

GUESSS 2023
Japanese National Report
(English version)

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GUESSS Japan Office

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1 Introduction.

The Global University Entrepreneurial Spirit Students' Survey (GUESSS) is a survey of entrepreneurial attitudes among university and graduate students. GUESSS is conducted every two to three years by the Institute of Small Business and Entrepreneurship at the University of St. Gallen, Switzerland, using the same survey instrument and with the participation of about 50 countries around the world. This survey was initiated in 2003, and this is the ninth time it has been conducted.

The 2023 survey was participated in by 57 countries worldwide and received 226,718 valid responses.

Table 1. Total number of responses from all participating countries

Country		Number of Responses	%	Country		Number of Responses	%
1	Argentina (ARG)	2,462	1.09%	30	South Korea (KOR)	1,409	0.62%
2	Austria (AUT)	2,277	1.00%	31	Liechtenstein (LIE)	124	0.05%
3	Belgium (BEL)	5,422	2.39%	32	Lithuania (LTU)	2,448	1.08%
4	Bolivia (BOL)	3,695	1.63%	33	Mexico (MEX)	3,082	1.36%
5	Brazil (BRA)	7,447	3.28%	34	Morocco (MAR)	45	0.02%
6	Bulgaria (BUL)	1,742	0.77%	35	Netherlands (NED)	811	0.36%
7	Canada (CAN)	4,687	2.07%	36	New Zealand (NZL)	1,671	0.74%
8	Chile (CHI)	6,164	2.72%	37	Nigeria (NGR)	204	0.09%
9	China (CHN)	6,123	2.70%	38	North Macedonia (MKD)	254	0.11%
10	Colombia (COL)	13,041	5.75%	39	Norway (NOR)	8	0.00%
11	Costa Rica (CRC)	2,603	1.15%	40	Pakistan (PAK)	354	0.16%
12	Croatia (CRO)	1,822	0.80%	41	Panama (PAN)	1,468	0.65%
13	Czech Republic (CZE)	1,407	0.62%	42	Paraguay (PAR)	2,020	0.89%
14	Dominican Republic (DOM)	547	0.24%	43	Portugal (POR)	1,055	0.47%
15	Ecuador (ECU)	5,215	2.30%	44	Puerto Rico (PUR)	71	0.03%
16	England (ENG)	855	0.38%	45	Qatar (QAT)	132	0.06%
17	Germany (GER)	2,087	0.92%	46	Russia (RUS)	4,668	2.06%
18	Greece (GRE)	416	0.18%	47	Saudi Arabia (KSA)	3,746	1.65%
19	Guinea (GUI)	418	0.18%	48	Slovakia (SVK)	5,997	2.65%
20	Hungary (HUN)	14,720	6.49%	49	Slovenia (SLO)	254	0.11%
21	India (IND)	13,896	6.13%	50	Spain (ESP)	76,889	33.91%
22	Indonesia (INA)	1,665	0.73%	51	Sweden (SWE)	191	0.08%
23	Iran (IRI)	28	0.01%	52	Switzerland (SUI)	5,145	2.27%
24	Iraq (IRQ)	1,461	0.64%	53	Tunisia (TUN)	151	0.07%
25	Ireland (IRL)	140	0.06%	54	Ukraine (UKR)	71	0.03%
26	Italy (ITA)	4,374	1.93%	55	United Arab Emirates (UAE)	440	0.19%
27	Japan (JAP)	1,837	0.81%	56	Uruguay (URY)	1,693	0.75%
28	Jordan (JOR)	1,765	0.78%	57	United States of America (USA)	2,160	0.95%
29	Kazakhstan (KAZ)	1,841	0.81%		Total	226,718	100.00%

Source: Created by the author from the Global Report GUESSS 2023

1.1 Implementation in Japan

Japan has participated since the 2011 survey, and the 2023 survey was the seventh. More than 30 universities participated in this year's survey, and the number of valid responses was 1,698¹. We would like to express our deepest gratitude to all those involved at each university who cooperated in the survey.

Students responded to the survey posted on the web by accessing it on their own computers or smartphones. A flyer with the URL and QR code of the survey site was prepared, and students were asked to cooperate and respond to the survey through classes and other means. The survey was conducted from October 2023 to January 2024.

Table 2. Number of valid responses by university in Japan

University Name	Number of Responses	Percentage	University Name	Number of Responses	Percentage
Aoyama Gakuin University	1	0.06%	Tokyo University	5	0.29%
Atomi University	45	2.65%	Tokyo University of Science	70	4.12%
Osaka Metropolitan University	8	0.47%	Nanzan University	11	0.65%
Iwate Prefectural University	55	3.24%	Nihon University	33	1.94%
Gakushuin University	18	1.06%	Japan Women's University	34	2.00%
Kansai University	21	1.24%	Hitotsubashi University	23	1.35%
Kyushu University	38	2.24%	Fukuoka University	61	3.59%
Kyoto University	24	1.41%	Fukuoka Jo Gakuin University	86	5.06%
Kyoto Sangyo University	42	2.47%	Fukuyama City University	198	11.66%
Kinki University	17	1.00%	Hosei University	369	21.73%
Kobe University	36	2.12%	Musashi University	28	1.65%
Shizuoka University	8	0.47%	Meiji University	17	1.00%
Setsunan University	27	1.59%	Ritsumeikan University	19	1.12%
Senshu University	264	15.55%	Ryukoku University	65	3.83%
Chukyo University	54	3.18%	Other	21	1.24%
			Total	1698	100%

¹ The number of valid responses in Japan is the number of responses after data cleaning and does not correspond to the number of responses in the Global Report GUESSS 2023 in Table 1.

2 Basic Information of Respondents

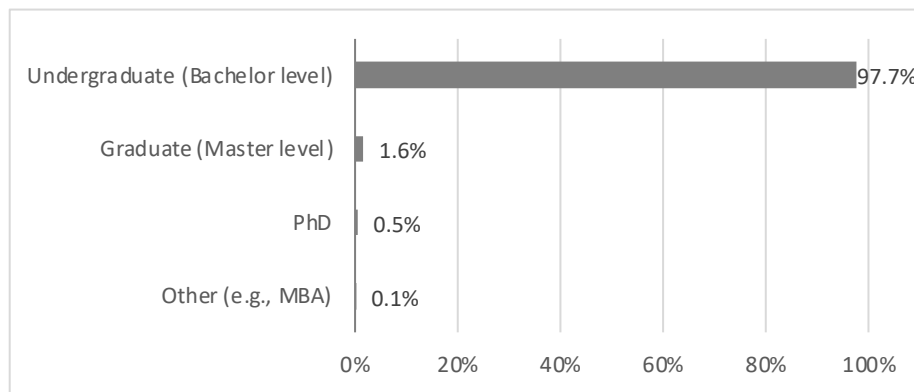
2.1 Gender

The gender of respondents was 49.2% female, 49.9% male, and 0.8% other. Note that 57.2% of the respondents overseas were female.

2.2 Educational Background

Respondents belonged to 97.7% of undergraduate schools, 1.6% to master's programs, 0.5% to doctoral programs, and 0.1% to professional graduate schools (MBA, etc.).

