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Entrepreneurial Spirit at the University of Auckland **2023 GUESSS Survey Insights**

Executive Summary

This report provides an in-depth analysis of entrepreneurial trends among students at the University of Auckland, using data from the GUESSS survey. It benchmarks key findings against global averages, covering demographics, academic levels, career intentions, and entrepreneurial activities. With a global sample of 226,718 and a University of Auckland sample of 1,669 students, this was the university's third time participating in the global survey.

Career Intentions: Most University of Auckland students prefer to start their careers as employees, with only 6.2% expressing a desire to begin as entrepreneurs, compared to the global average of 15.7%. The interest in entrepreneurship rises to 20.9% five years after graduation, though it remains below the global average of 30%. A gender gap is evident in career intentions, with 6.6% of male and 6.1% of female students at the University of Auckland expressing interest in entrepreneurship immediately after graduation. This gap increases five years later, with entrepreneurial aspirations rising to 23.9% for males but only 19.4% for females. While career intentions are similar across fields of study at graduation, Computer Science/IT and Engineering students show a greater inclination toward entrepreneurship five years later than those in other faculties.

Entrepreneurial Activities: Entrepreneurship education trends show a rise in compulsory course enrolment from 7.4% in 2021 to 8.9% in 2023, while elective course participation slightly declined. In 2023, 79.9% of Auckland students have not taken an entrepreneurship course, compared to 58.8% globally. Additionally, since 2021, the entrepreneurial climate at the University of Auckland has improved, with the score rising from 4.2 to 4.3 out of 7 in 2023. Student engagement in entrepreneurial activities has also improved since 2021 (2021 = 4.3 and 2023 = 4.6), now crossing the global average score of 4.5 out of 7.

The report further analyses respondents' status as nascent versus active entrepreneurs. Nascent entrepreneurs are in the early stages of starting a business and have yet to launch their ventures fully. In contrast, active entrepreneurs are students who have successfully established and are currently managing their businesses.

Nascent Entrepreneurs: The average age of nascent entrepreneurs at the University of Auckland is 25 years. Only 14.9% of students identified as nascent entrepreneurs, notably lower than the global average of 25.7%. Regarding gender differences across study levels, females lead in most levels, except for doctoral programmes, where they are equally represented. Additionally, there is a strong preference among these entrepreneurs for knowledge-based industries, such as IT, consulting, and education, as well as production-related sectors like manufacturing and construction. Fewer students show interest in service-oriented (e.g., tourism, legal) or resource-based sectors (e.g., agriculture, fishing, etc).

Active Entrepreneurs: The average age of active entrepreneurs at the University of Auckland is 29.1 years, with only 7% of students identifying as active entrepreneurs, below the global average of 11.1%. Regarding gender differences across study levels, female entrepreneurs dominate most levels – except in doctoral programs (42.9%), where the male student proportion is higher at 50%. Like nascent entrepreneurs, active entrepreneurs have primarily established businesses in knowledge-based industries, such as IT, consulting, and education, as well as production-related sectors like manufacturing and construction.

The analysis reveals notable differences between University of Auckland students and their global peers in entrepreneurial intentions and activities. While there is growing entrepreneurial interest and engagement, it still lags the global average, and the University of Auckland student entrepreneurs' lower performance ratings and confidence levels highlight areas for improvement. Strengthening support mechanisms and expanding entrepreneurial education could enhance performance and better align the University of Auckland's entrepreneurial landscape with global trends.

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1. Introduction

Entrepreneurship among students has become an important issue for universities seeking to develop their student's abilities to innovate, solve problems and lead change. At the University of Auckland (UoA), this entrepreneurial spirit is fostered through formal education and the diverse extracurricular activities offered by the Centre for Innovation and Entrepreneurship (CIE).

This report offers an in-depth analysis of student demographics, career intentions, and entrepreneurial aspirations at the UoA, based on the 2023 Global University Entrepreneurship Student Spirit Survey (GUESSS), which gathered responses from over 1,300 universities across 57 countries, including 1,669 from the UoA. The GUESSS is a global research initiative that has been enhancing the study of student entrepreneurship since 2003, organised biennially by the Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen.

The report also explores the psychological traits and characteristics of the university environment that influence entrepreneurial ambitions and identifies characteristics of emerging and active student entrepreneurs. By gaining insights into these aspects, the UoA can better support its students' entrepreneurial journeys, contributing to a vibrant entrepreneurial ecosystem within and beyond the university. It also highlights current trends and identifies opportunities to enhance entrepreneurial education and support, ultimately empowering more students to embark on entrepreneurial ventures.

2. Sample Demographics

1,669 students from the University of Auckland (UoA) in New Zealand responded to an email inviting them to participate in the GUESSS survey[1]. The features of the UoA sample are compared in this section with those of the university population in 2023 and the average of the responses from the other universities participating in the GUESSS survey (i.e., the global sample).

2.1. Personal characteristics

The average age of UoA respondents is 29.1 years (median = 21 years). Approximately 61% of the respondents were between 21 and 25. The UoA sample has a higher proportion of females (61.7%) than the overall university population (56%), as shown in Figure 1. Figure 2 highlights the gender distribution of the UoA sample in comparison to the global sample, with both showing a larger representation of females (61.7% and 57.5%, respectively) than males or gender-diverse[2] individuals.

[1] Two out of 1,669 cases were deleted because the respondents reported that they attend a university other than the University of Auckland. However, the GUESSS Global Report 2023 includes these three responses, as the global report focuses on countries rather than individual universities.

[2] Gender diverse individuals refer to those people who do not identify as male or female.

Figure 1: Gender Distribution of University of Auckland (Sample vs. Population)

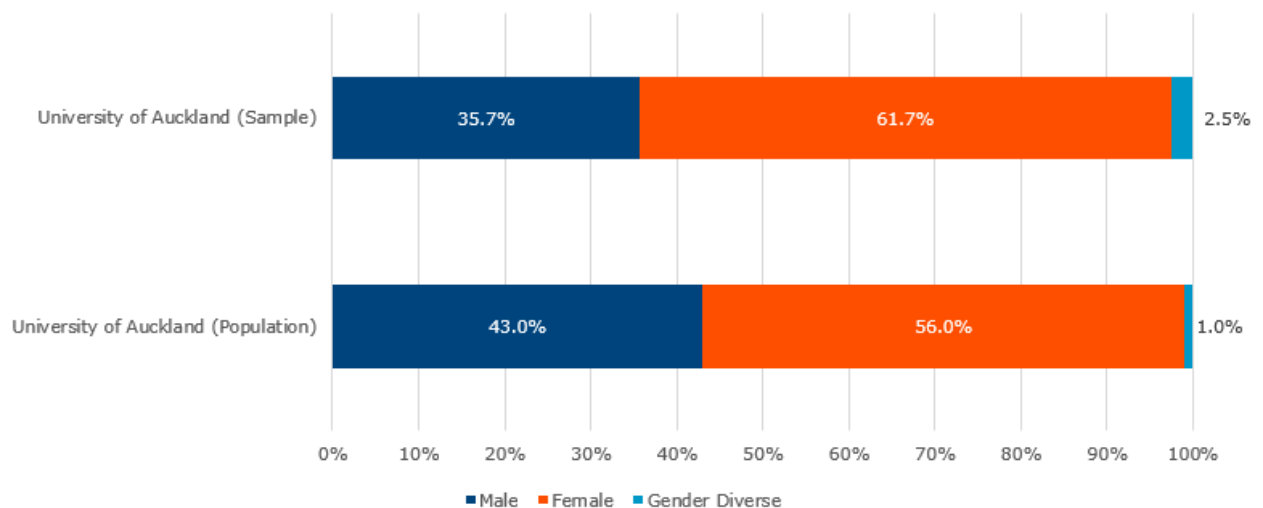


Figure 2: Gender Distribution across the University of Auckland and Global sample

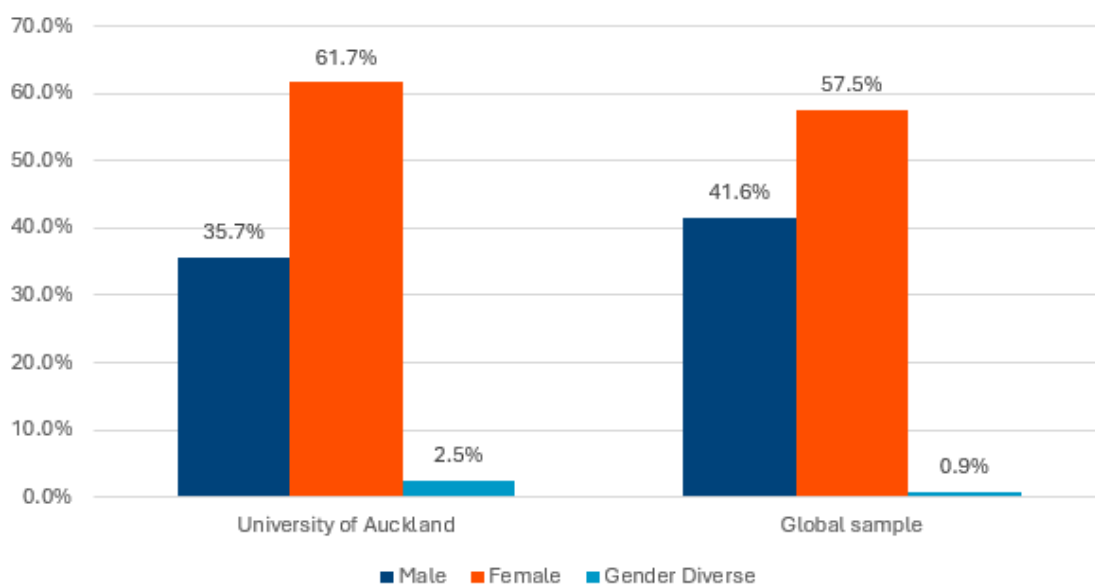
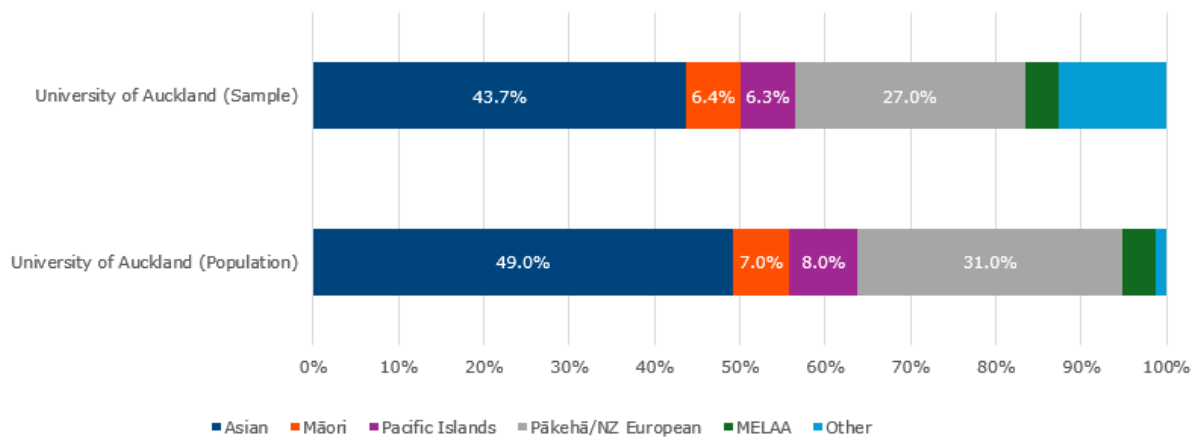


Figure 3 illustrates the ethnic distribution of the UoA sample when compared to the overall university population. The data reveals a slight underrepresentation of both Asian and Pākehā/NZ European students in the sample, with Asian students making up 43.7% of the sample versus 49% of the population and Pākehā students comprising 27% of the sample compared to 31% of the population. Māori and Pacifica groups are represented more consistently, accounting for 6.4% and 6.3% of the sample. MELAA (Middle Eastern, Latin American, and African) students comprise 3.9% of the sample.

