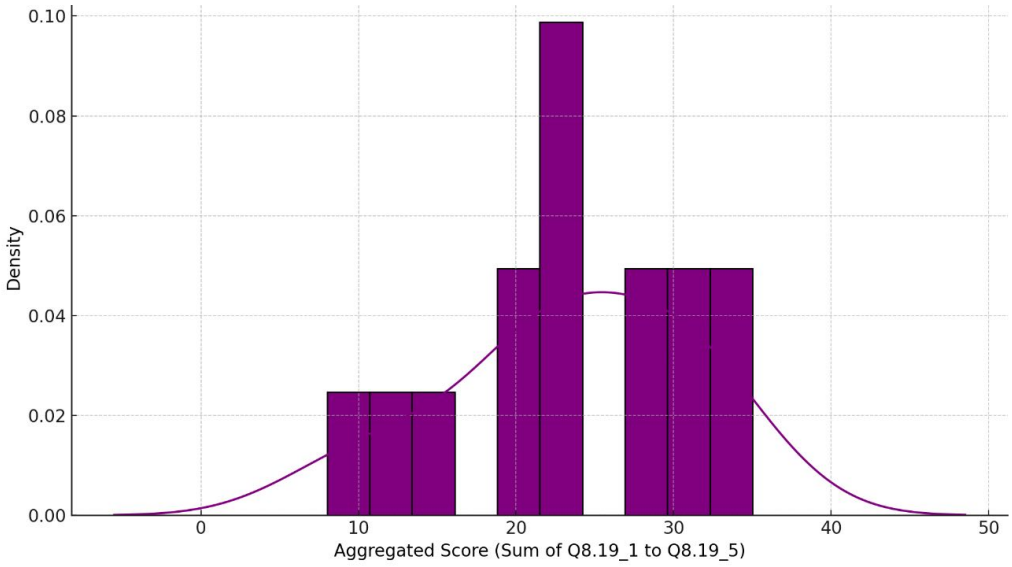


Figure 74 and Figure 75 assess the social and environmental performance of firms using measures based on Hooi et al. (2016). These measures capture a firm's commitment to societal well-being, social responsibility, environmental protection, and sustainable growth. Figure 74 presents the boxplots for these four dimensions, showing that many businesses actively contribute to campaigns promoting societal well-being and place a strong emphasis on social responsibility. However, there is some variability, particularly in the area of environmental protection, where firms may differ in their level of involvement. Figure 75, which shows the aggregated scores for social and environmental performance, indicates that while most businesses

score highly overall, suggesting a strong commitment to sustainability, some may prioritize certain areas more heavily than others. This distribution reflects diverse approaches to social and environmental responsibilities, with some firms leading the way in sustainability efforts and others focusing more selectively on specific aspects.

Figure 74: Social and environmental performance (Valid responses N=14)

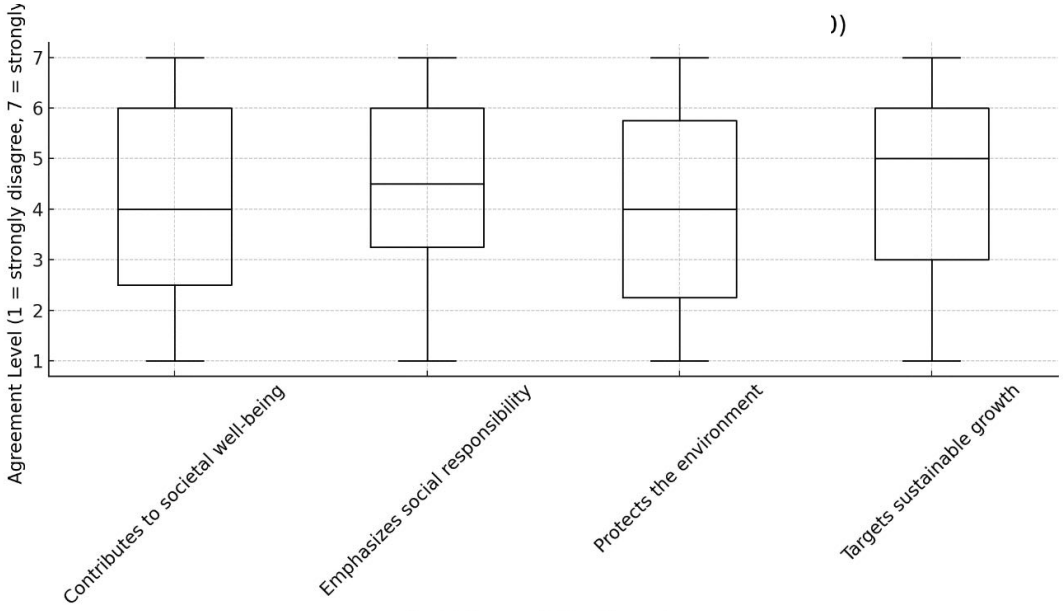
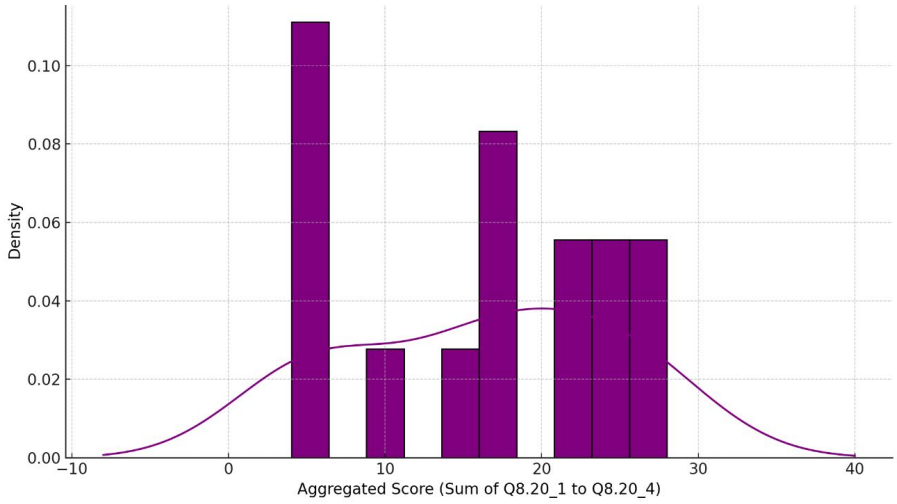


Figure 75: Social and environmental performance aggregated (Valid responses N=14)



6.4 Entrepreneurial behavior

6.4.1 Business idea

Figure 76 illustrates how entrepreneurs approach business ideation across various dimensions, such as understanding customer problems, seeking multiple perspectives, and aligning products with market needs. Most responses show high levels of agreement, indicating that these practices are widely adopted. However, there is more variability in responses related to controlling emotions and writing business plans, suggesting

that these aspects are less consistently emphasized. Building on this, Figure 77 presents the aggregated business ideation scores, where the majority of entrepreneurs fall between 60 and 80. This reflects a strong overall commitment to structured ideation practices, though the variability in certain areas.