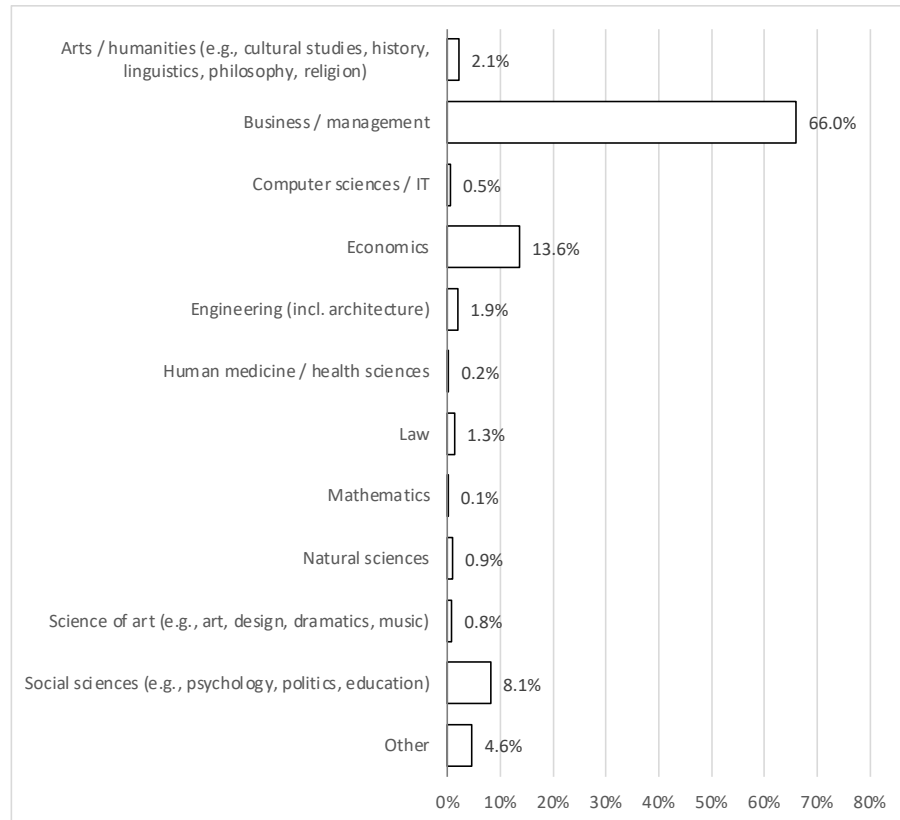
Figure 1. Educational background of respondents



2.3 Respondent's Major

Respondents were asked about the field of study in which they are studying. Commerce and Business Administration were the most common, accounting for 66.0% of the total. This was followed by economics (13.6%), social sciences (8.1%), and others (4.6%).

Figure 2. Major of respondents (Japan) (N=1,698)



2.4 Nationality

As there are also international students among the respondents, the nationality of the respondents is not limited to Japan. The nationalities of the respondents are shown in Table 3.

Table 3. Nationalities of respondents (Japan)

Nationality	Number of responses (N=1,698)	Percentage (%)
Japan	1467	86.4
China	21	1.2
Korea	11	0.6
Other	4	0.2
Non-response	195	11.5

2.5 Entrepreneurial Status of Respondents

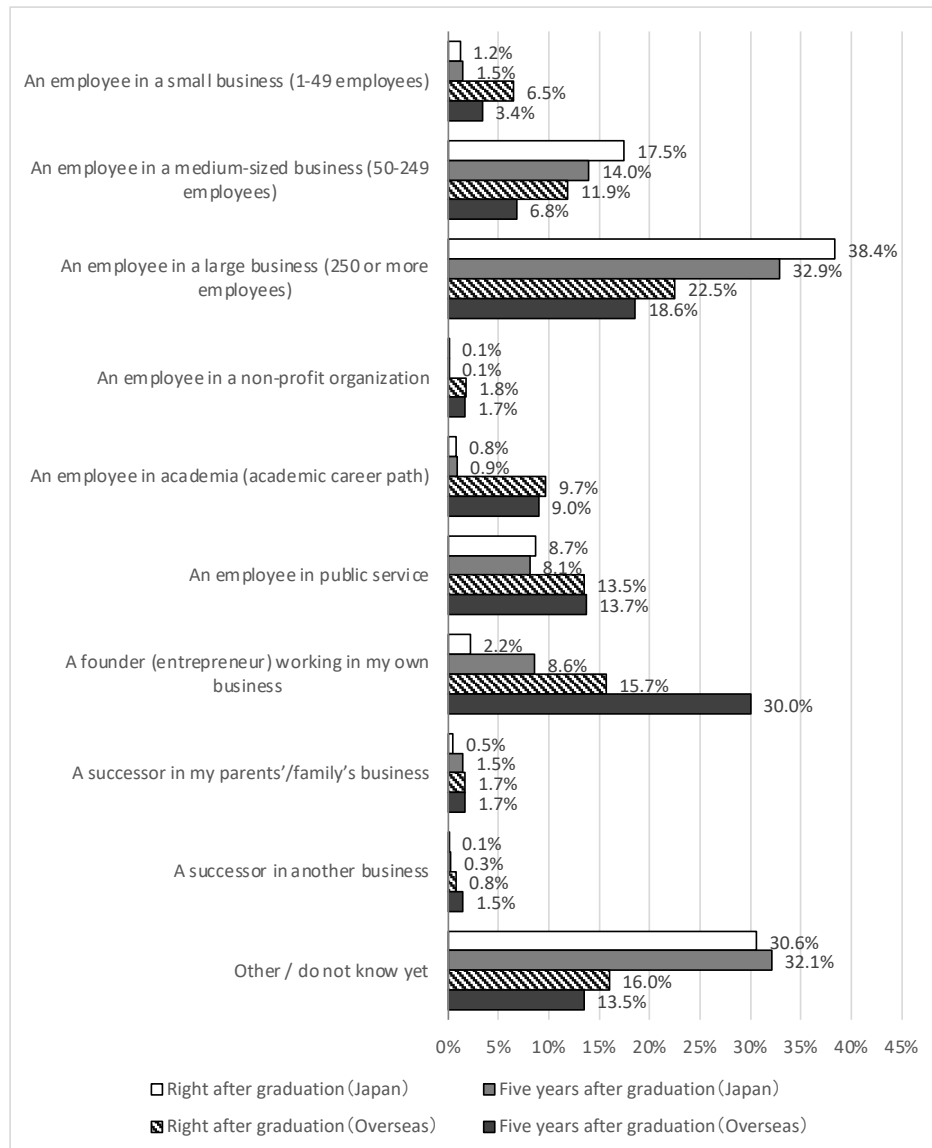
In the 2023 survey, 0.2% had already started a business or were self-employed, and 3.2% were preparing to start a business. In overseas, 11.1% have started a business and 25.7% are preparing to start a business, indicating that the number of Japanese students who have started preparing to start a business is quite small.

3 Career Choice Intentions

3.1 Career Choice after Graduation

In terms of respondents' career choices immediately after graduation and five years after graduation, the largest number of Japanese respondents, both immediately after graduation and five years after graduation, chose "work for a large company with 250 or more employees" with the exception of "other/not sure yet. In contrast, most of the respondents from overseas similarly desired to work for a large company immediately after graduation, but "run my own company as a founder" was the most common choice five years later.

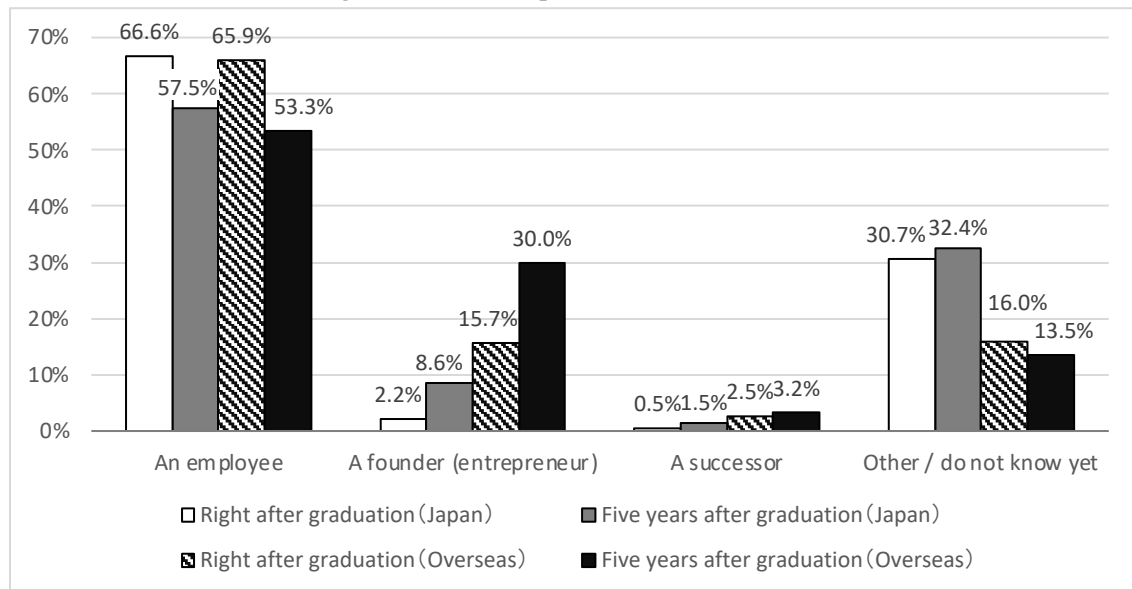
Figure 3. Career choices of respondents (immediately after graduation and years after graduation) (Japan N=1,698, World N=226,718)