Figure 3: Ethnic distribution of students at the University of Auckland (Sample vs. Population)



2.2. Level and field of study

From Figure 4, the UoA sample shows a similar distribution to the population in terms of the level of study, with undergraduates making up the largest portion (69.8% vs. 72%), followed by postgraduate students (17.4%) and PhD students (9.4%). Additionally, 3.1% of the sample falls into the 'Other' category, which includes professional programmes like the MBA.

Figure 4: Distribution of Level of study of the University of Auckland (Sample vs. Population)

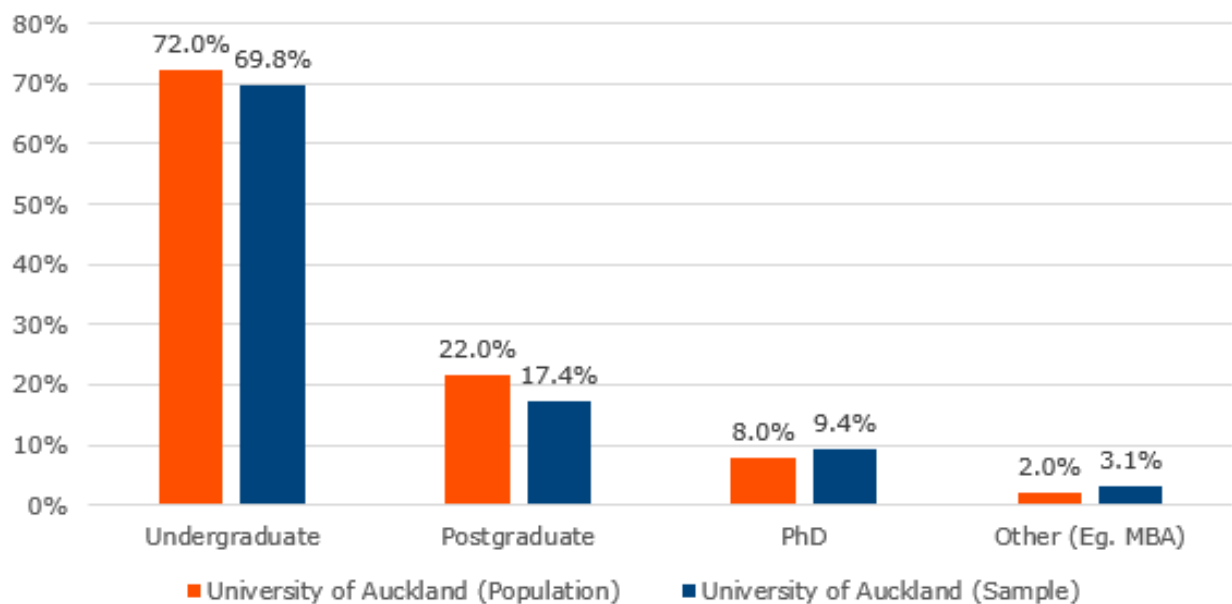
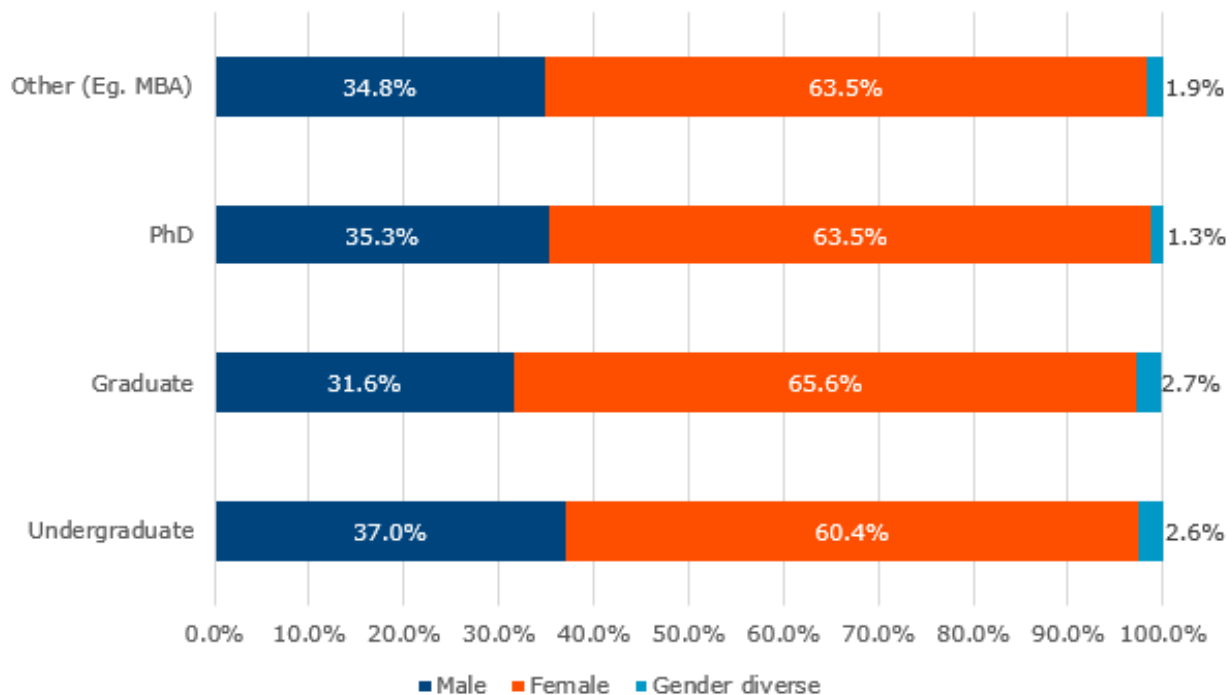


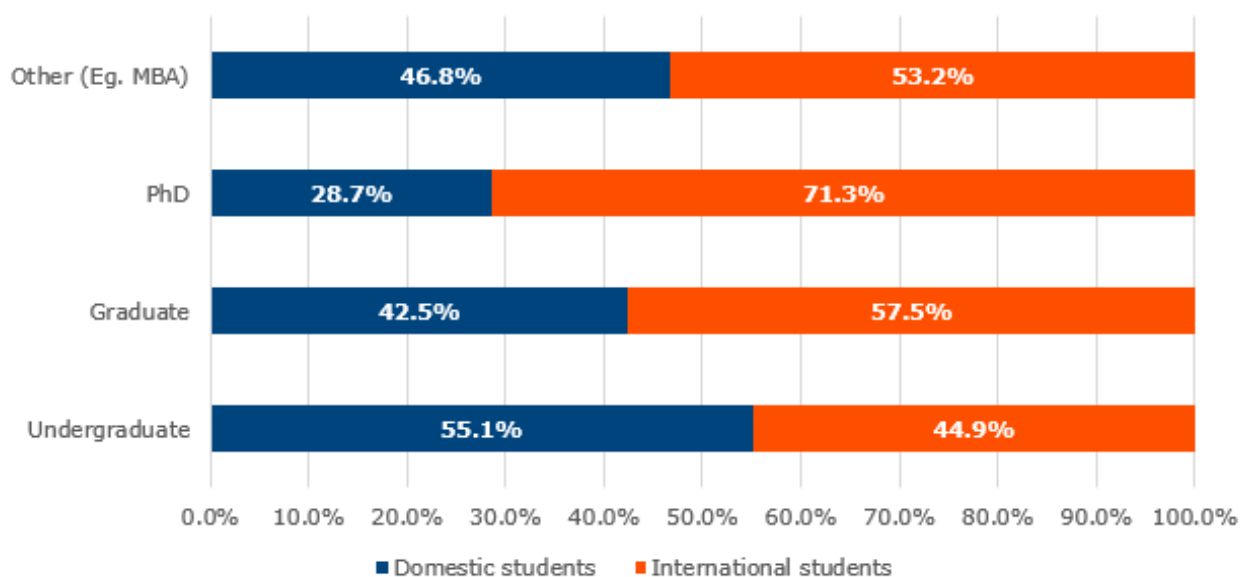
Figure 5 shows the distribution of study levels by gender, with females leading across all levels. The highest representation of females is at the graduate level, where they make up 65.6%, followed closely by professional degrees such as MBAs and doctoral programs, both at 63.5%.

Figure 5: Distribution of Study Levels by Gender (University of Auckland)



Considering the respondent's nationality, domestic students at UoA are underrepresented in the sample (53.8% vs. 66% of the population), while international students are overrepresented (43.6% vs. 34%)[SB1]. From Figure 6, comparing domestic and international students' programme choices from the sample, a large proportion of the international student respondents are enrolled in doctoral programs (71.3%), master's programs (57.5%) and other professional programs (53.2%). Domestic enrolment is highest at the undergraduate level (55.1%).

Figure 6: Distribution of Study Levels by Nationality (University of Auckland)



The distribution of study fields in the sample compared to the population, as illustrated in Figure 7, highlights some variations. The sample and population distribution of study fields show that Engineering students constitute 17% of the sample, while Medicine & Health Science students comprise 16.6%. These figures are higher than their population proportions of 12% and 15%, respectively. On the other hand, Science students are underrepresented in the sample, only at 11.8% (population share at 22%).