Figure 76: Business ideation (Valid responses = 14)

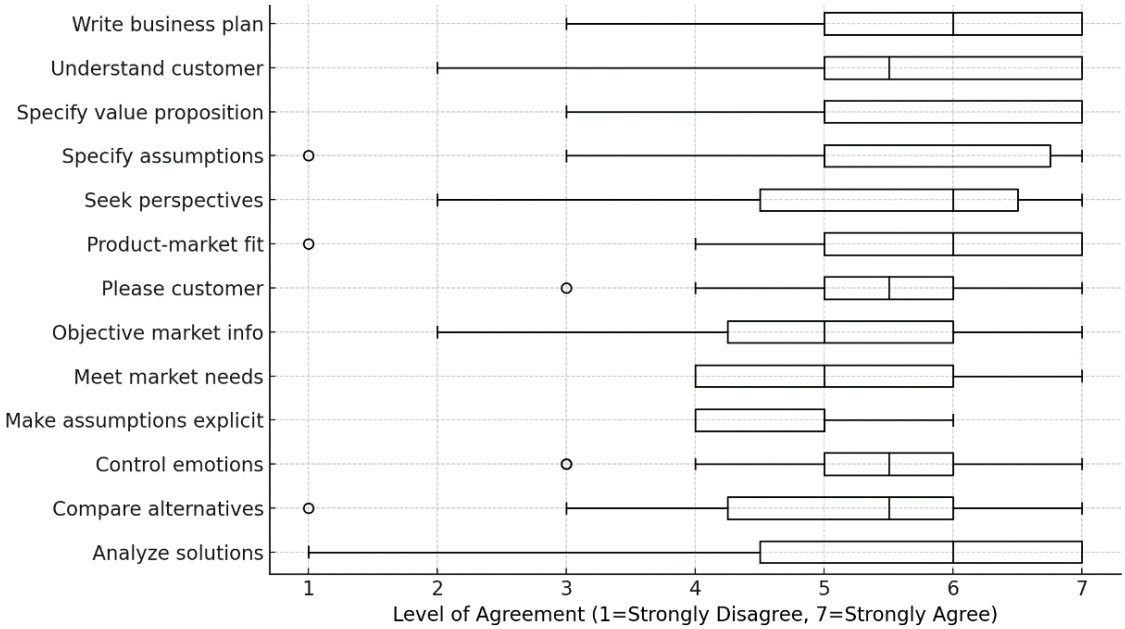
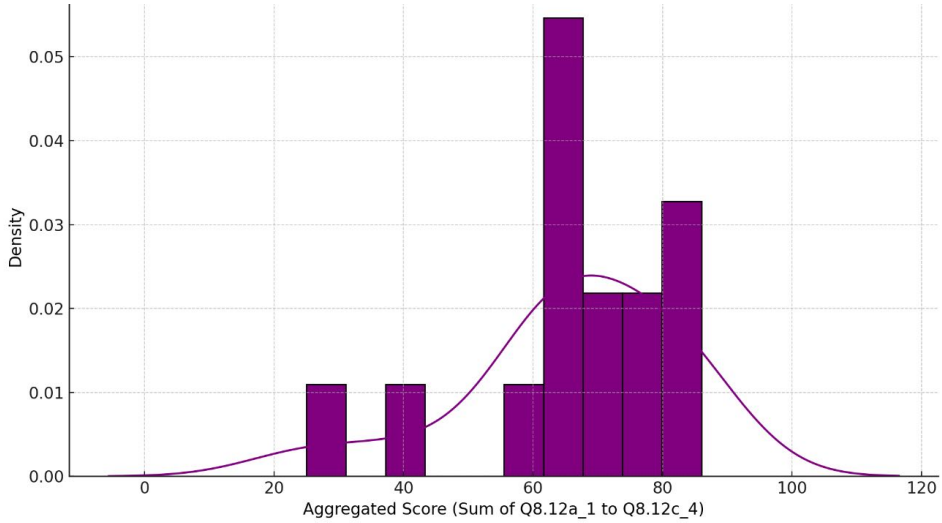


Figure 77: Business ideation aggregated (Valid responses = 14)



6.4.2 Lean startup entrepreneurship

This boxplot highlights entrepreneurs' approaches to lean startup principles, such as getting to a minimum viable product (MVP) quickly, testing multiple ideas, and pivoting rapidly. Most entrepreneurs show a high level of agreement with these practices, with median responses around 5-6. However, there is some variability, especially regarding the speed of pivoting, where a few entrepreneurs take a more cautious approach. Building on this, Figure 79 presents the aggregated score for these lean startup practices. The majority of scores fall between 10 and 20, showing that most entrepreneurs actively engage with lean startup methodologies. However, the variation in scores reflects the differences in how rigorously these practices are applied.

Figure 78: Lean startup entrepreneurship (Valid responses N=14)

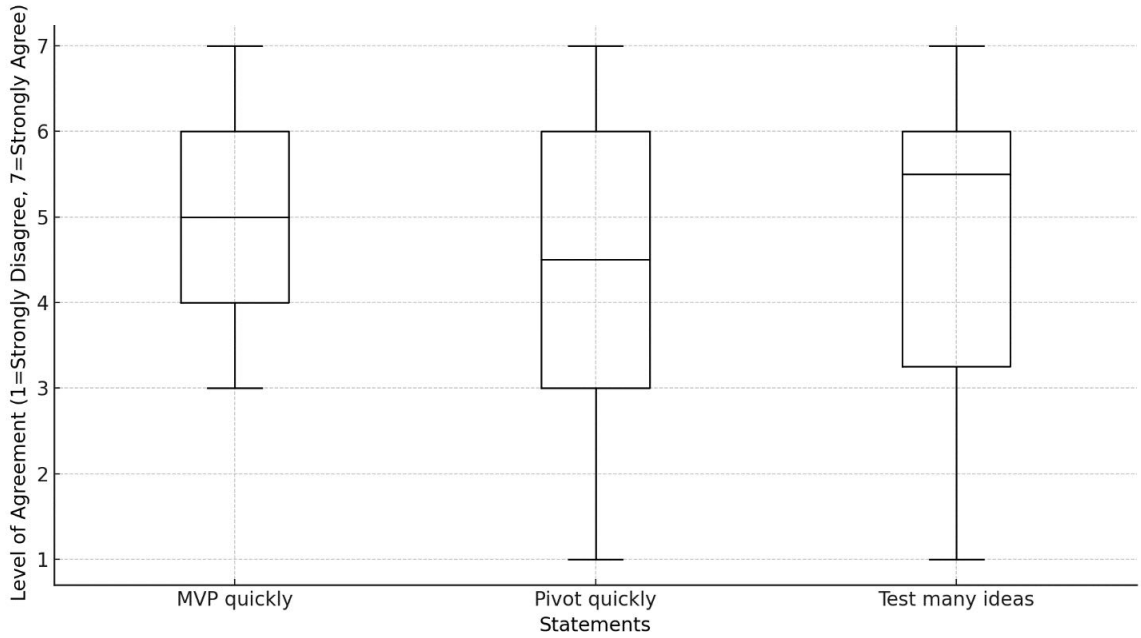
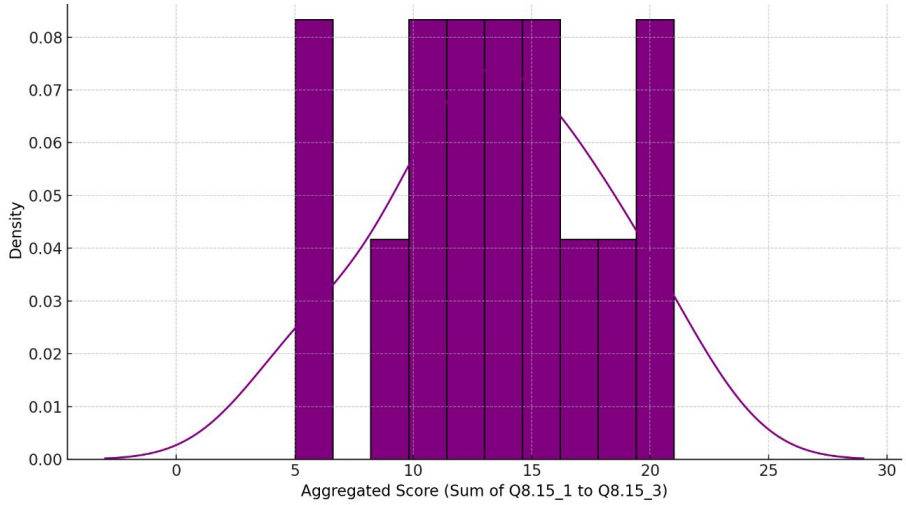