3.2 Desired Post-graduation Work Arrangements and Readiness to Start a Business

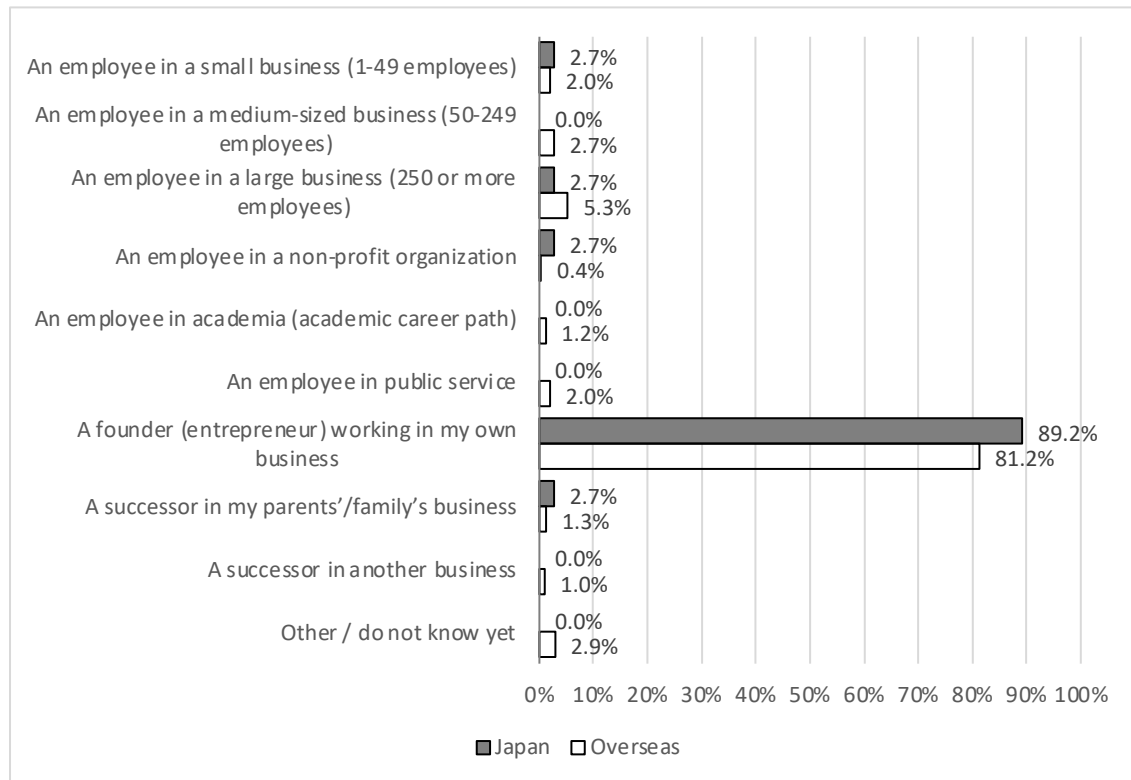
With regard to the desired work style immediately after graduation and five years after graduation, Japanese respondents chose employees both immediately after graduation and five years after graduation, whereas the overseas respondents chose employees the most followed by founders five years after graduation.

Figure 4. Desired Work Arrangements after graduation (Immediately after graduation and 5 Years after graduation) (Japan N=1,698, World N=226,718)



Those who chose to be founders immediately after graduation were most likely choose to be founders in both Japan and the rest of the world in terms of their desired work style five years later.

Figure 5. Desired work arrangements five years later for those who chose founder as their immediate career after graduation (Japan N=37, World N=35,517)



Conversely, those who indicated that they would run their own company as a founder five years after graduation most frequently desired to work for a large company immediately after graduation in Japan, while being a founder was the most common choice in the rest of the world. Japanese students, even those who intend to become founders in the future, do not intend to start their own companies immediately after graduation, but rather to first work for a company to acquire business knowledge and organizational management skills. In the 2021 survey, 35.5% of the respondents wished to work for a large company, while in the 2023 survey, 41.8% of the respondents wished to work for a large company, an increase of 6.3 points. As for those wishing to become founders, 27.0% in the 2021 survey decreased to 22.6% in the 2023 survey, a decrease of 4.3 points.

Figure 6. How people who want to become founders 5 years after graduation would like to work immediately after graduation (Japan N=146, World N=68,095)

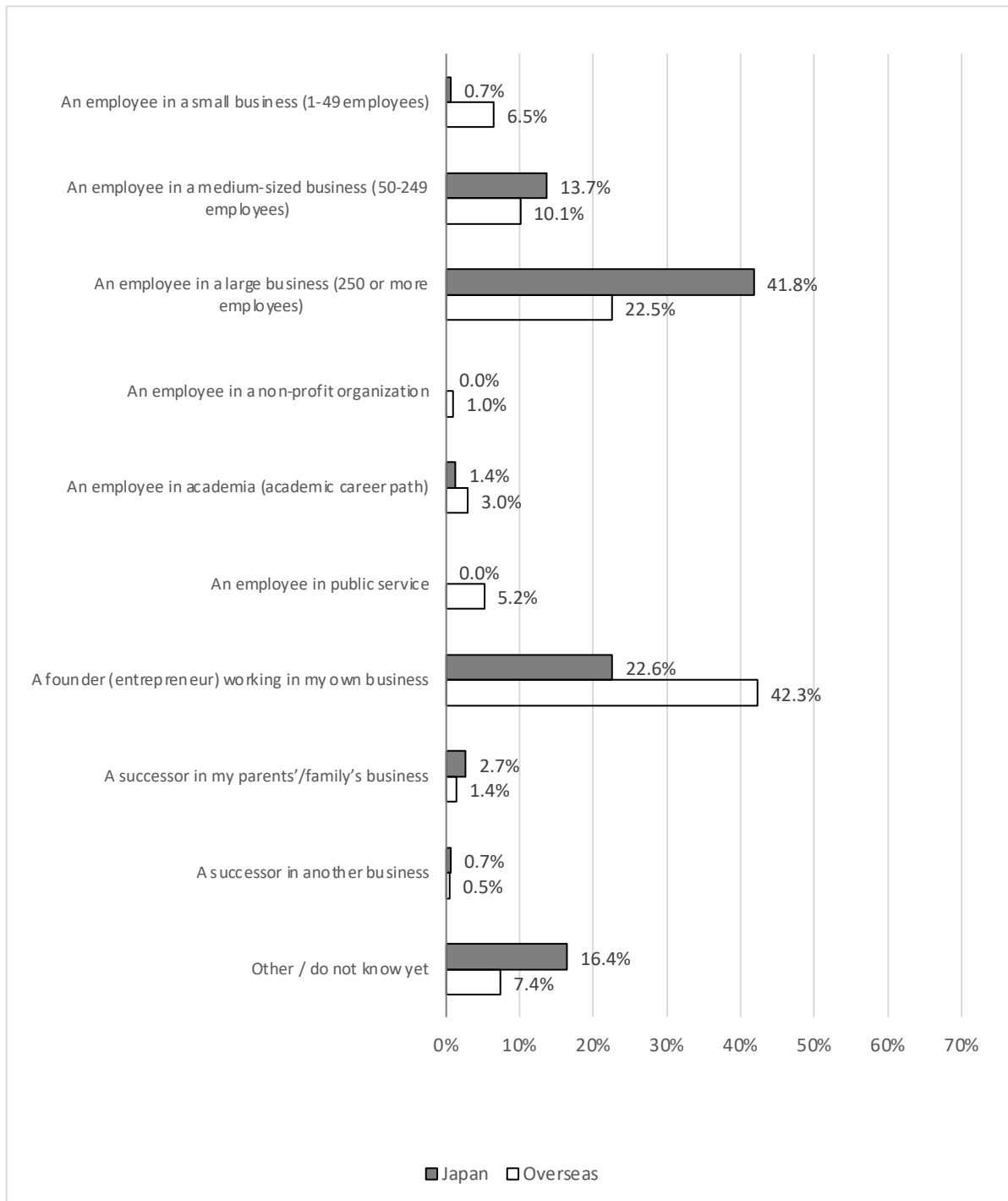
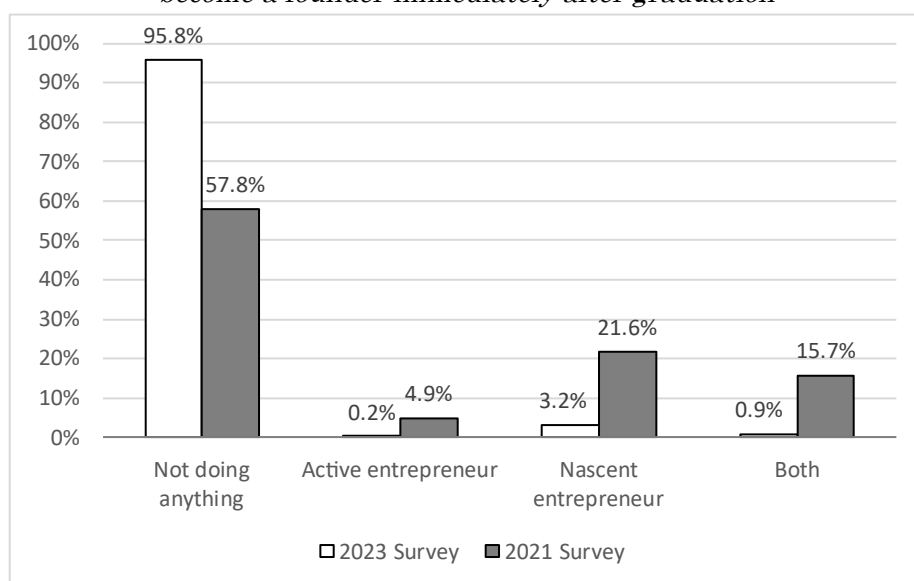