Figure 7: Distribution of Study fields at University of Auckland (Sample vs. Population)

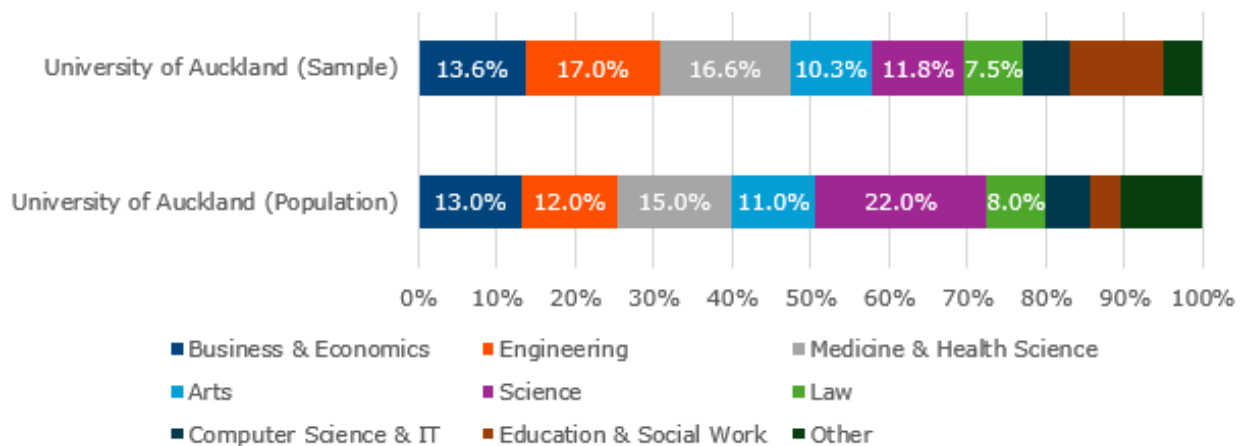


Figure 8 compares the distribution of students across different academic disciplines between the global sample and the University of Auckland. Engineering (17%) and Medicine (16.6%) have the most UoA students. Contrarily, the global sample has the highest proportions in Business/Management (18.7%) and Engineering (16.5%).

Figure 8: Distribution of Study Fields across the University of Auckland and Global Samples

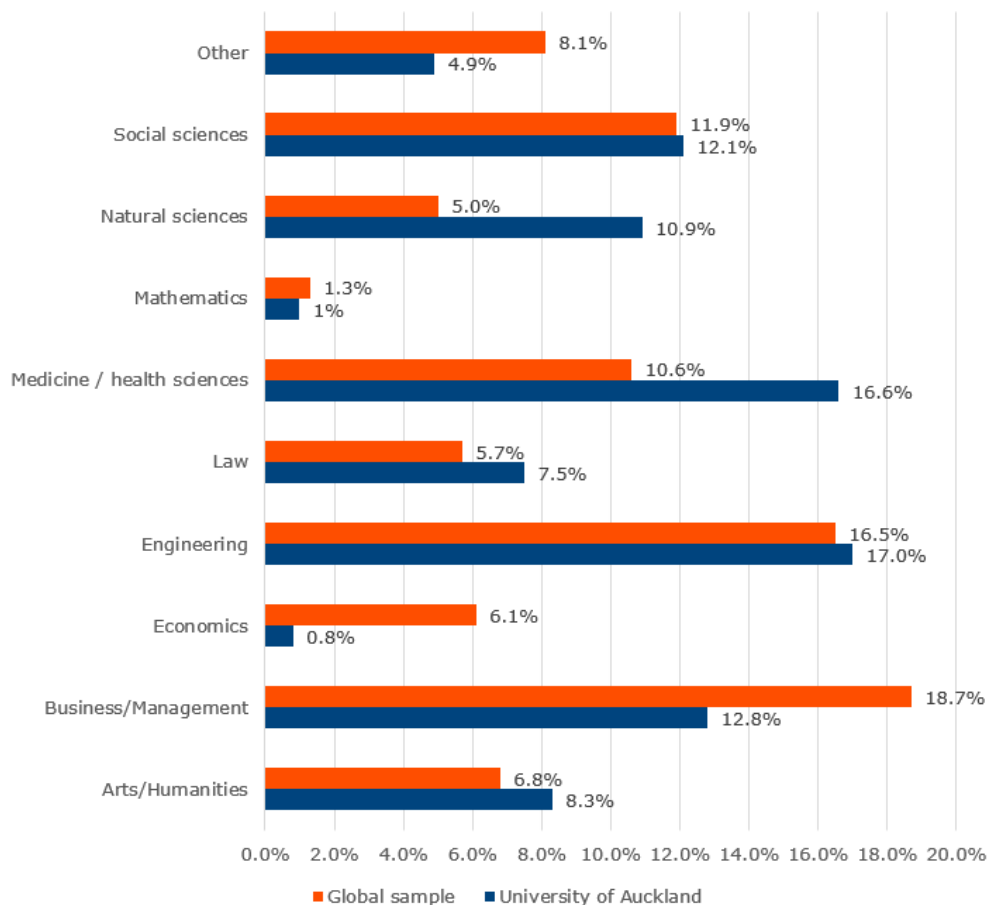
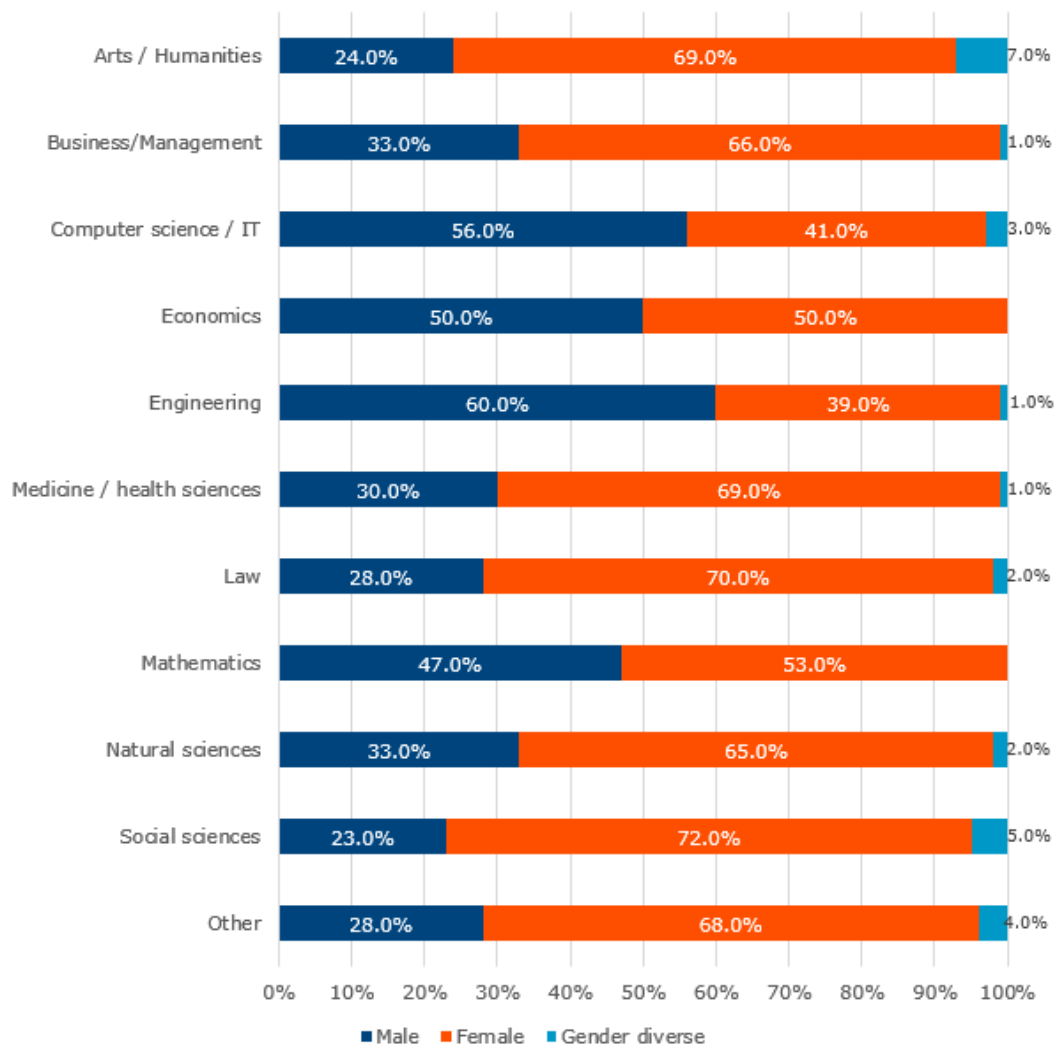


Figure 9 illustrates the gendered differences in the selection of study fields at UoA. Females dominate several fields, the highest being 72% in social sciences and 70% in Law. In contrast, males are predominant in engineering, accounting for 60% of those enrolled. Gender-diverse students comprise a minimal sample share across all study fields. Their highest representation is in arts/humanities courses, accounting for 7% of the students.

Figure 9: Distribution of Study Fields by Gender (University of Auckland)



3. Career intentions

The primary goal of GUESSS is to explore the career preferences of university students, particularly their interest in starting a business. This section examines the career paths that UoA students plan to follow immediately after graduation and five years later.

3.1. General Overview

Table 1 explores the University of Auckland respondents' career intentions right after graduation. Interest in working in a small business slightly increased from 7.8% in 2021 to 8.2% in 2023, while interest in medium-sized businesses rose from 15% to 17% in the same period. On the other hand, the desire for employment in large businesses decreased from 24.6% in 2021 to 22.8% in 2023. Academic career aspirations dropped from 14.6% to 10.6%, but public service interest grew from 12.8% to 14.9%. The share of respondents wanting to start a business right after they graduated declined from 7% to 6.2%, and the proportion expressing uncertainty about their career choice reduced from 17.4% to 15.8%.

Looking at career intentions five years after graduation, interest in working in a small business increased from 2.9% in 2021 to 5.8% in 2023, and medium-sized business intent rose from 9.3% to 10.5%. Academic career intentions decreased from 13.1% to 9.9%, and entrepreneurial aspirations dropped from 24.4% to 20.9%. These shifts reflect changing career preferences over time, highlighting an increased interest in large businesses and public service alongside declines in entrepreneurship and academia.