Figure 79: Lean startup entrepreneurship aggregated (Valid responses N=14)



6.4.3 Dark traits

This section explores the presence of dark personality traits—Machiavellism, Psychopathy, and Narcissism—among active entrepreneurs. These traits are measured across twelve statements, grouped into three categories: Machiavellism (statements 1-4), Psychopathy (statements 5-8), and Narcissism (statements 9-12), as defined by Jonason & Webster (2010).

Figure 80 shows the distribution of agreement with these statements, where respondents rated their tendencies related to manipulation, deceit, lack of remorse, callousness, and a desire for admiration. The boxplot highlights the variability in responses, with some respondents strongly agreeing with traits like seeking attention and admiration (narcissism), while there is a broader spread of responses for traits such as manipulation and callousness. Figure 81 presents the aggregated score for all dark traits. The distribution of the aggregated score reveals that most respondents show moderate levels of dark personality traits, with some exhibiting higher levels, particularly in the areas of Machiavellism and Narcissism.

Figure 80: Dark traits (Valid responses N=14)

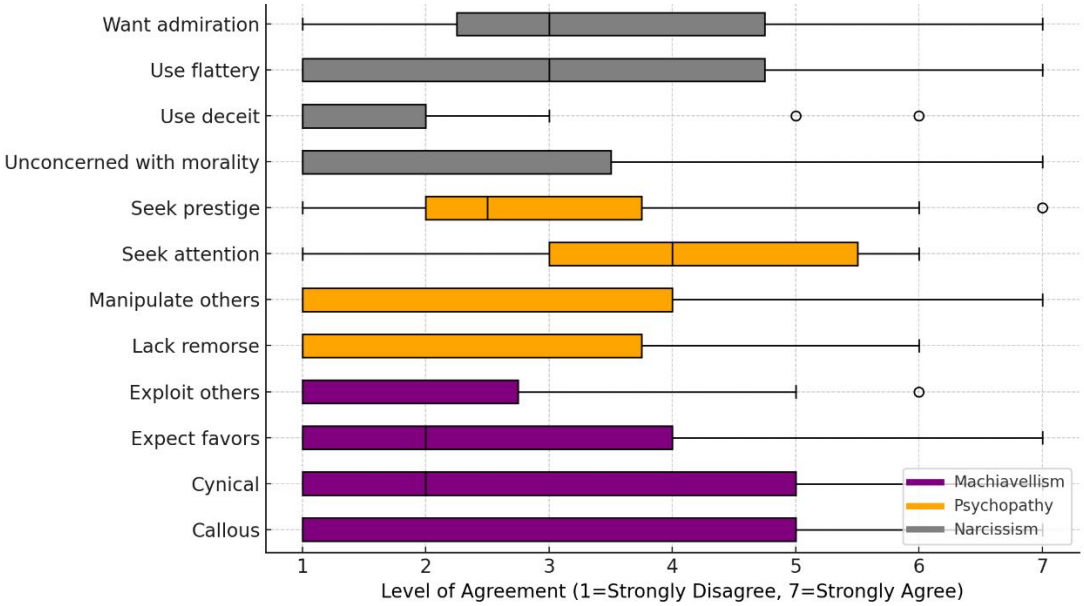
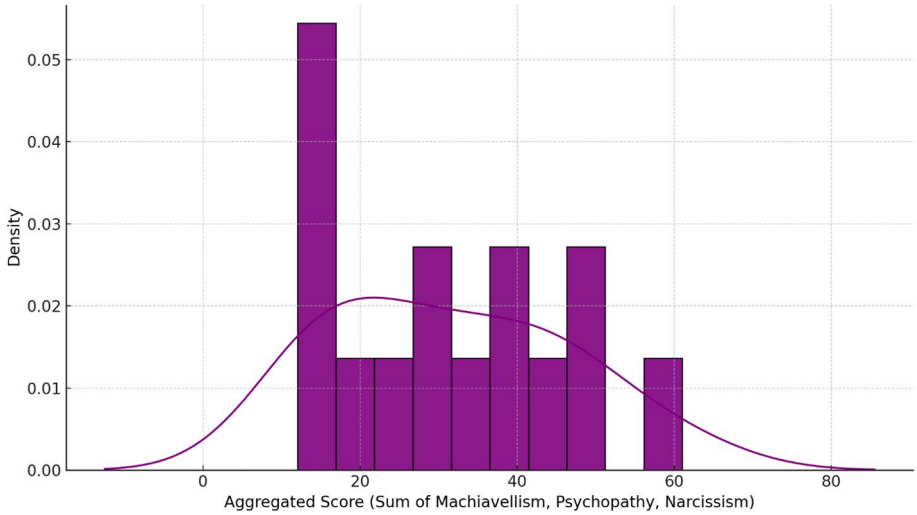


Figure 81: Dark traits aggregated (Valid responses N=14)



6.4.4 Causation

Causation refers to a structured and deliberate approach to business planning and decision-making. The data is based on responses to five statements that measure different aspects of causation, following the framework by Chandler et al. (2011). Entrepreneurs rated their agreement with statements about analyzing long-term opportunities, planning strategies, implementing control processes, researching markets, and planning production and marketing efforts.

Figure 82 presents a boxplot illustrating the distribution of responses for each of these causation statements. The results show that most entrepreneurs agree with these structured approaches to business foundations, particularly in areas like planning strategies and researching markets. There is some variability in responses related to implementing control processes, which suggests that not all entrepreneurs emphasize formal control mechanisms as part of their business foundation efforts.

Figure 83 shows the distribution of the aggregated causation score, which sums the responses across

the five statements. The majority of aggregated scores are concentrated in the mid-to-upper range, indicating that most entrepreneurs adopt a structured, causation-based approach to planning their businesses. However, the spread of scores highlights that some entrepreneurs apply these practices more rigorously than others, with a few scoring lower on the aggregated scale.