Figure 7 shows the status of entrepreneurial preparation and other activities of Japanese respondents who intend to become founders immediately after graduation. Since the global data were not available in the Global Report, the data are compared with those from the 2021 survey in Japan. The percentage of respondents who answered that they were "doing nothing" amounted to 95.8%, a significant increase compared to the 2021 survey.

Figure 7. Entrepreneurial preparation and entrepreneurial activities of those who want to become a founder immediately after graduation



Note: The questions were "Are you currently planning to establish a company or start self-employment?" and "Are you already running your own company or self-employed?" Respondents who answered "Yes" to both questions were labeled "Both". If they answered "Yes" only to the former question, they were labeled "Nascent entrepreneur." If they answered "Yes" only to the later question, they were "active entrepreneur", and if they answered "No" to both questions, they were labeled "not doing anything."

4 Entrepreneurship

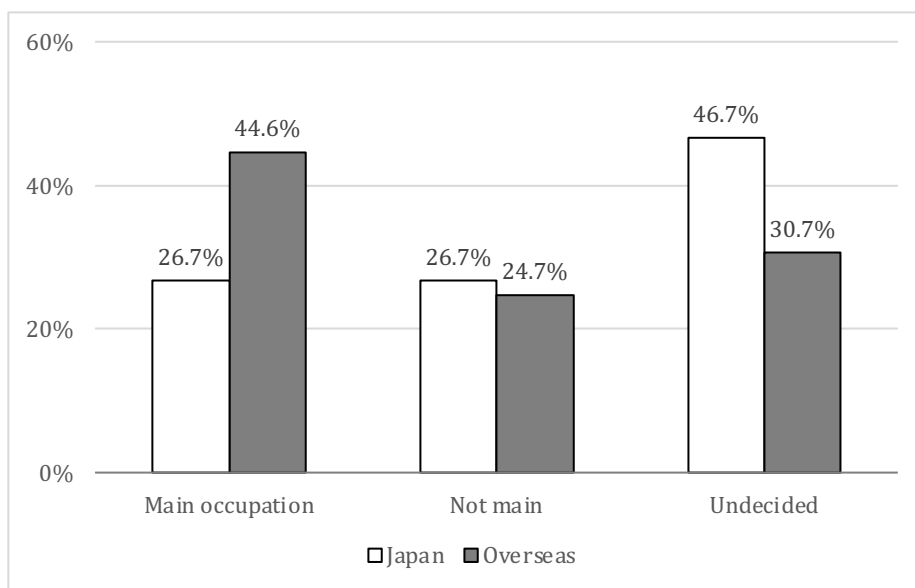
4.1 Those Preparing to Start a Business

Those preparing to start a business accounted for 4.1% of all respondents (25.7% overseas).

Those who have started another business before, although the business they are starting now is in preparation, account for 20.0% in Japan and 24.9% overseas, indicating that there are serial entrepreneurs in Japan, albeit small numbers.

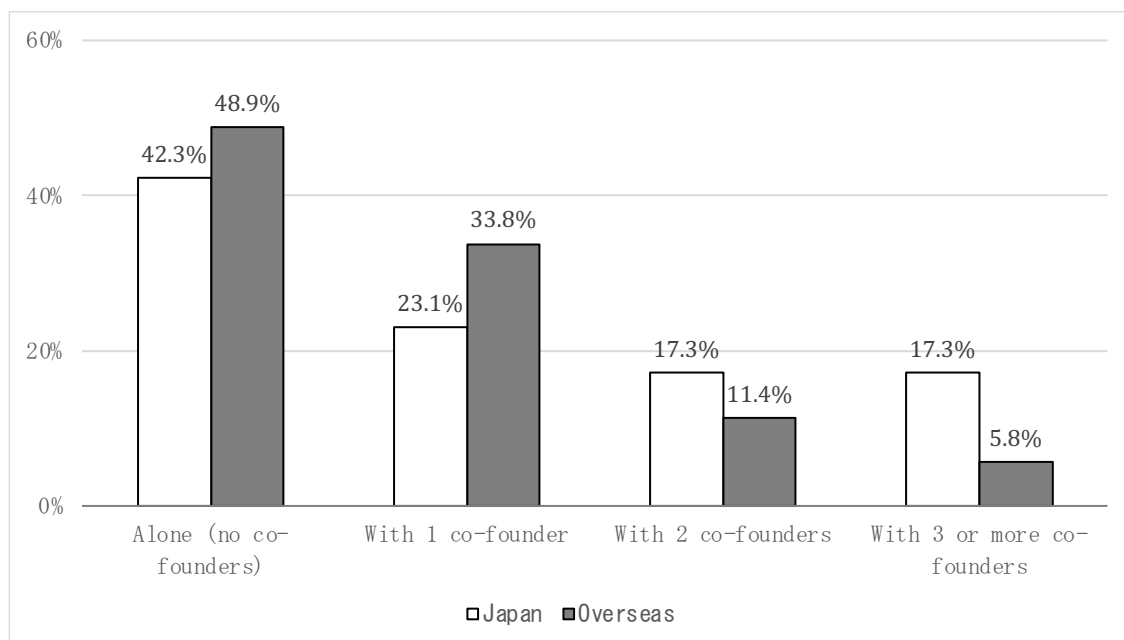
Among those preparing to start a business, 22.2% in Japan and 41.1% in the world intend to make entrepreneurship their main occupation after graduation from university. In this regard, it can be said that many Japanese students are less determined than students around the world in their intention to make entrepreneurship their main occupation.