Table 1: Career Intentions of University of Auckland Respondents

I want to be...	Right after graduation		5 years later	
	2021	2023	2021	2023
an employee in a small business (1-49 employees)	7.8%	8.2%	2.9%	5.8%
an employee in a medium-sized business (50-249 employees)	15%	17%	9.3%	10.5%
an employee in a large business (250 or more employees)	24.6%	22.8%	16.8%	19.1%
an employee in a non-profit organisation	3%	3.4%	3.5%	3.6%
an employee in academia (academic career path)	14.6%	10.6%	13.1%	9.9%
an employee in public service	12.8%	14.9%	11.4%	11.7%
a founder (entrepreneur) working in my own business	7%	6.2%	24.4%	20.9%
a successor in my parents'/family's business	0.4%	0.5%	0.8%	0.7%
a successor in another business	0.4%	0.6%	1.3%	1.3%
Other / do not know yet	17.4%	15.8%	16.6%	16.5%
Total observations	1,899	1,669	1,899	1,669

The most popular career choice for UoA respondents is employment – 76.9% aspire to do so immediately after graduation, which is higher than the global sample (65.9%). The interest in becoming a founder is notably low among the UoA students (6.2%) compared to the global sample (15.7%). The desire to become a successor of a business is minimal in both groups, with 1.1% of Auckland students and 2.5% of the global sample expressing this intention.

Table 2: Career Intentions of the University of Auckland and Global Sample Respondents

I want to be...	Right after graduation		5 years later	
	University of Auckland	Global Sample	University of Auckland	Global Sample
Employee	76.9%	65.9%	60.6%	53.3%
Successor	1.1%	2.5%	2%	3.2%
Founder	6.2%	15.7%	20.9%	30%
Other/ Do not know yet	15.8%	16%	16.5%	13.5%

Five years after graduation, the career intentions of students change notably. At the UoA, the percentage of students who plan to be employees decreased to 60.6%, but this proportion is still higher than the global sample of 53.3%. Meanwhile, the desire to become a founder increases for UoA students, reaching 20.9%, though this is still below the global average of 30% aiming to start a business. The interest in becoming a successor shows a small increase, rising to 2% for UoA students and 3.2% globally. The proportion of uncertain students, represented by the 'Other' category, slightly declined to 13.5%.

Table 3: Expected Career Transitions among University of Auckland Respondents over Five Years

5 years later						
Right after graduation	Employees	Founder	Successor	Other	TOTAL	Observations
Employees	46.0%	14.6%	1.0%	15.2%	76.8%	N = 1283
Founder	0.0%	5.0%	0.5%	0.7%	6.2%	N = 103
Successor	0.5%	0.3%	0.2%	0.1%	1.1%	N = 19
Other	14.1%	1.0%	0.3%	0.5%	15.8%	N = 264
TOTAL	60.6%	20.9%	2%	16.50%	100%	
Observations	N = 1011	N = 348	N = 34	N = 276		

Table 3 illustrates the expected career transitions among UoA respondents over five years. Initially, 76.8% of respondents anticipated that they would remain in the Employees category, a significant proportion compared to other roles. In contrast, only 6.2% are expected to transition to Founder roles, and even fewer are projected to become Successors (1.1%). The 'Other' category, indicating various unspecified roles, constitutes 15.8%. While most will stay within the Employees group, the data highlights a relatively small shift towards founding or successor roles.

3.2. Career Intentions by Gender

Table 4 compares the University of Auckland respondents' career intentions by gender immediately after graduation. Overall, being an entrepreneur seems a less attractive career path option to female and gender-diverse students than to male students. Male students at the University of Auckland show slightly more interest in entrepreneurship (6.6%) than female students (6.1%), resulting in a small gender gap of 0.5%. When compared to the global sample, UoA male students have a much lower interest in entrepreneurship than the global sample rate for males (19%). UoA female students are also lower than the global rate for females (13.4%).

Table 5 shows increased interest in entrepreneurship five years after graduation among UoA respondents. Male students' intention to found a business rises to 23.9%, and female students' interest increases to 19.4%, widening the gender gap to 4.5%. Both male and female UoA rates remain lower than the global sample (34.4% and 27.1%). Gender-diverse respondents also show an increase, with 12.2% intending to be founders. Overall, entrepreneurial aspirations grow over time across all groups, though a gap remains between UoA and global figures.

Table 4: Career intentions Right after graduation by Gender

	Male		Female		Gender diverse	
	University of Auckland	Global sample	University of Auckland	Global sample	University of Auckland	Global sample
Employees	77.6%	63.8%	76.8%	67.5%	65.9%	56.8%
Founder	6.6%	19.0%	6.1%	13.4%	2.4%	11.0%
Successor	0.8%	3.1%	1.4%	2.0%	0.0%	2.2%
Other	15.0%	14.1%	15.7%	17.1%	31.7%	30.0%
Observations	N = 595	N = 94,046	N = 1029	N = 130,014	N = 41	N = 2,053

Table 5: Career Intentions Five years after Graduation by Gender

	Male		Female		Gender diverse	
	University of Auckland	Global sample	University of Auckland	Global sample	University of Auckland	Global sample
Employees	57.6%	49.9%	62.6%	55.7%	53.7%	52.2%
Founder	23.9%	34.4%	19.4%	27.1%	12.2%	18.4%
Successor	2.2%	3.8%	2.0%	2.7%	0.0%	3.1%
Other	16.3%	11.9%	16.0%	14.5%	34.1%	26.3%
Observations	N = 595	N = 94,046	N = 1029	N = 130,014	N = 62	N = 2,053

3.3 Career Intentions by Study Fields

Table 6 displays the career intentions of university students by field of study immediately after graduation. Most students prefer employment, with Economics students leading at 85.7%, followed closely by Engineering students at 83.5%. Only 3.3% of Business students plan to become successors to businesses right after graduation. Founder aspirations are highest among Engineering students (16.1%), followed by 11.1% of Computer science students. Moreover, a considerable proportion of Arts students, 23.8%, are still determining their career intentions immediately following graduation.

Table 7 shows the career intentions of University of Auckland students five years after graduation. Most Mathematics students (76.9%) prefer employment, followed by 71.4% of Economics students. Founder aspirations have notably increased among Computer Science students, rising to 29.3%. There is a substantial shift among engineering students – while 83.5% preferred employment right after graduation, only 56.3% continued to do so five years later. This shift reflects a growing interest in founding businesses, with 25.4% of Engineering students aspiring to become founders five years after graduation.

Table 6: Career Intentions of University of Auckland Respondents Immediately After Graduation by Study Fields

	Employee	Founder	Successor	Other / Do not know
Other	79.3%	2.4%	1.2%	17.1%
Social sciences	76.6%	7.0%	1.0%	15.4%
Natural sciences	74.6%	2.2%	0.5%	22.7%
Mathematics	82.4%	5.8%	0.0%	11.8%
Law	76.8%	8%	0.0%	15.2%
Medicine / health sciences	80.5%	3.6%	1.8%	14.1%
Engineering	83.5%	16.1%	0.4%	0.0%
Economics	85.7%	0.0%	0.0%	14.3%
Computer science / IT	70.7%	11.1%	0.0%	18.2%
Business/Management	76.6%	10.3%	3.3%	9.8%
Arts / Humanities	66.9%	7.9%	1.4%	23.8%

Table 7: Career Intentions of University of Auckland Respondents Five Years Later by Study Fields

	Employee	Founder	Successor	Other / Do not know
Other	54.9%	19.5%	1.2%	24.4%
Social sciences	67.2%	19.9%	2.0%	10.9%
Natural sciences	61.9%	11.6%	2.2%	24.3%
Mathematics	76.9%	5.5%	0.0%	17.6%
Law	62.4%	19.2%	0.8%	17.6%
Medicine / health sciences	70.4%	14.8%	1.1%	13.7%
Engineering	56.3%	25.4%	1.8%	16.5%
Economics	71.4%	21.4%	0.0%	7.2%
Computer science / IT	52.5%	29.3%	4.1%	14.1%
Business/Management	50.0%	11.2%	5.1%	33.2%
Arts / Humanities	61.9%	13.7%	0.7%	23.7%

4. Students and Entrepreneurship

This section analyses the university context and students' psychological characteristics as essential factors influencing their entrepreneurial intentions.

4.1 The University Context

Entrepreneurship education cultivates essential skills, traits, and attributes for entrepreneurial endeavours. It can equip students for entrepreneurial activity by shaping attitudes and values that make entrepreneurship appealing, motivating them to pursue entrepreneurial opportunities.

Table 8 illustrates the proportion of students enrolled in entrepreneurship courses in 2023 compared to 2021 in both the UoA and global samples. Notably, there has been a slight decline in the percentage of the UoA student sample who have taken at least one entrepreneurship course as an elective, decreasing from 11.1% in 2021 to 10.8% in 2023. However, the percentage of students at the UoA who have taken at least one entrepreneurship course as a compulsory part of their studies rose from 7.4% to 8.9%. In 2023, 79.9% of UoA students have yet to take any entrepreneurship courses, contrasting with 58.8% of the global sample.

Table 8: Proportion of University of Auckland respondents taking entrepreneurship courses compared to the Global sample (2021 vs. 2023)

	2021		2023	
	University of Auckland	Global sample	University of Auckland	Global sample
I have not attended a course on entrepreneurship so far.	79.1%	53.2%	79.9%	58.8%
I have attended at least one entrepreneurship course as an elective	11.1%	26.7%	10.8%	22.7%
I have attended at least one entrepreneurship course as a compulsory part of my studies	7.4%	23.9%	8.9%	17.3%
I am studying in a specific programme on entrepreneurship	2.8%	8.7%	2.6%	6.3%
I chose to study at this university mainly because of its strong entrepreneurial reputation	6.1%	18.9%	3.9%	9.2%

At the University of Auckland, participation levels in extracurricular activities reveal an interesting disparity among gender groups (see Figure 10). Despite females comprising the majority of the sample (at 61.7%), males lead in engagement with a participation rate of 25.3%, compared to 19.7% for females. Gender-diverse individuals comprise 2.5% of the sample and have a participation rate of 12.2%.