Figure 82: Causation (Valid responses N=14)

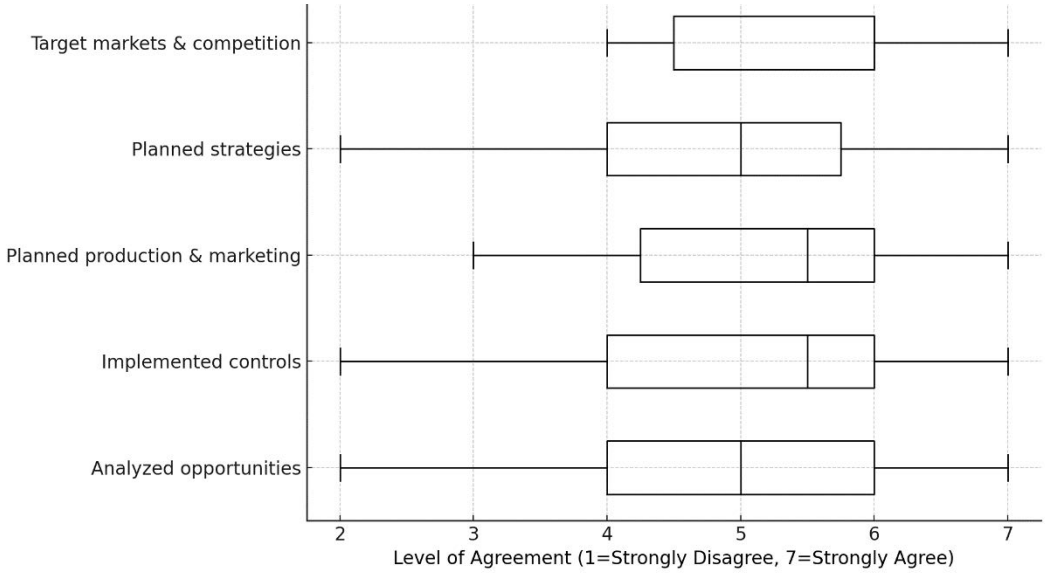
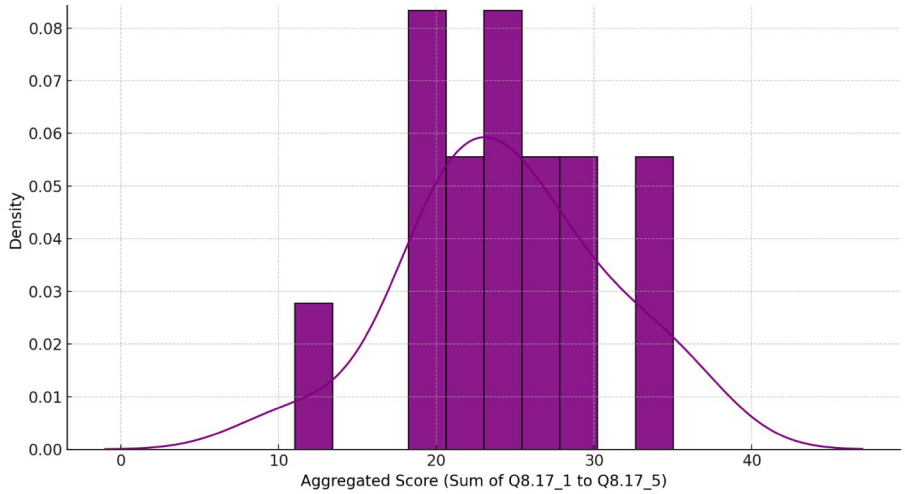


Figure 83: Causation aggregated (Valid responses N=14)



6.4.5 Entrepreneurial capabilities

Figure 84 shows that knowledge of technology is rated the highest by active entrepreneurs, with most scores near 6 out of 7. Knowledge of customer needs also . Gut feeling for opportunities displays the most variability, with scores ranging from 3 to 7, indicating diverse confidence levels in this area.

Figure 85 presents the aggregated entrepreneurial capabilities, where most respondents score between 12 and 20, with a peak around 15-20. This indicates that while entrepreneurs generally rate their capabilities as moderate to strong, a few show lower confidence across these dimensions.

Figure 84: Entrepreneurial capabilities (Valid responses N=13)

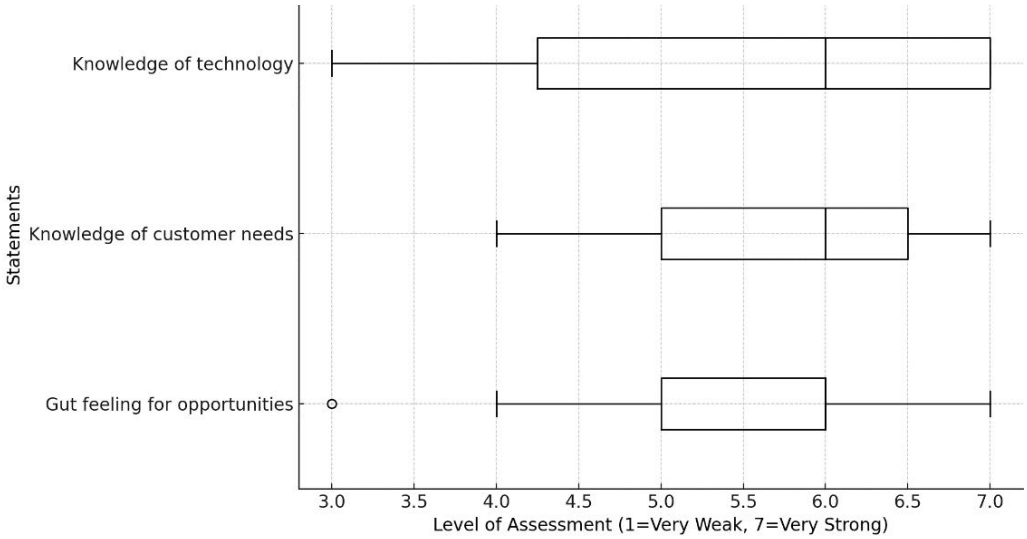
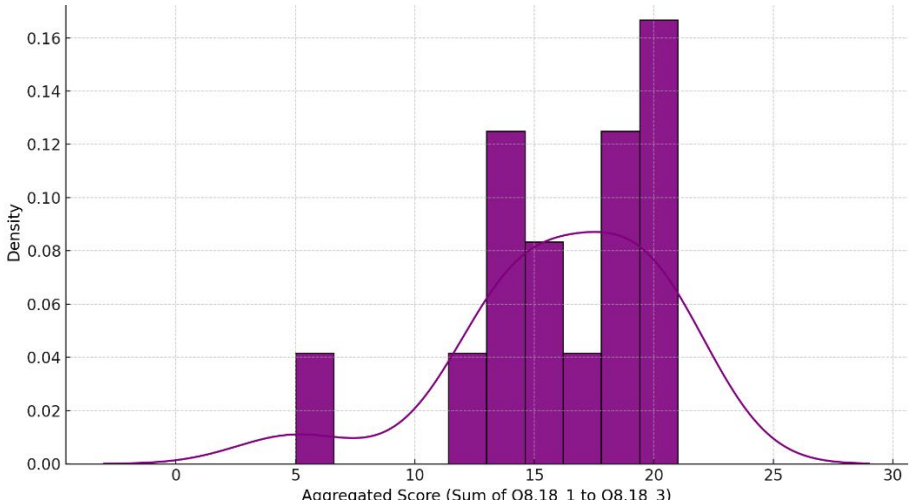


Figure 85: Entrepreneurial capabilities aggregated (Valid responses N=13)



7 Family business

Family businesses are an important part of Sweden's economy, as they are globally, contributing to employment and economic development (Sharma et al., 1997; Astrachan & Shanker, 2003). These businesses often feature overlapping family ownership and management, where decision-making is influenced by both business factors and family dynamics (Chrisman, Chua, & Sharma, 2005). A key aspect of family businesses is the focus on long-term sustainability, often with the goal of passing the business on to the next generation (Ward, 1987). However, succession planning can be complex, involving family dynamics and differing visions for the business (Handler, 1994). This section provides an analysis of family businesses in Sweden, based on responses from students whose parents own or manage businesses. It covers general business characteristics, succession intentions, and firm performance.