Figure 8. Those preparing to start a business and want to make it their main occupation (Japan N=15, World N=19,481)



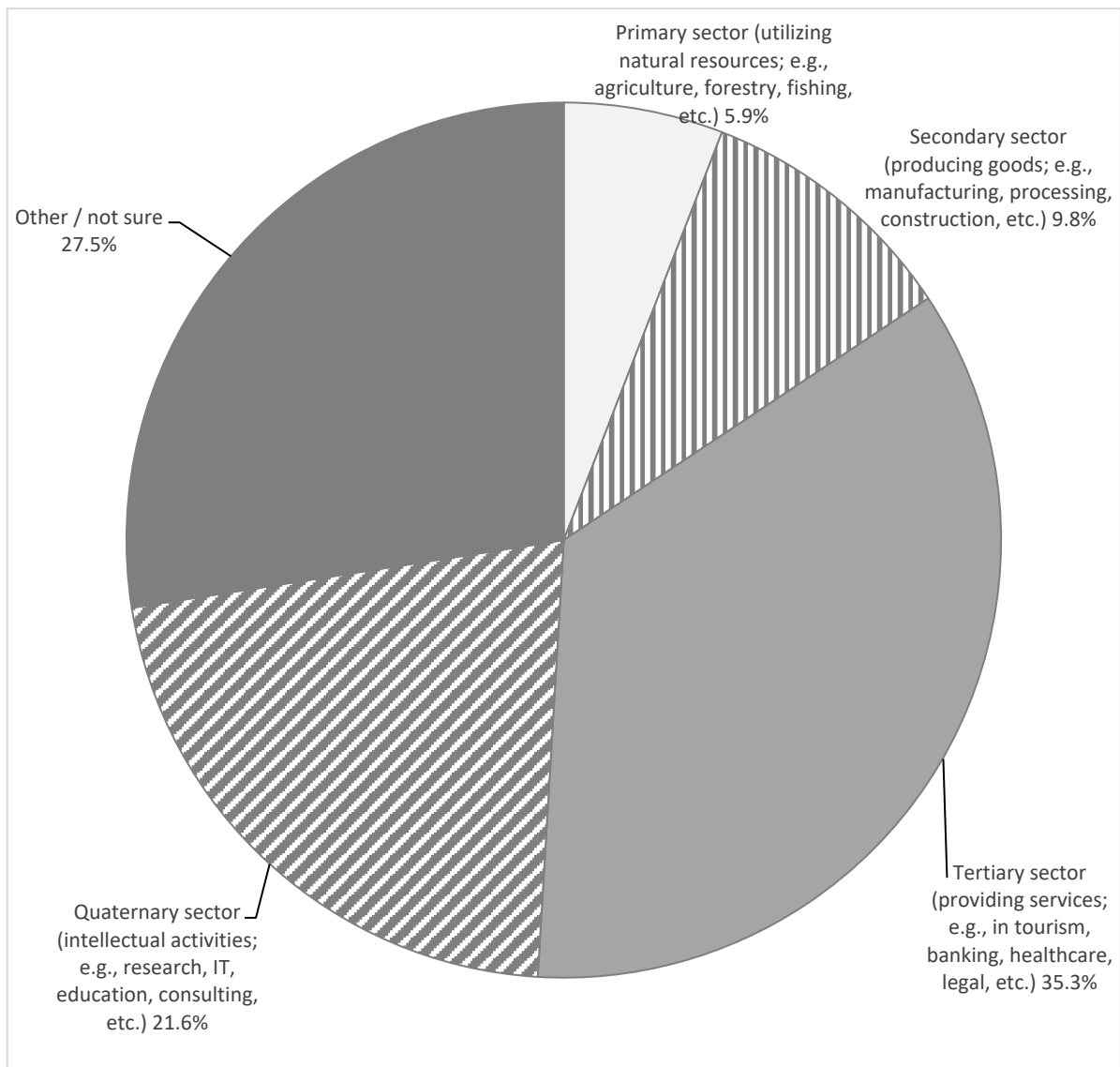
As for the number of co-founders of the business being prepared to start, the most common answer was "only myself (no co-founder)" at 42.3%, followed by "one co-founder" at 23.1%, indicating that many respondents, including the respondent him/herself are trying to start a business with a team of two or less people, in common with the rest of the world. On the other hand, "3 or more co-founders" was selected by 17.3% of the respondents in Japan and 5.8% in the rest of the world, showing a difference between Japan and the rest of the world.

Figure 9. Number of co-founders of businesses preparing to start up (Japan N=52, World N=38,172)



The distribution of business sectors in which prospective entrepreneurs plan to operate is as follows (Japan)

Figure 10. Types of businesses planned by pre-entrepreneurs (Japan) (N=51)



4.2 Active Entrepreneurs

In the 2023 survey, only 18 (1.1%) were already entrepreneurs. The difference is significant since 25,205 (11.1%) students overseas were active entrepreneurs. As for the year in which they started their businesses, the year 2023 accounted for about 1/3 of the global total at 30.2%. In Japan, too, the year 2023 was the most common, at 43.8%, followed by 2022 at 18.8% (Fig. 11).

When Japanese respondents who had already started their own business while still in school were asked how many employees they had in their company, the largest percentage (62.5%) answered 0 (management only), with all of them having 5 or fewer employees (Fig. 12).