Figure 10: Participation levels in entrepreneurial extracurricular activities based on Gender at University of Auckland

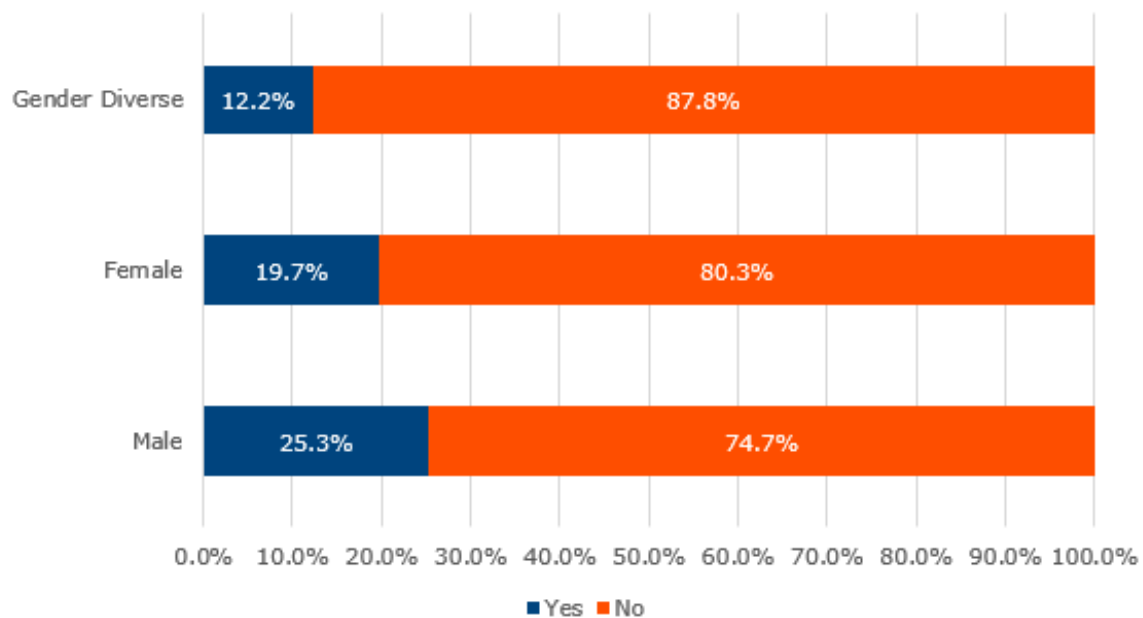


Table 9 compares students' learning outcomes from entrepreneurship education at the UoA with the global sample using a seven-point scale (1 = not at all; 7 = very much). The global sample scores highest in increasing students' understanding of entrepreneurs' attitudes, values, and motivations, with an average score of 4.3. Similarly, for helping students develop networks, the global sample scores an average of 4.3 again, with UoA students scoring a close 4.2. UoA students rate themselves as most confident in identifying business opportunities aligned with their knowledge and interests, averaging 3.7, which is still below the global average of 4.2. They also rated their learning outcomes lower than students in the global sample across all categories.

Table 9: Students' Learning Outcomes from Entrepreneurship Education

	University of Auckland				Global Sample
	Overall	Male	Female	Gender diverse	
...increased my understanding of the attitudes, values, and motivations of entrepreneurs.	3.6	3.6	3.5	2.8	4.3
...increased my understanding of the actions someone has to take to start a business.	3.4	3.6	3.4	2.8	4.1
...enhanced my practical management skills to start a business.	3.4	3.6	3.3	2.6	4.1
...enhanced my ability to develop networks.	4.2	4.2	4.2	3.3	4.3
...encouraged me to identify business opportunities closely aligned with my own knowledge and interests.	3.7	3.8	3.6	3	4.2
...encouraged me to identify business opportunities closely aligned with current trends, shocks, breakthroughs, or other changes in the business environment.	3.5	3.7	3.4	2.6	4.1
Total observations	1,669	574 - 576	990 - 998	37 - 39	226,718

Note: Scale: 1 = not at all; 7 = very much

Table 10 compares perceptions of the entrepreneurial climate at the UoA with the global sample in both 2021 and 2023, based on student ratings on a scale of 1 to 7 (1 = not at all; 7 = very much). Overall, the entrepreneurial climate at the UoA has seen a slight improvement, with the average score for a favourable climate for being an entrepreneur at the university increasing from 4.2 to 4.3. Similarly, the score for how much students felt encouraged to engage in entrepreneurial activities rose from 4.3 to 4.6. This score is also slightly higher than the global sample's average of 4.5, indicating a more supportive environment at the UoA. However, the average score for the 'atmosphere at my university inspires me to develop ideas for new businesses' remained consistent at 4.1 between 2021 and 2023.

Table 10: Entrepreneurial Climate at the University of Auckland

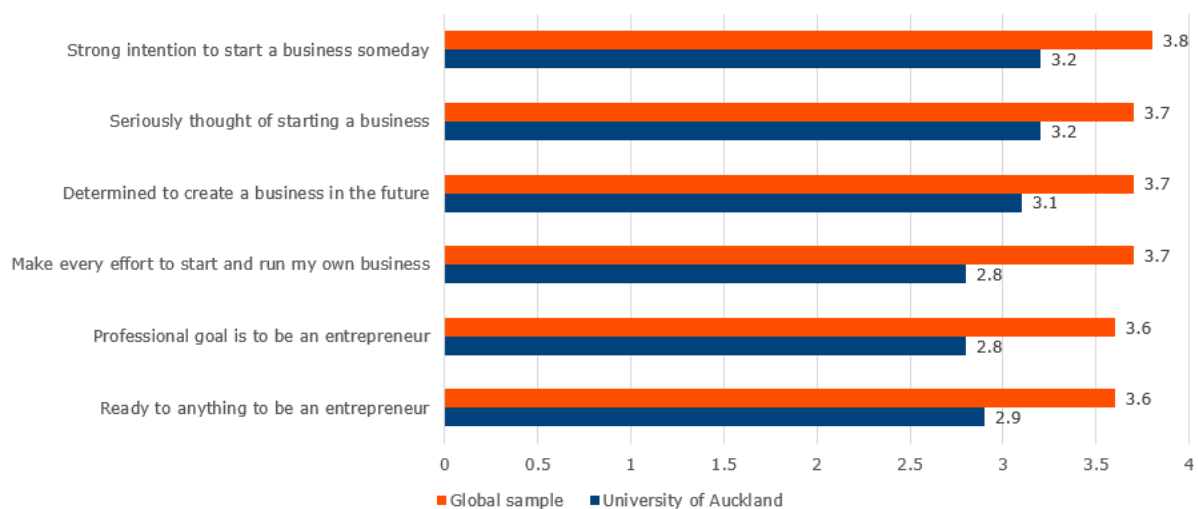
	2021		2023	
	University of Auckland	Global sample	University of Auckland	Global sample
The atmosphere at my university inspires me to develop ideas for new businesses.	4.1	4.6	4.1	4.4
There is a favourable climate for becoming an entrepreneur at my university.	4.2	4.6	4.3	4.4
At my university, students are encouraged to engage in entrepreneurial activities.	4.3	4.8	4.6	4.5
At my university, students can get entrepreneurship-related advice and guidance easily.	-	-	4.4	4.5
Total observations			1,669	226,718

Note: Scale: 1 = not at all; 7 = very much.

4.2 Psychological Characteristics

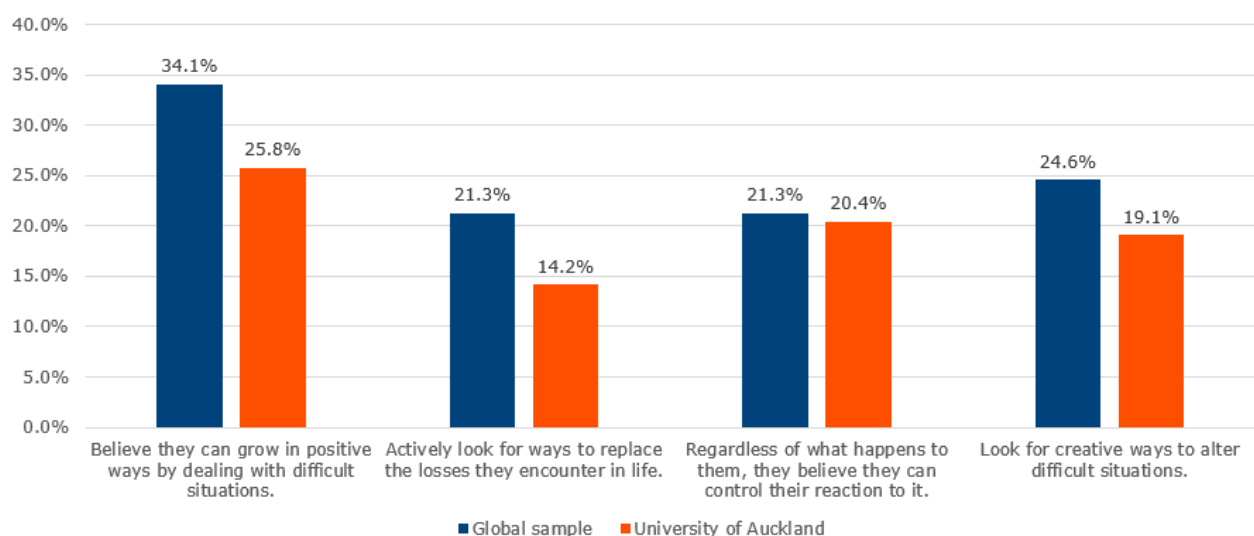
The individual attitudes of entrepreneurs—such as innovativeness, self-efficacy, and an internal locus of control, can positively influence their entrepreneurial intention. Figure 11 compares students' entrepreneurial attitudes at the UoA with those in the global sample, using a seven-point scale where 1 represents strong disagreement and 7 represents strong agreement. The UoA students rated their motivation to start a business at an average of 3.2 out of 7. This score is slightly lower than the global sample average of 3.8, suggesting their entrepreneurial attitudes are less strong than their global peers.

Figure 11: Assessment of Students' Attitudes towards Becoming an entrepreneur



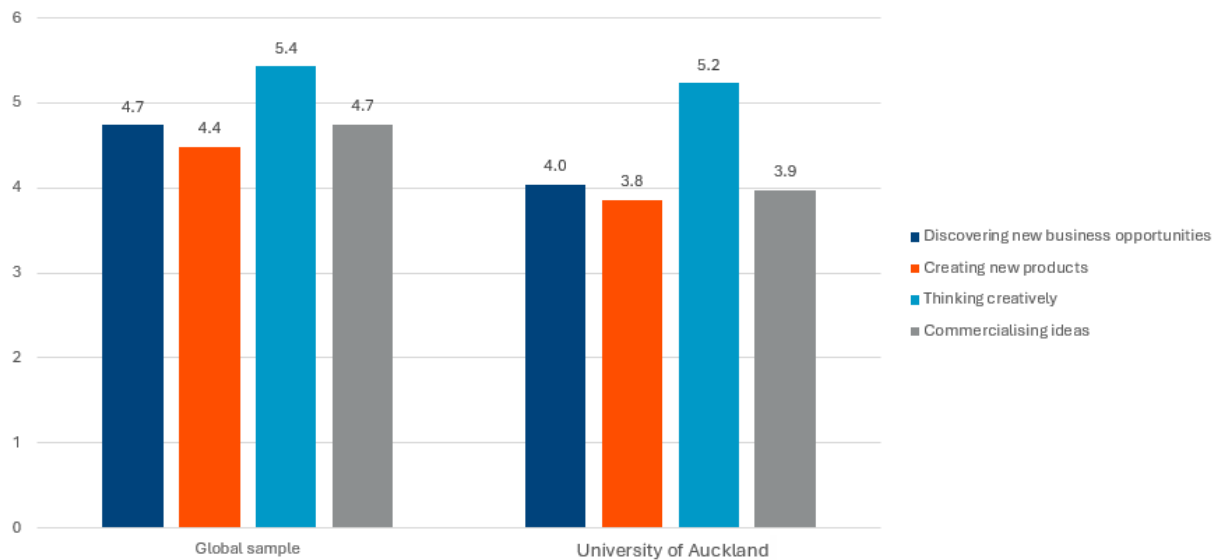
The locus of control refers to the extent to which individuals believe their actions determine their successes. Figure 12 shows a clear difference in the perceived locus of control between the UoA students and the global sample. Both groups strongly believe in their ability to influence their lives through problem-solving and resilience. However, UoA students exhibit low confidence in shaping their circumstances. Students in the global sample are more motivated, particularly in proactively seeking solutions and maintaining optimism.