7.1 General information

The data on founding years shows a wide range, indicating that the businesses have been established at different points in time, reflecting both well-established and relatively newer companies. A noticeable concentration of businesses was founded from the 1980s through the 2020s. The businesses founded in more recent decades (especially from 2000 to 2020) make up a significant portion of the dataset, suggesting that many of the parents' businesses are still in the growth or consolidation phase.

Figure 86: Founding year (Valid responses N=36)

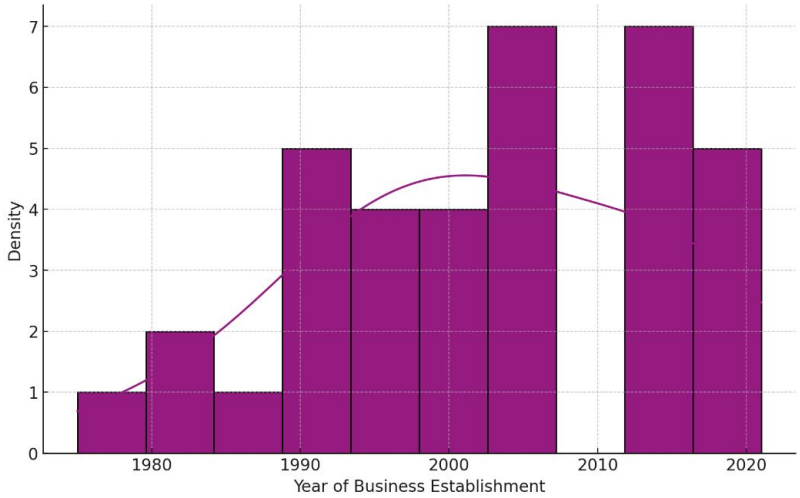
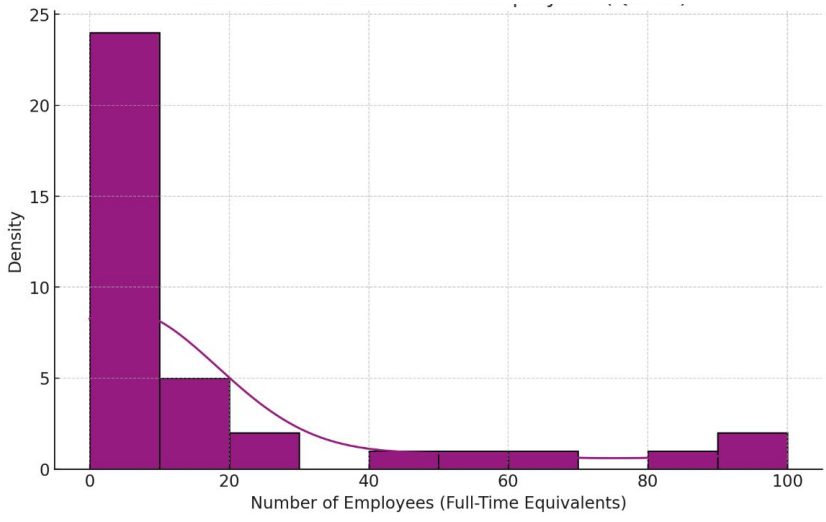


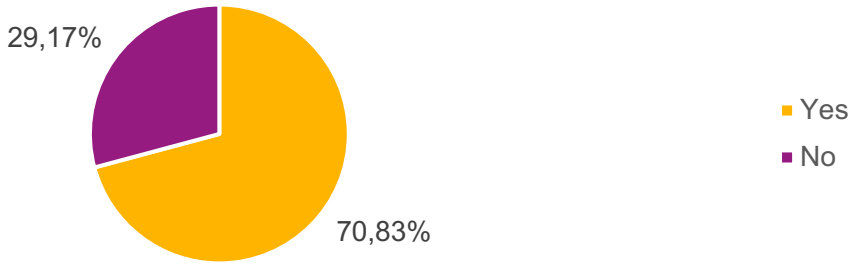
Figure 87: Number of employees (Valid responses N=37)



The distribution of employee numbers reveals that most businesses are small to medium-sized enterprises (SMEs). The majority of businesses employ fewer than 20 full-time equivalents, which is typical for family-run businesses. A few respondents reported their parents' businesses as having more than 50 employees, pointing to the presence of larger businesses within the sample. The data underscores the diversity in business sizes, but it emphasizes that most of the businesses in question are small enterprises.

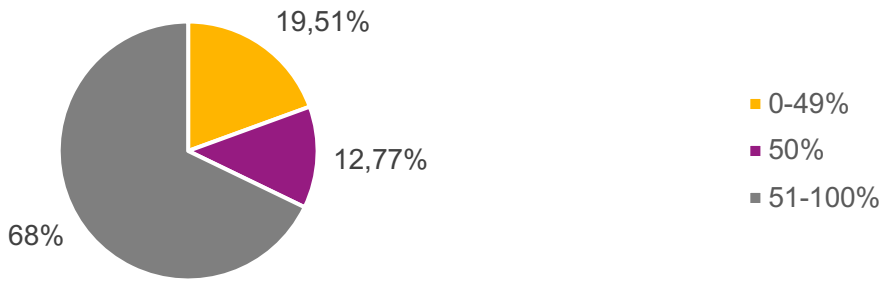
A strong majority of respondents (around 71%) indicated that their parents are still operationally involved in running the business. This suggests that the businesses are either still in the hands of the founding generation or that parents play a central role in day-to-day decision-making. This operational control highlights the direct involvement of the older generation in steering business operations, possibly signifying delayed or gradual succession planning in many cases.

Figure 88: Parents are operationally leading the business (Valid responses N=48)



The ownership of most businesses is firmly within the family's control, with a vast majority indicating that the family holds 51-100% of the ownership. This reinforces the idea that these businesses are family-owned and that the family likely has significant control over major decisions and the strategic direction of the enterprise. A smaller percentage (24%) reported 50% ownership, and very few are minority owners, suggesting that most families prefer to retain strong ownership stakes.

Figure 89: Ownership share (Valid responses N=47)



Interestingly, only 2% of respondents report having a personal ownership stake in the business, indicating that most students have not yet inherited or purchased a share of the business. This could suggest that ownership transition to the younger generation is either not planned yet, or students are involved in the business in non-ownership roles, possibly as employees or in training roles for future leadership. This reflects the early career stages of most students, where they may not yet be fully integrated into the business's ownership structure.

Despite many of these businesses being family-owned, 60% of respondents do not regard their parents' business as a "family business." This indicates a disconnect between ownership and the perception of the business as being family-driven. It may also suggest that, for many respondents, the business does not rely on multiple generations or extended family involvement, thus not fitting the traditional image of a "family business." On the other hand, 40% do consider their parents' businesses as family-run, indicating a more traditional perception of family businesses among this portion of the sample.