Figure 11. Year of establishment of companies of active entrepreneurs

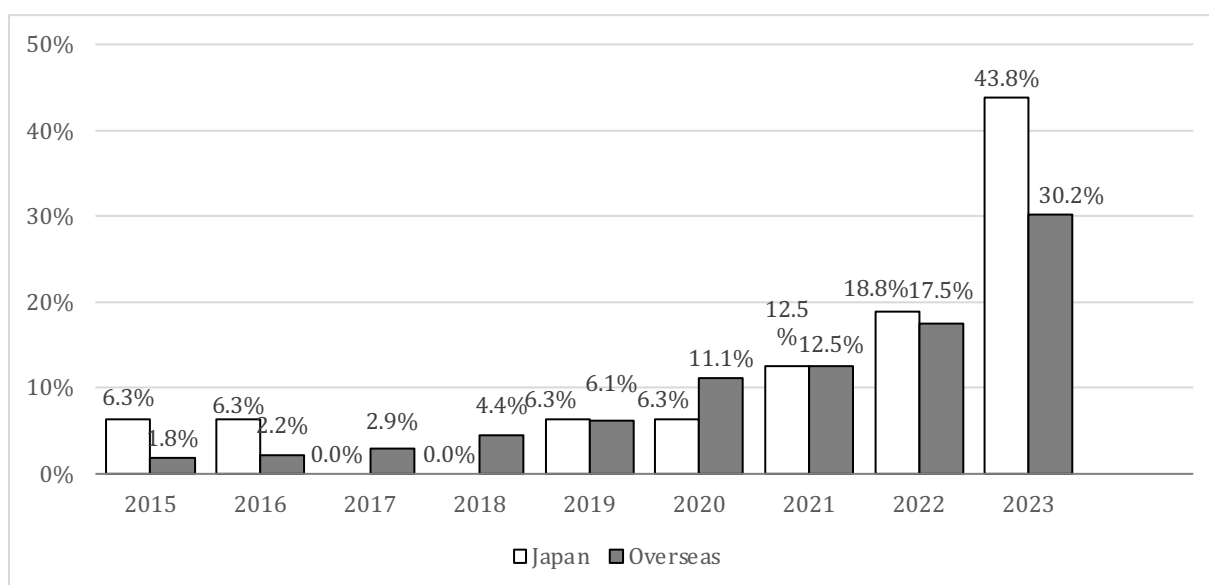
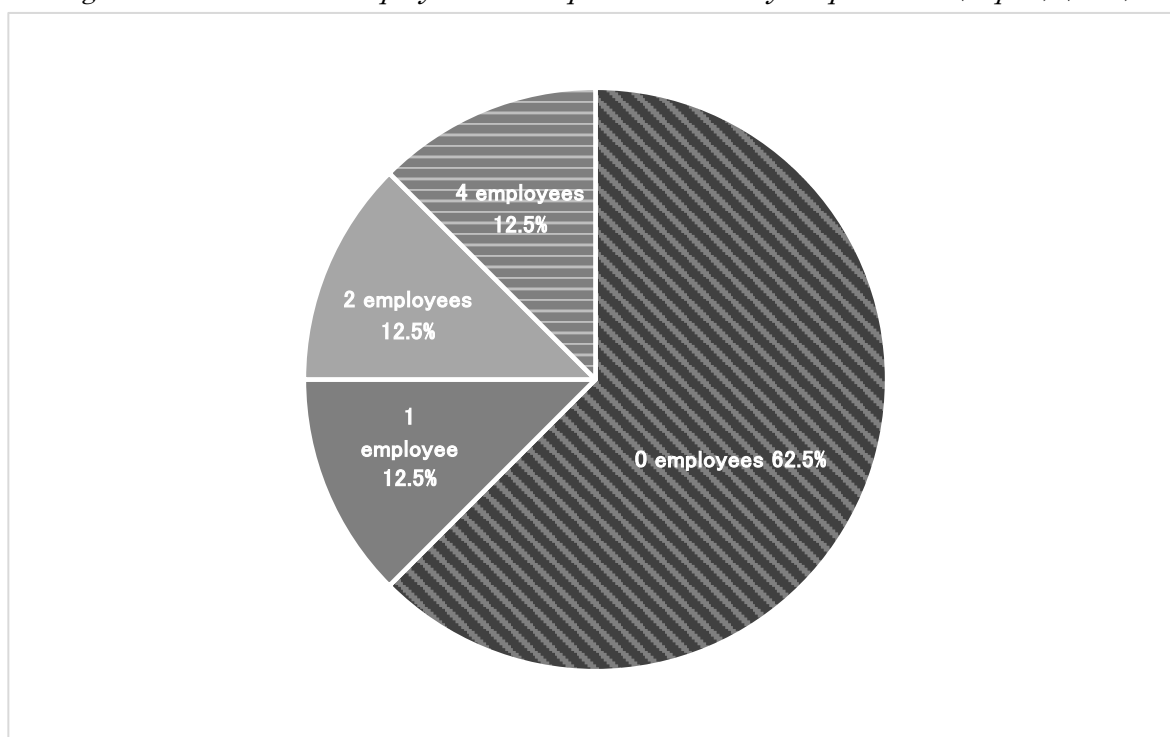
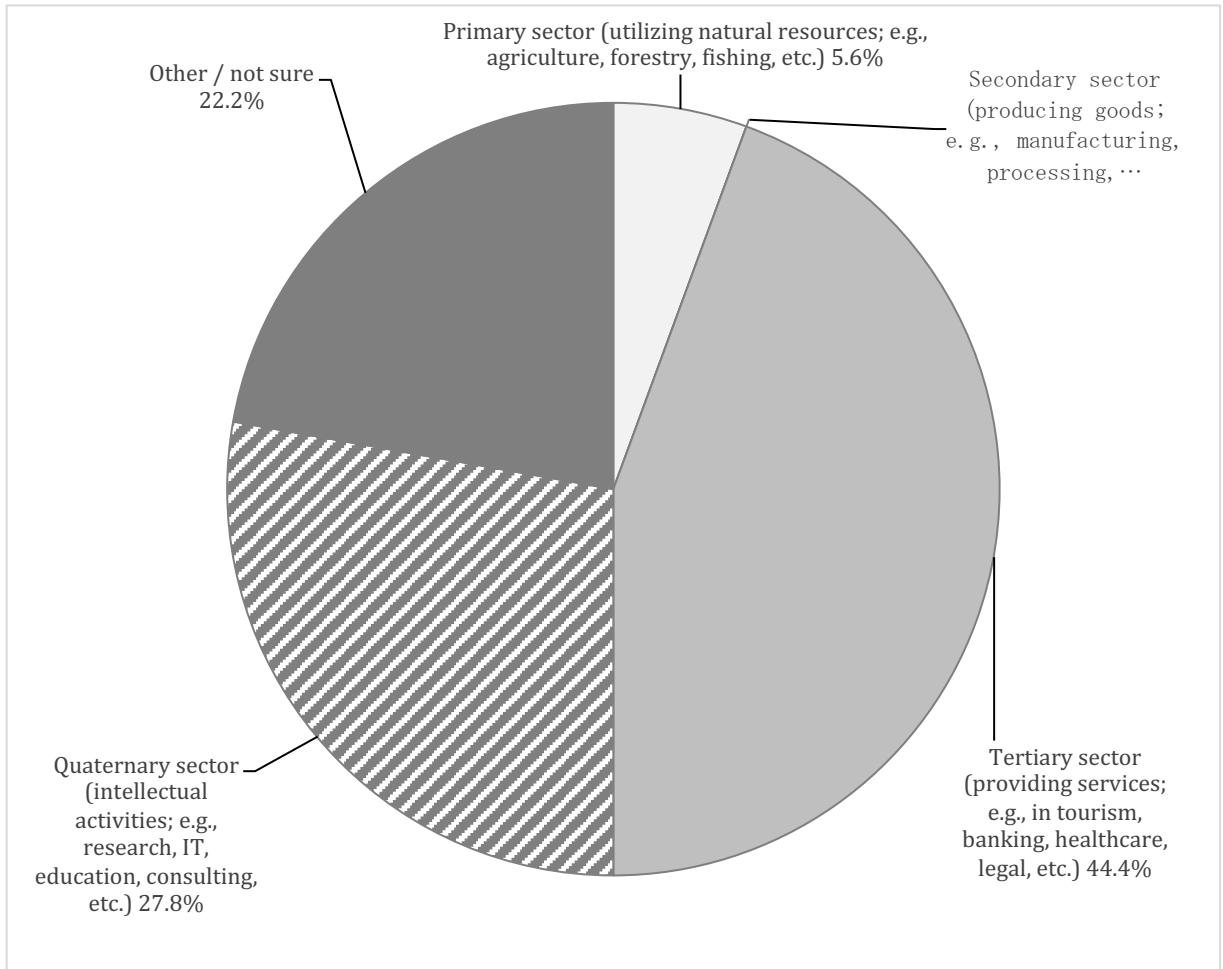


Figure 12. Number of employees in companies owned by respondents (Japan) (N=8)



The business areas of activity entrepreneurs are as follows (Japan)

Figure 13. Business domain of entrepreneurial businesses (Japan) (N=18)

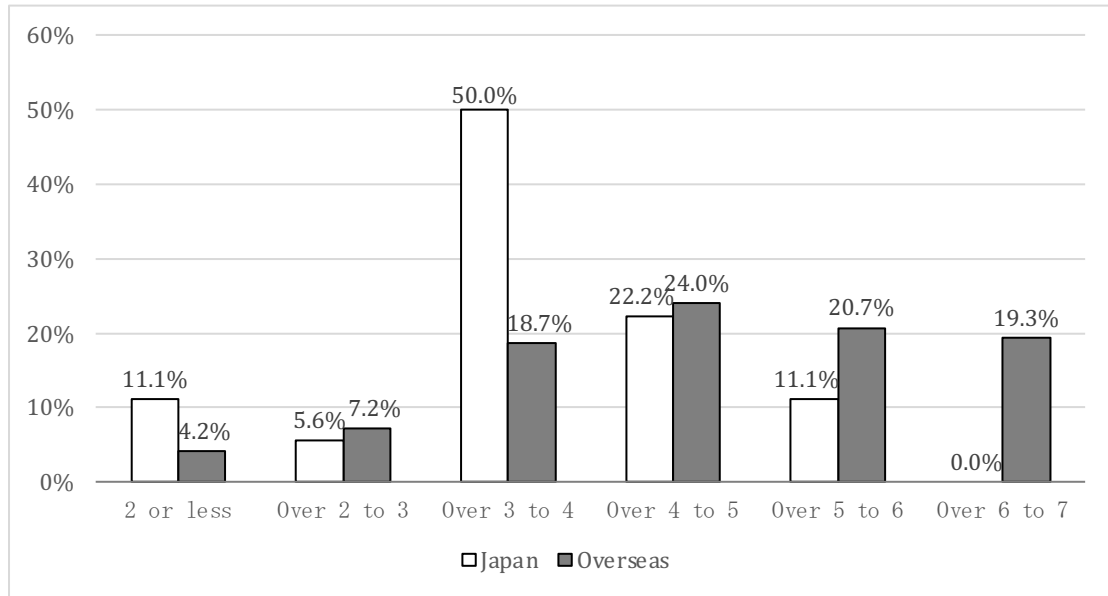


With regard to the performance of the firms run by activity entrepreneurs, they were asked to rate the firms on a Likert scale of 1 (= very poor) to 7 (= very good) in terms of sales growth, market share growth, profit growth, job creation, and innovation compared to other firms selling similar products/services. The averages for each indicator are shown in Table 4. The overall average of the five indicators for performance is 3.92, with 11.1% of active entrepreneurs scoring 5 or more out of 7. However, in the rest of the world, the average of the five indicators is 4.82, and about 40% of the respondents gave 5 points or more, indicating that many of them gave higher ratings than in Japan (Fig. 14).