Figure 12: Assessment of Students' Locus of Control



Finally, Figure 13 shows students' self-assessed competence in completing four entrepreneurial tasks, using a scale from 1 (indicating very low competence) to 7 (indicating very high competence). UoA students lack confidence in creating new products (average score of 3.8) and commercialising their ideas (average score of 3.9) compared to those in the global sample. They are more confident in thinking creatively, rating 5.2 on average, though this is still less than the global average.

Figure 13: Students' Perceived Level of Entrepreneurial Self-Efficacy (University of Auckland)



5. Nascent Entrepreneurs

This section examines the 14.9% of University of Auckland respondents ($n = 250$) currently attempting to start their own business and become self-employed, classifying them as nascent entrepreneurs. This percentage is much lower than the global sample, where 25.7% are nascent entrepreneurs.

5.1 Characteristics of Nascent Entrepreneurs

The average age of nascent entrepreneurs from the University of Auckland is 25 (median = 21 years), the same as the global sample. Figure 14 compares the rate of nascent entrepreneurs across different levels of study between UoA and the global sample. At the undergraduate level, 14.8% of UoA students are attempting to start their businesses, which is lower than the global sample rate of 25.5%. Similarly, at the postgraduate level, 15.4% of UoA students are engaged in nascent entrepreneurship, which is also lower than the global sample rate of 26.3%.

Figure 15 highlights the distribution of nascent entrepreneurship across genders at various study levels. Females lead in most study levels, except in doctoral programmes, where they are equally represented. In professional programs like MBAs, 75% of nascent entrepreneurs are female, outnumbering males (25%). Gender-diverse students make up a small share, with 2.3% at the undergraduate and 2.2% at the graduate level.

Figure 14: Distribution of Nascent entrepreneurs by Level of Study

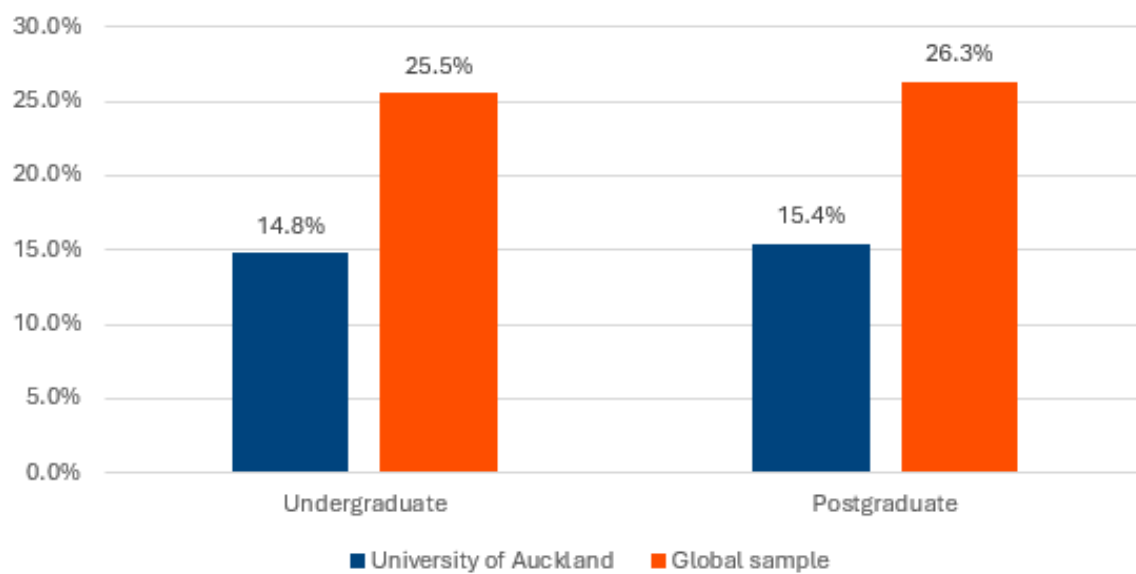


Figure 15: Nascent Entrepreneurs by Gender and Level of Study

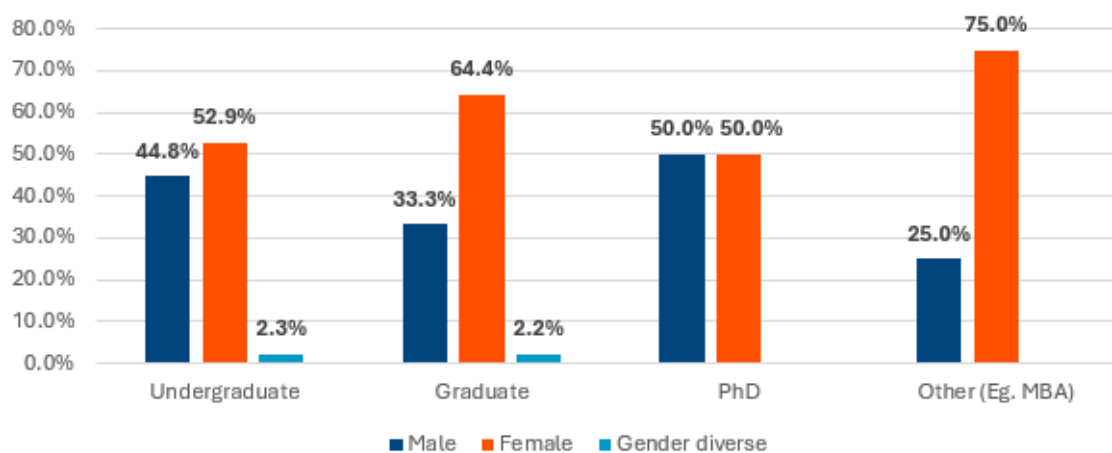
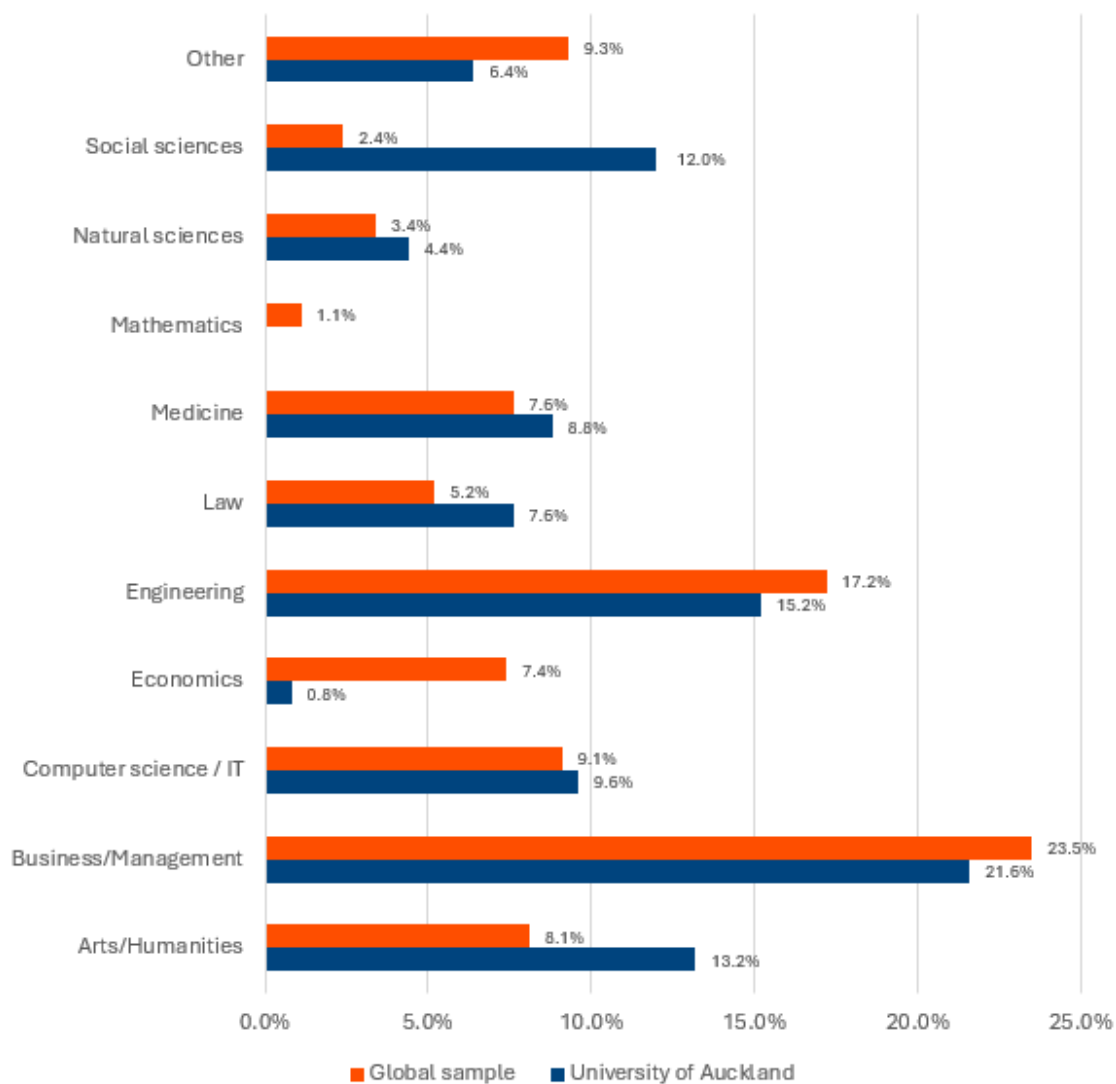


Figure 16 highlights the distribution of nascent entrepreneurs by field of study for UoA and the global sample. Business emerges as the leading discipline for nascent entrepreneurs in both samples, with 21.6% of nascent entrepreneurs at UoA studying Business, compared to 23.5% globally. Following Business, UoA nascent entrepreneurs are also concentrated in Engineering (15.2%) and Arts (13.2%), whereas the global sample shows 17.2% in Engineering and 8.1% in Arts.