Figure 90: Personal ownership of student (Valid responses N=48)

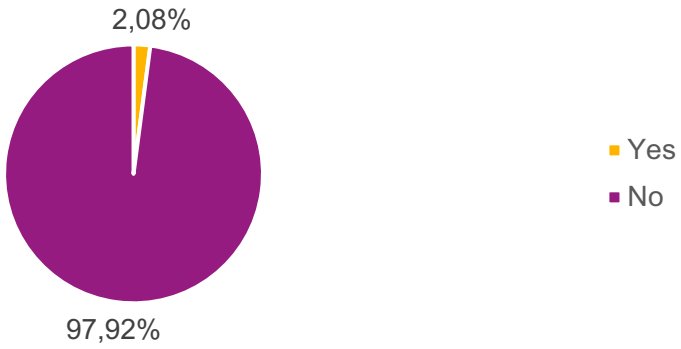
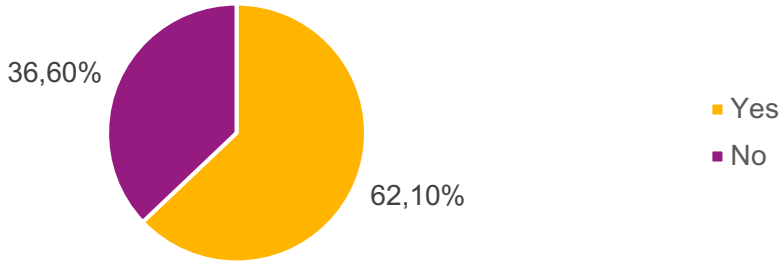
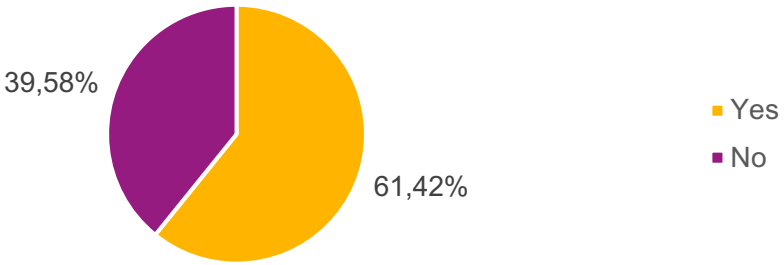


Figure 91: Student regards business as 'family business' (Valid responses N=48)



A significant proportion of students (around 62%) have worked in their parents' businesses at some point. This finding underscores the importance of family businesses as early career stepping stones for many students. Working for the family business likely allows these individuals to develop key skills and gain valuable experience in a business environment. The high proportion of students who have worked in their family businesses may also reflect cultural or familial expectations, where children are involved in the business from a young age, whether as future successors or temporary contributors.

Figure 92: Student worked for parents' business (Valid responses N=48)



The distribution of respondents' sibling count shows that a little over one-third of students do not have older siblings, while 33% have one older sibling, and the remaining 29% have two or more older siblings. This could have implications for succession planning, as family businesses with multiple children may face more complex dynamics in determining succession, especially if there are multiple candidates for future leadership roles.

The businesses represented in this survey are predominantly involved in the secondary sector, with 54% of respondents indicating that their parents' businesses are engaged in producing goods (e.g., manufacturing, construction). The quaternary sector (intellectual activities such as research, IT, education, consulting) follows with 24%. A smaller portion of businesses operate in the tertiary sector (services such as tourism, healthcare,

banking) and the primary sector (natural resources like agriculture, forestry). This data shows that the majority of respondents come from families with businesses involved in tangible production, whether in manufacturing or high-level intellectual activities.

Figure 93: Number of older siblings (Valid responses N=48)

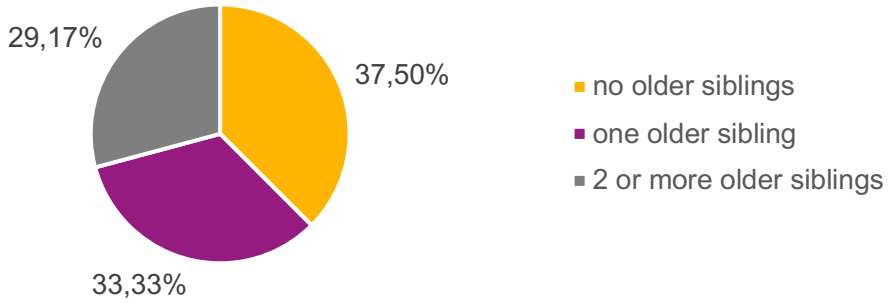
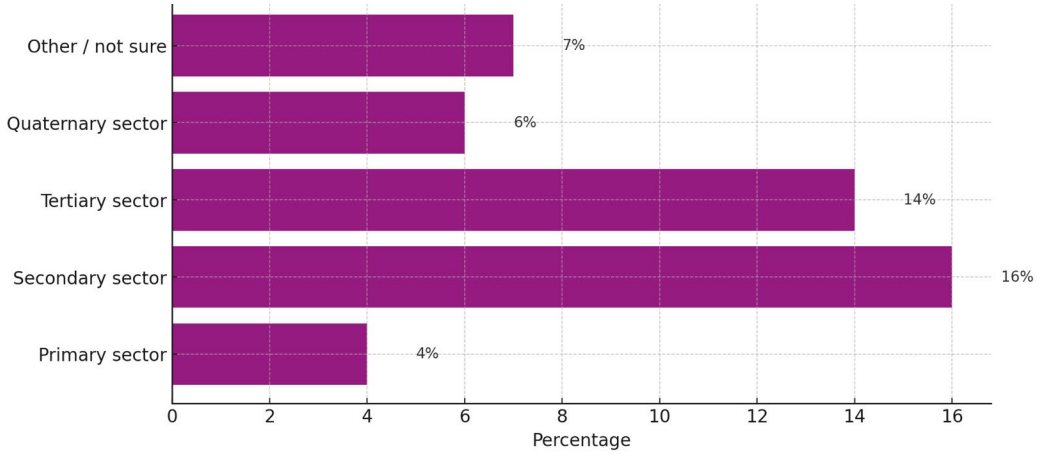


Figure 94: Economic sector (Valid responses N=47)



7.2 Succession

Succession intention is a crucial factor in determining the future of family businesses (Handler, 1994; Sharma et al., 2001). The desire to take over a family business can be shaped by multiple factors, including personal goals, family expectations, and business conditions (De Massis et al., 2008; Chrisman et al., 2012).

Figure 95 provides insight into respondents' individual levels of agreement with six statements regarding their intention to take over their parents' businesses. The responses reveal a broad spectrum of succession intentions, ranging from strong disagreement to strong agreement. The distribution shows that while some respondents are highly motivated to become successors, others express more ambivalence or even reluctance. This suggests a diversity of perspectives among the respondents, reflecting both commitment and uncertainty about their role in the family business succession process.

Figure 96 presents the aggregated succession intention scores, combining responses to the six succession-related statements. The distribution indicates that most respondents fall within a moderate range of succession intention, with a relatively even spread across the scale. However, there is a notable cluster of individuals with high aggregated scores, suggesting that a portion of the respondents are highly committed to becoming successors. This highlights a split between those strongly intent on succession and those less certain, potentially indicating varied levels of involvement or personal aspirations outside the family business.