Table 4. Performance of firms owned by active entrepreneurs (Japan)

Performance Items	Mean	SD
Increase in sales	4.22	1.06
Market share growth	4.24	1.251
Increase in profit	4	1.495
Job creation	3.44	1.58
Innovativeness	3.71	1.572

Figure 14. Performance evaluation of active entrepreneurs' businesses (Japan N=18, World N=23,713)



5 Analysis of Influencing Factors

5.1 Entrepreneurship Education at Universities

Respondents were asked about entrepreneurship education they had taken at university. More than half of the respondents in both Japan and the world as a whole have never taken courses related to entrepreneurship (Fig. 15 and Fig. 16).

Respondents who are preparing to start a business or who want to start a business immediately after graduation had a higher percentage of respondents who selected "have taken a special program on entrepreneurship," "have taken at least one elective course on entrepreneurship," or "have taken at least one required course on entrepreneurship" compared to respondents as a whole, both overseas and in Japan (Fig. 15 and Fig. 16). The percentage of respondents who selected "Have taken at least one course related to entrepreneurial activities as a required course" was higher (Fig. 15 and Fig. 16).

Figure 15. Entrepreneurship education course enrollment rates (Japan) (N=1,698)

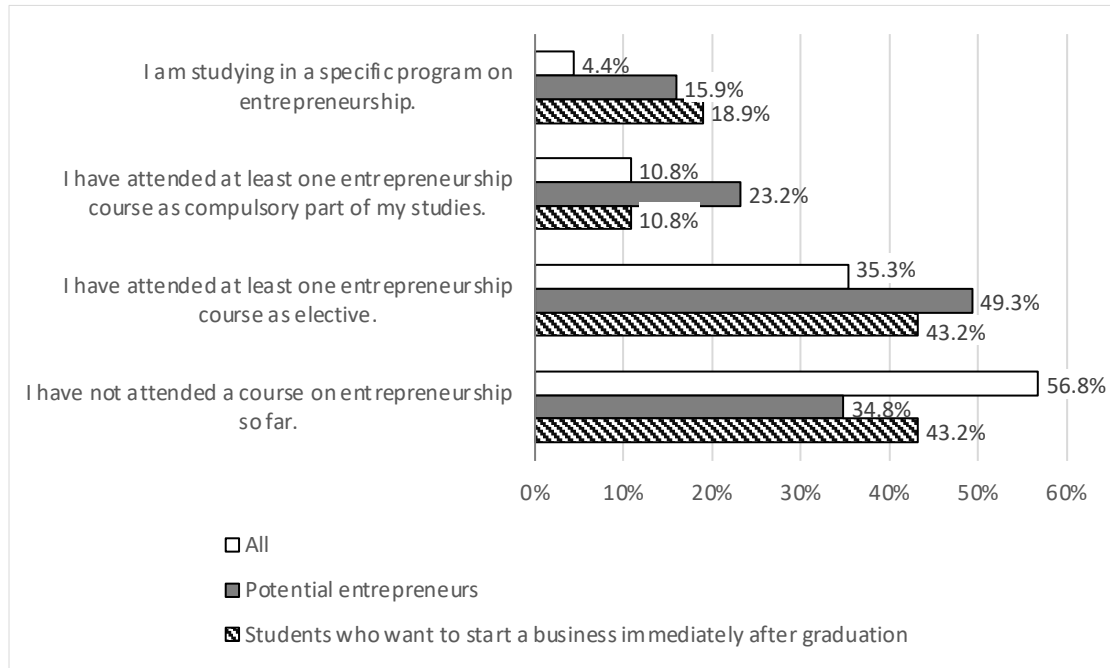
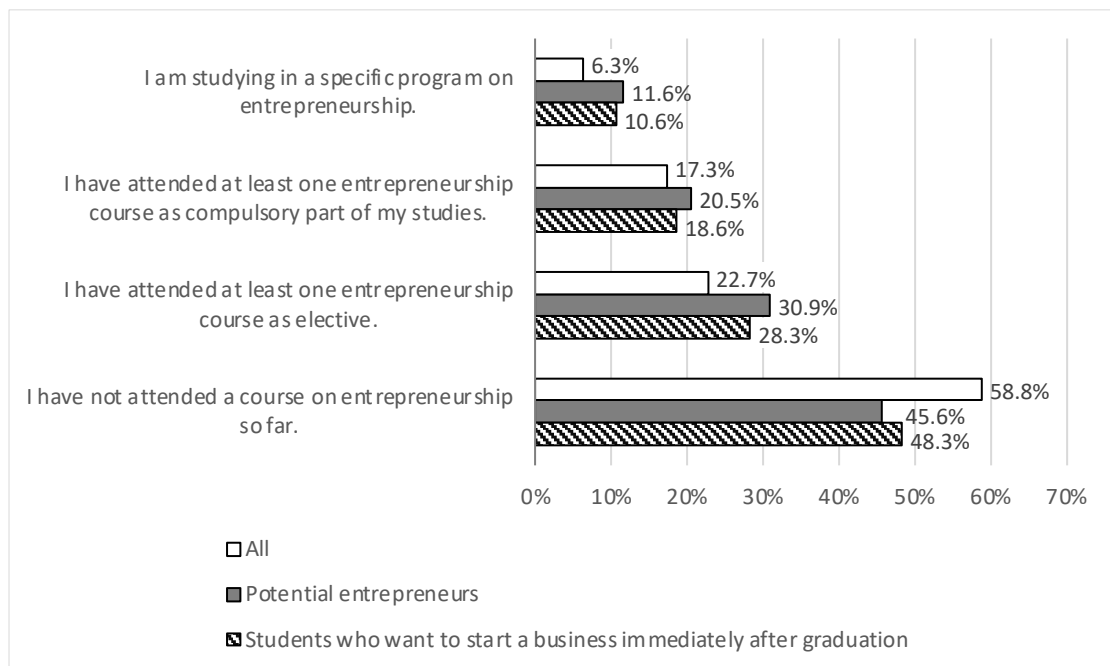


Figure 16. Entrepreneurship education course enrollment rates (Overseas) (N=226,718)



5.2 By Major

We compared entrepreneurial intention immediately after graduation and five years after graduation for each major studied at the university. In Japan, students majoring in "Arts and Humanities (Liberal Arts, History, Philosophy, Linguistics, and Religious Studies)" had the highest entrepreneurial intention both immediately after and five years after graduation, although it should be noted that the sample size is very small. Immediately after graduation, "Law," "Economics," and "Engineering" were the most popular majors; five years later,

"Commerce and Business Administration," "Arts," and "Economics" were the most popular majors for entrepreneurial intentions (Fig. 17).

In overseas, students majoring in "Commerce and Business Administration" have higher entrepreneurial intentions both immediately after graduation and five years after graduation, followed by "Economics" (Fig. 17).