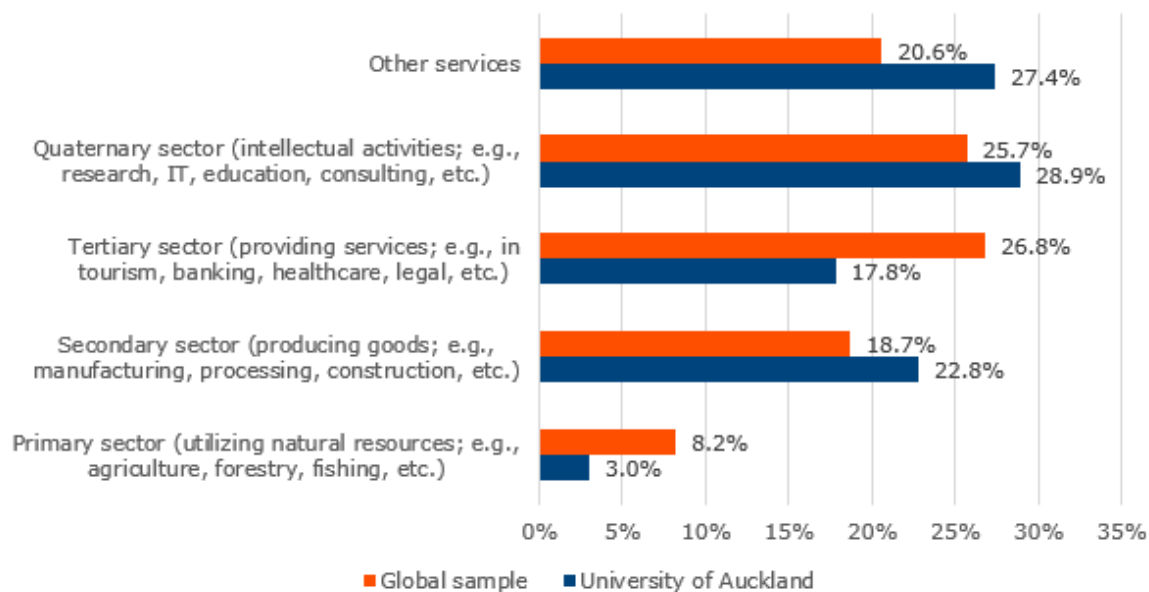
Figure 16: Nascent Entrepreneurs by Field of Study



5.2 Characteristics of the Planned Businesses

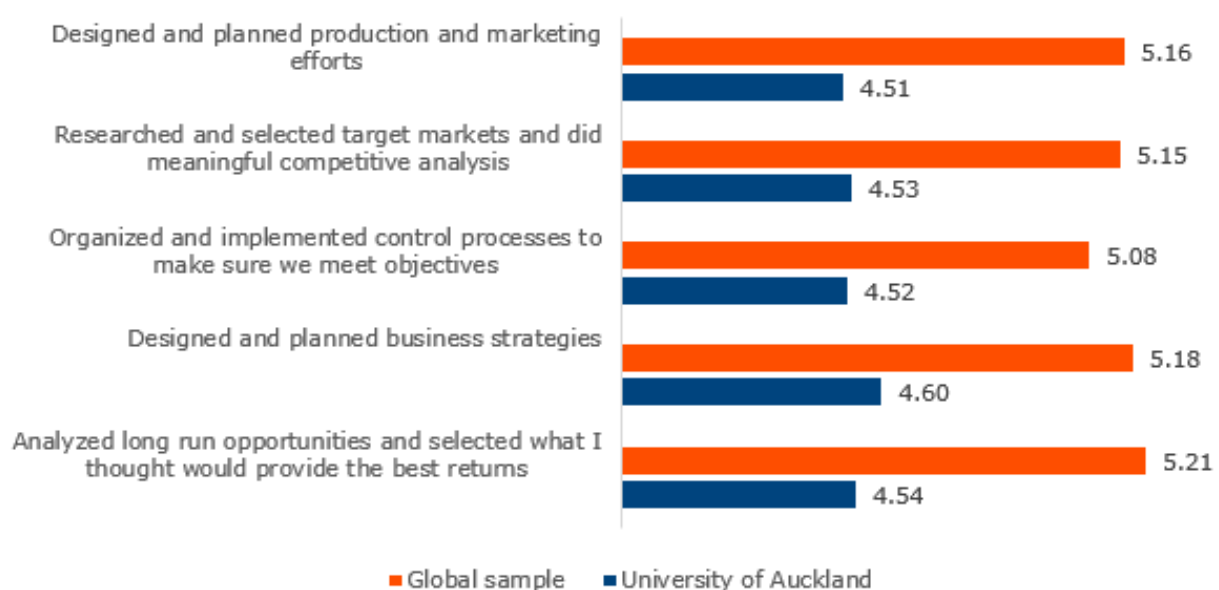
Figure 17 shows the preferred industries for nascent entrepreneurs to start their businesses. The most popular choice is the quaternary sector, which includes activities like research, IT, education, and consulting, attracting 28.9% of entrepreneurs. Following closely, 27.4% of students are still determining their industry choice. The secondary sector, which is focused on producing goods (e.g., manufacturing and construction), accounts for 22.8% of the total. The tertiary sector, which covers services like tourism, banking, and healthcare, is preferred by 17.8% of entrepreneurs. The least popular is the primary sector, which involves natural resources like agriculture and fishing, with just 3% showing interest. There is a preference for knowledge-based and production-related industries, while fewer students lean towards service-oriented or resource-based sectors.

Figure 17: Nascent Entrepreneurship by Industry



Emerging entrepreneurs seek to understand the opportunities they are exploring to make better-informed evaluations of their potential and develop more effective strategies for transforming that potential into a successful business. Figure 18 illustrates the self-assessment scores of nascent entrepreneurs on a scale from 1 to 7, where 1 indicates strong disagreement, and 7 indicates strong agreement. 'Designed and planned production and marketing efforts' shows the largest gap, with global sample participants scoring an average of 5.1 compared to 4.5 for the University of Auckland. A similar trend is observed in 'Organised and implemented control processes to make sure we meet objectives' (global sample = 5.08, University of Auckland = 4.5) and 'Analysed long run opportunities and selected what I thought would provide the best returns' (global sample = 5.21, University of Auckland = 4.54). These patterns suggest that while UoA's nascent entrepreneurs rate their foundational knowledge relatively highly on the scale, those from the global sample appear to have an even higher level of confidence across all areas.

Figure 18: Foundations of Business Knowledge by Nascent Entrepreneurs at University of Auckland



6. Active Entrepreneurs

This section examines the 14.9% of University of Auckland respondents ($n = 250$) currently attempting to start their own business and become self-employed, classifying them as nascent entrepreneurs. This percentage is much lower than the global sample, where 25.7% are nascent entrepreneurs.

6.1 Characteristics of Active Entrepreneurs

The average age of active entrepreneurs at the UoA is 29.1 years. Figure 19 compares the rate of active entrepreneurs across different levels of study between UoA and the global sample. At the undergraduate level, 6.2% of UoA students are running their businesses, which is lower than the global sample rate of 10.5%. Similarly, at the postgraduate level, 8.2% of UoA students are engaged in active entrepreneurship, lower than the global sample rate of 13.04%.

Figure 20 highlights the distribution of active entrepreneurship across genders at various study levels. Female entrepreneurs dominate most study levels, except in doctoral programs, where they account for 42.9%, compared to the larger male proportion (50%).

Figure 19: Distribution of Active Entrepreneurs by Level of Study

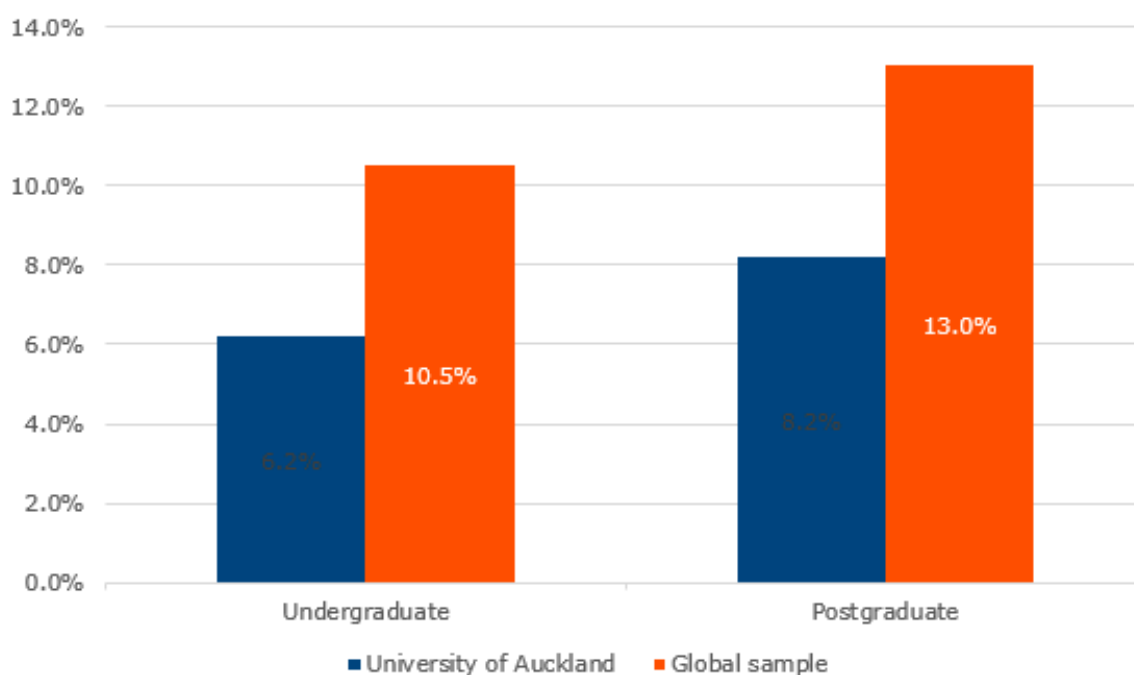


Figure 20: Active Entrepreneurs by Gender and Level of Study (University of Auckland)