Figure 95: Succession intention (Valid responses N=47)

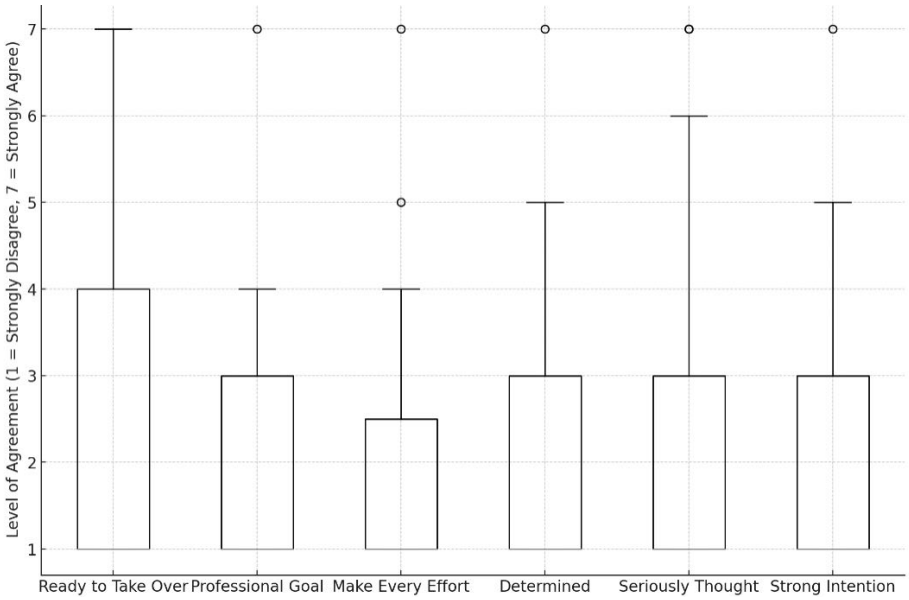
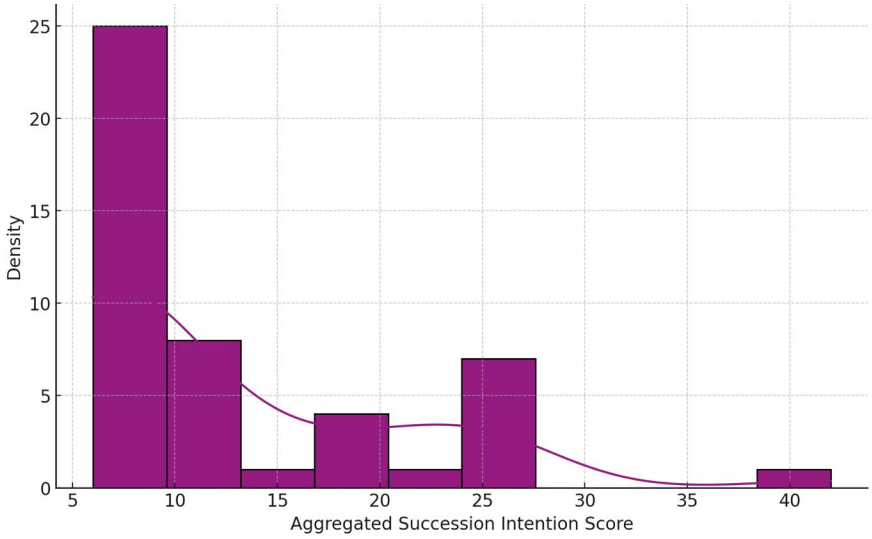


Figure 96: Succession intention aggregated (Valid responses N=47)

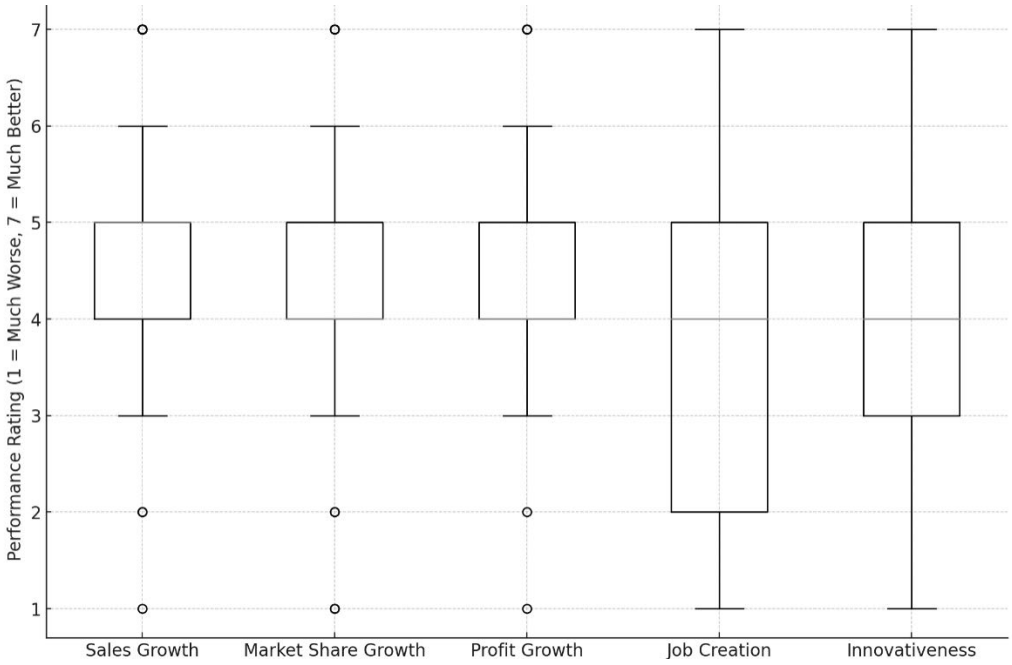


7.3 Performance

Firm performance was assessed using a multidimensional approach, based on the frameworks of Dess & Robertson (1984) and Eddleston et al. (2008). Respondents were asked to rate their parents' business performance relative to competitors over the past three years, across five key dimensions: sales growth, market share growth, profit growth, job creation, and innovativeness.

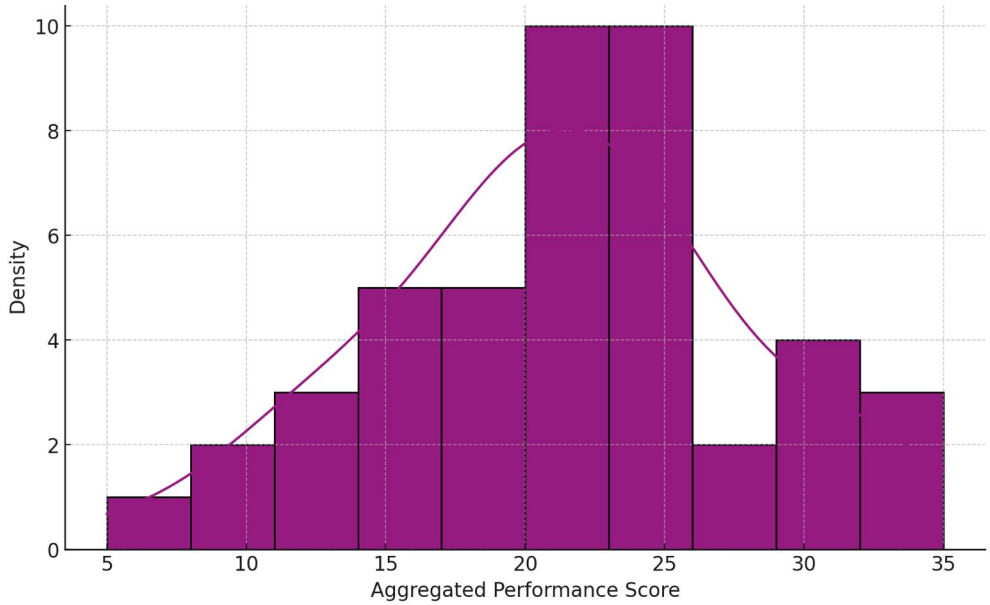
The boxplots (Figure 97) provide a clear view of the distribution of responses for each performance dimension. Across the five categories, respondents rated their businesses on a scale from 1 (much worse) to 7 (much better) relative to competitors. The boxplot shows that most respondents rated their businesses within the mid to upper range of the scale, indicating that they generally perceive their family firms as performing well, particularly in profit growth and innovativeness. However, there is some variation across dimensions, with job creation showing a wider range of responses, suggesting that not all firms have been expanding their workforce at the same rate as their competitors.