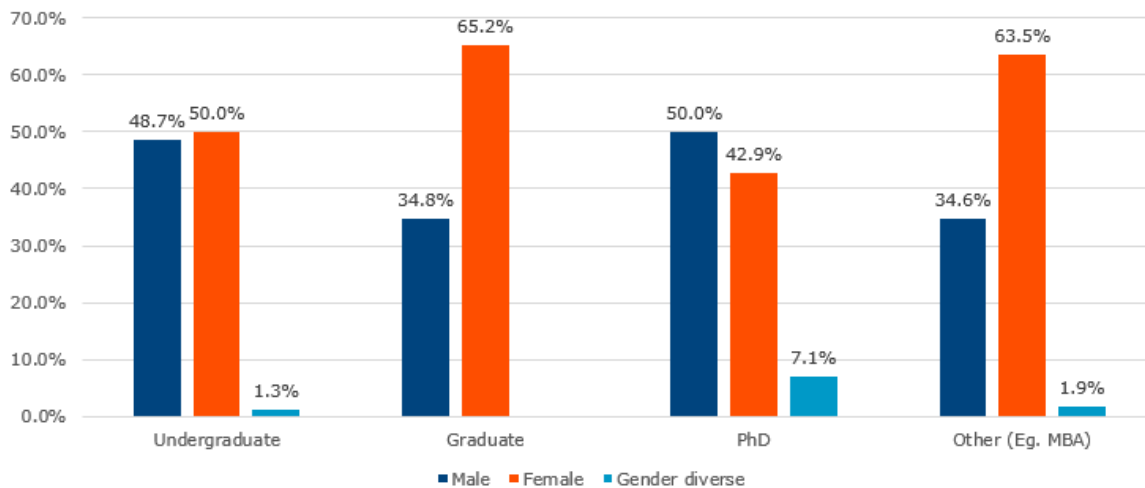
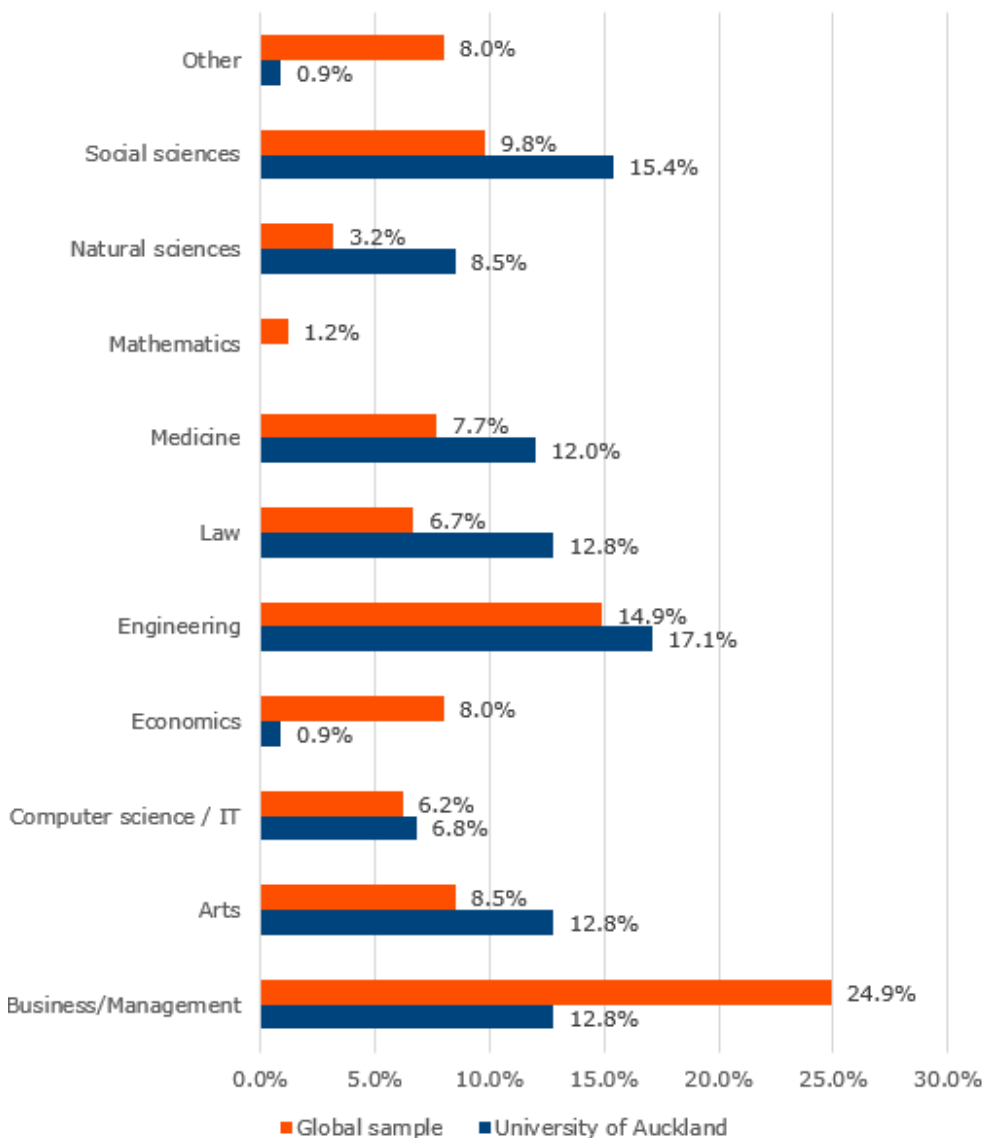


Figure 21 illustrates the distribution of active entrepreneurs by their field of study. It reveals that 12.8% of active entrepreneurs at UoA are studying Business, which is lower than the global sample, where 24.9% of active entrepreneurs are from Business disciplines. On the other hand, a higher proportion of UoA active entrepreneurs are studying Engineering (17.1%), compared to the global sample (14.9%).

Figure 21: Active Entrepreneurs by Field of Study



6.2 Characteristics of the Existing Businesses

Figure 22 details the industries and sectors in which active entrepreneurs have businesses. These entrepreneurs ventured into a wide range of sectors, having a stronger focus on the tertiary (UoA = 31.9% vs. global sample = 26.1%) and quaternary sectors (UoA = 31.9% vs. global sample = 21.8%), highlighting an emphasis on services and intellectual activities. These sectors included banking, healthcare, tourism, education, consulting, and IT services.

Figure 22: Active Entrepreneurship by Industry

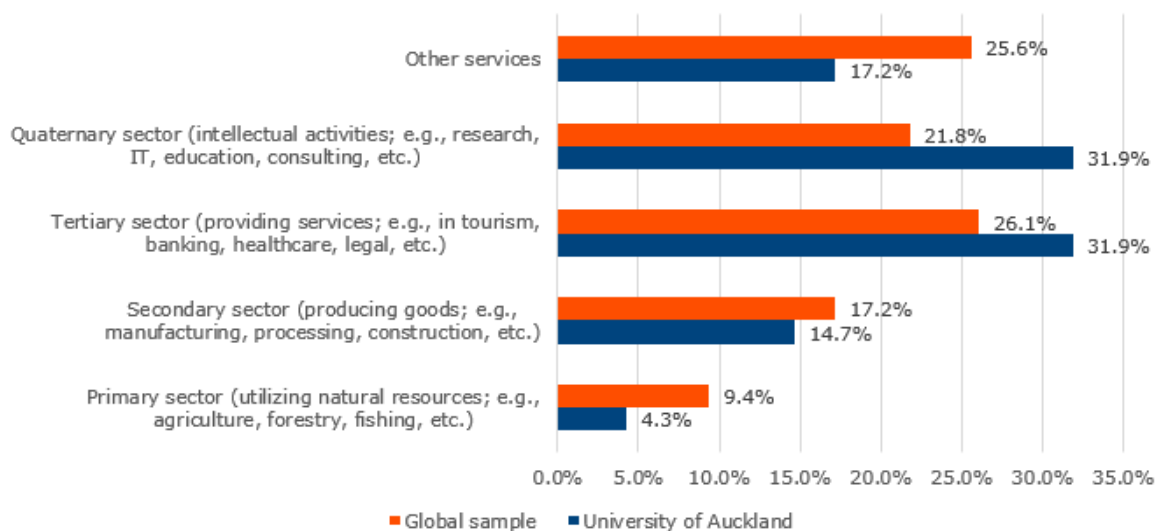


Table 11 explores how active entrepreneurs rate their business performance compared to competitors, using a scale from 1 (much worse) to 7 (much better). The data reveals a notable gap between UoA entrepreneurs and their global counterparts. University of Auckland entrepreneurs consistently rated their performance lower. For instance, UoA entrepreneurs scored 4.3 in sales growth, lagging the global average of 5, and rated their market share growth at a score of 4, compared to 4.8 globally. Similar patterns followed for profit growth, job creation and innovativeness. These statistics suggest that UoA entrepreneurs perceive their business performance to be weaker across all dimensions than their global peers.

Table 11: Perceived Performance of the Business

Performance type	University of Auckland	Global sample
Sales Growth	4.3	5
Market share growth	4	4.8
Profit growth	4.2	5
Job creation	3.3	4.3
Innovativeness	4.5	5.1
Observations	111	203,579

Note: Scale: 1 = much worse; 7 = much better



7. Conclusions

The 2023 GUESSS survey provides a detailed analysis of student entrepreneurship at the University of Auckland, highlighting both strengths and areas for development. The data reveals that a considerable proportion of UoA students (76.9%) prefer traditional employment immediately after graduation, with only 6.2% initially aiming to start a business. This is notably lower than the global sample of 15.7%. Although entrepreneurial intentions rise to 20.9% over five years, this figure still falls short of the global sample of 30%. This trend suggests that UoA students could benefit from earlier and more robust exposure to entrepreneurship as a career option.

Nascent entrepreneurship at the University of Auckland stands at 14.9%, well below the global average of 25.7%. Female entrepreneurs lead in most study levels, the highest being in professional programs (such as MBAs), accounting for 75% of female nascent entrepreneurs. However, UoA students report lower confidence in their entrepreneurial abilities and business planning skills compared to global peers, indicating a need for enhanced support and education. Active entrepreneurs at UoA, who comprise 7% of respondents (below the global average of 11.1% active entrepreneurs), also exhibit weaker performance metrics in sales growth, market share, and profit growth than their global counterparts. This highlights the need for more effective mentorship and practical guidance to help students successfully scale their ventures.

At the University of Auckland, a large share of the student sample has not taken any entrepreneurship courses (79.9%), a higher proportion than the global average of 58.8%. Students reported feeling less confident identifying business opportunities aligned with their knowledge and interests, rating themselves below the global average. Additionally, UoA students rated their learning outcomes lower than the global sample across all categories. The University of Auckland could focus on raising awareness and interest in entrepreneurship across various disciplines to improve entrepreneurial outcomes. Expanding entrepreneurship courses and offering hands-on experiential learning opportunities may help close the gap between entrepreneurial intentions and successful execution. Collaborating with industry to provide real-world applications of entrepreneurial skills in startups and small and medium-sized enterprises (SMEs) could further enhance these efforts.

The University of Auckland is dedicated to promoting entrepreneurship but must further strengthen student confidence, business performance, and long-term entrepreneurial ambitions. By expanding education and support systems and increasing entrepreneurship awareness, UoA can align more closely with global best practices and impact New Zealand's entrepreneurial ecosystem.



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