Figure 97: Firm performance compared to competitors (Valid responses N=45)



The aggregated score combines the ratings across all five performance dimensions, providing an overall measure of firm performance. The distribution of the aggregated performance score (Figure 98) reveals that most businesses are rated in the moderate to high range, indicating strong performance relative to competitors. A substantial number of respondents provided high aggregated scores, reflecting businesses that have excelled in multiple areas over the past three years. However, a smaller subset of respondents reported lower aggregated scores, suggesting some firms are struggling to keep pace with competitors. This distribution highlights the competitive variability within the sample.

Figure 98: Firm performance compared to competitors (Valid responses N=45)



8 Implications and summary

8.1 Main findings and key messages

The GUESSS 2023 reports for both Sweden and globally reveal several key trends in student entrepreneurship, with notable similarities and differences. In Sweden, 13.6% of students are identified as nascent entrepreneurs, actively engaged in starting their own businesses. This rate is slightly below the global figure, where 17.6% of students are involved in nascent entrepreneurial activities. This suggests that while entrepreneurial interest is present in Sweden, it is not as pronounced as in other regions.

Family background plays a significant role in shaping entrepreneurial intentions across both reports. In Sweden, as in the global context, students with entrepreneurial parents are more likely to pursue entrepreneurial activities. This demonstrates a consistent pattern, where early exposure to business practices and entrepreneurial values within the family environment helps cultivate entrepreneurial aspirations.

Universities are also recognized as crucial facilitators of entrepreneurship. In both Sweden and globally, students who perceive their university as supportive of entrepreneurship are more likely to engage in entrepreneurial activities. Globally, 38.7% of students feel that their university fosters entrepreneurship, and this trend is echoed in Sweden. However, the perception of university support varies, indicating that while universities are key players in entrepreneurship development, there is room for improvement in ensuring that these resources reach a broader student base.

One of the distinct features of the Swedish report is the gender dynamics in entrepreneurship. In Sweden, 66.7% of active entrepreneurs are female, whereas globally, men are more likely to be both nascent and active entrepreneurs. This suggests that Sweden may have more structures or societal norms that support female entrepreneurs, potentially due to a strong emphasis on gender equality in the country.

Political orientations are explored in both reports. In Sweden, students tend to align with center-left political ideologies, particularly concerning income redistribution, environmental sustainability, and social justice. Globally, students exhibit a range of political views, but the report notes that political orientation influences entrepreneurial values and priorities. Left-leaning students are often more inclined towards social entrepreneurship and businesses that emphasize sustainability and ethical practices, which aligns with the Swedish students' focus on socially responsible business models. Both reports suggest that political views can shape how students approach entrepreneurship, especially in terms of the types of businesses they want to create and their broader societal impact.

Psychological traits such as resilience, entrepreneurial self-efficacy, and life satisfaction are consistently highlighted as significant in both reports. Swedish nascent entrepreneurs report higher levels of these traits compared to their peers, which mirrors the global trend where self-efficacy is closely tied to entrepreneurial engagement. Students who believe in their ability to succeed as entrepreneurs are more likely to take steps towards starting a business, both in Sweden and globally.

Career intentions after graduation also follow a similar trajectory in both reports. In Sweden, as in other regions, many students initially aim for employment after completing their studies, but there is a noticeable shift towards entrepreneurship within five years. This suggests that as students gain more experience and confidence, they become more inclined to pursue entrepreneurial ventures over traditional employment.

Finally, both the Swedish and global reports emphasize the varying levels of entrepreneurial readiness among students. While some students feel well-prepared to start their own businesses, others require more resources and support to develop their entrepreneurial skills. This underscores the need for tailored entrepreneurship programs that cater to students at different stages of their entrepreneurial journey.

8.2 Recommendations

Swedish institutions play a crucial role in shaping student entrepreneurship. With 13.6% of students actively engaged in nascent entrepreneurship, there is significant potential for universities and other institutions to further cultivate and support this interest. At the same time, the report reveals areas where improvements can be made, particularly in providing tailored resources, addressing gender dynamics, and fostering a stronger link between education and sustainable, socially responsible entrepreneurship. In this report we make four tangible recommendations.

Expand and Tailor University Entrepreneurial Support

While many students perceive their universities as supportive, there remains variability in how this support is experienced. Institutions can address this by offering more tailored entrepreneurial initiatives that consider the different backgrounds, needs, and readiness levels of students. This could include mentorship programs, specialized workshops, and access to incubators, ensuring that all students, regardless of their starting point, can engage meaningfully with entrepreneurial opportunities.

Encourage Sustainable Entrepreneurship

Swedish students show a strong interest in entrepreneurship that aligns with social responsibility and environmental sustainability, a trend that is reflected globally. Institutions should integrate these values into their entrepreneurship curriculum by offering courses and resources that focus on sustainable business practices, social entrepreneurship, and ethical business models. By doing so, Swedish institutions can not only align with student interests but also prepare future entrepreneurs to navigate and address critical global challenges through their ventures.

Integrate Family Business Insights into Entrepreneurial Education

Given the influence of family business backgrounds on entrepreneurial intentions, institutions should offer programs that connect students with family business owners and provide insights into running family enterprises. For students without such backgrounds, these programs can offer valuable exposure to the practical realities of entrepreneurship. Family business-oriented courses or mentorship opportunities could bridge this gap and prepare students for diverse entrepreneurial paths.

Offer Continued Support After Graduation

Many students shift towards entrepreneurship within five years of graduation, signaling the need for long-term support. Swedish institutions should create post-graduation programs, such as alumni networks, continuous access to entrepreneurial resources, and mentorship programs for recent graduates. By extending support beyond the university years, institutions can help graduates transition more smoothly into entrepreneurship when they feel ready to take the next step.

Centre for Family Entrepreneurship and Ownership

The GUESSS 2023 Sweden National Report has been prepared by the Centre for Family Entrepreneurship and Ownership (CeFEO) at Jönköping International Business School. Founded in 2005, the Centre counts more than 50 scholars and 30 affiliated researchers. Several studies and reportshave consistently identified CeFEO as a leading research environment in ownership and family business studies worldwide.

Research at CeFEO is conducted through different research projects around three core dimensions: Entrepreneurship, Family, and Ownership, with particular interest toward Strategy, Governance and Accounting. Since its foundation, CeFEO has followed the steering idea of combining "Academic Excellence and Practical Relevance". This mission means to combine rigorous academic research at the international frontier, which is the creation and diffusion of knowledge that is practically relevant for companies, organisations and individual stakeholders with interest in ownership and family business issues. We seek double impact with our research, education, and outreach, both in the academic community and broader society and industry.

More information is available on www.cefeo.se.