Figure 17. Percentage of those with entrepreneurial intentions by major, immediately after graduation and 5 years later: Japan (Immediately after graduation N=37, 5 years later N=146)

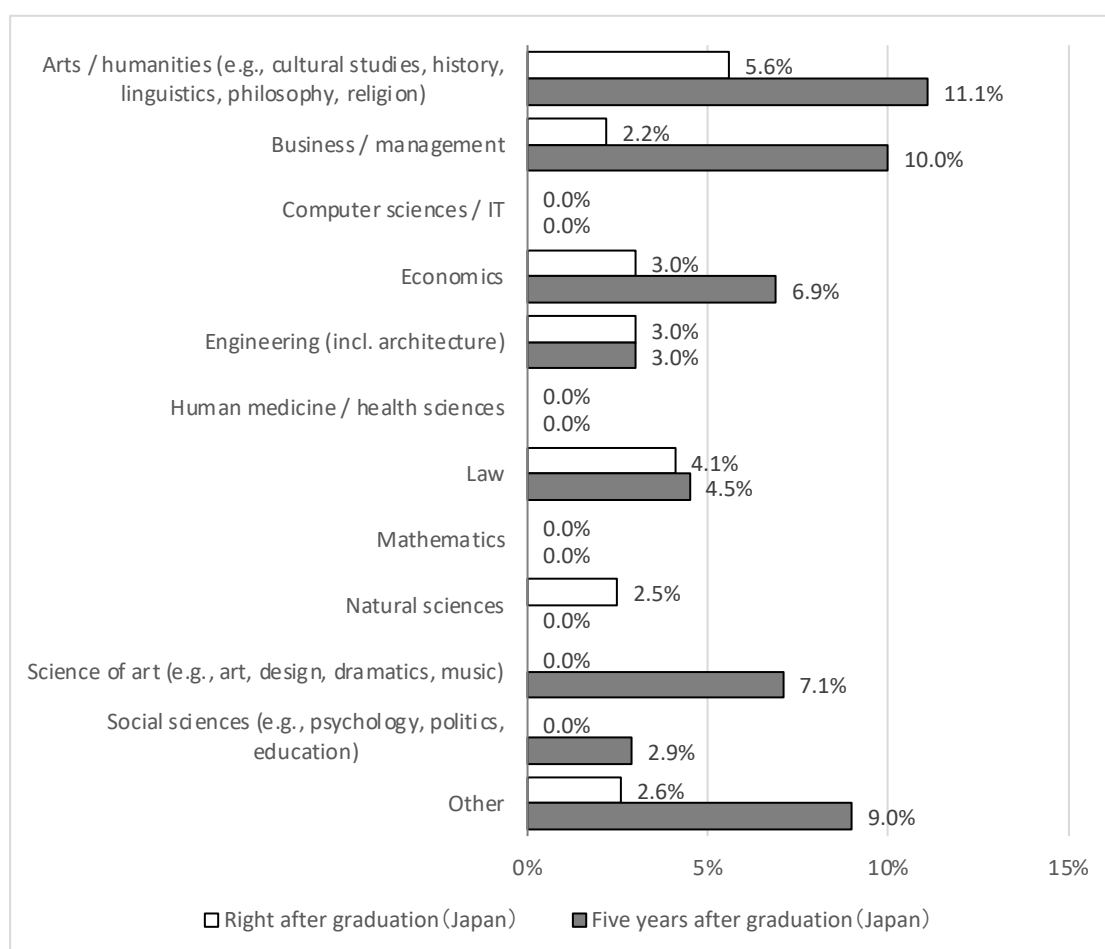
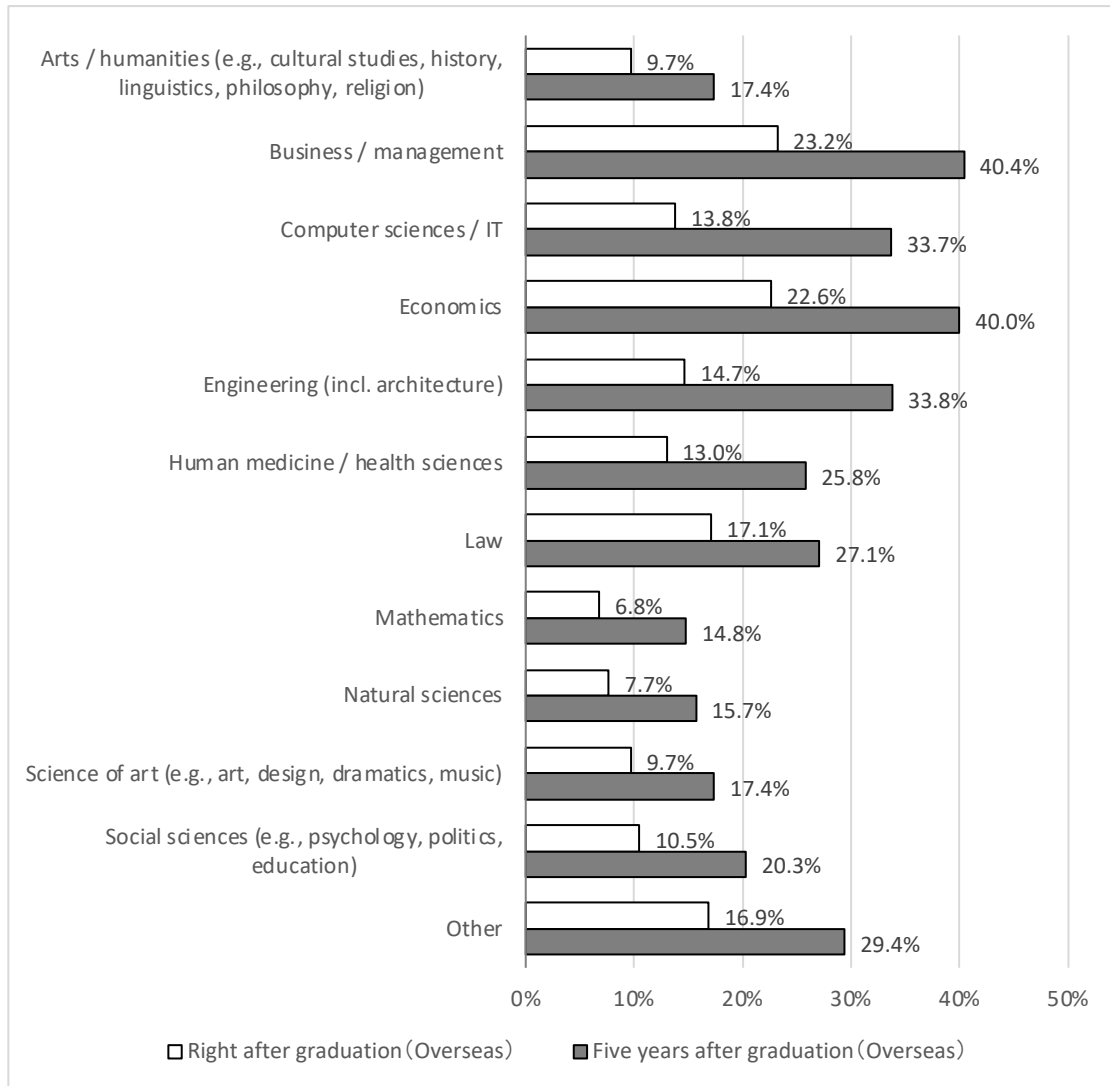


Figure 18. Percentage of those with entrepreneurial intentions by major (immediately after graduation and 5 years later: world) (N=226,512)



Figures 19 and 20 show an analysis of entrepreneurial activity by major by entrepreneurial activity status (i.e., pre-preparing entrepreneurs and active entrepreneurs). In Japan, entrepreneurial activity is generally low, but the number of active entrepreneurs is high in "Human Medicine and Health Sciences," "Law," and "Economics," etc. In the rest of the world, the number of active entrepreneurs is high in "Commerce and Business Administration," "Economics," etc. In the rest of the world, students majoring in "Commerce and Business Administration" and "Economics" show a high percentage of both preliminary entrepreneurs and active entrepreneurs, as does the intention to start a business after graduation.

Figure 19. Entrepreneurial activities by major (Japan) (active entrepreneurs N=18, pre-entrepreneurs N=69)

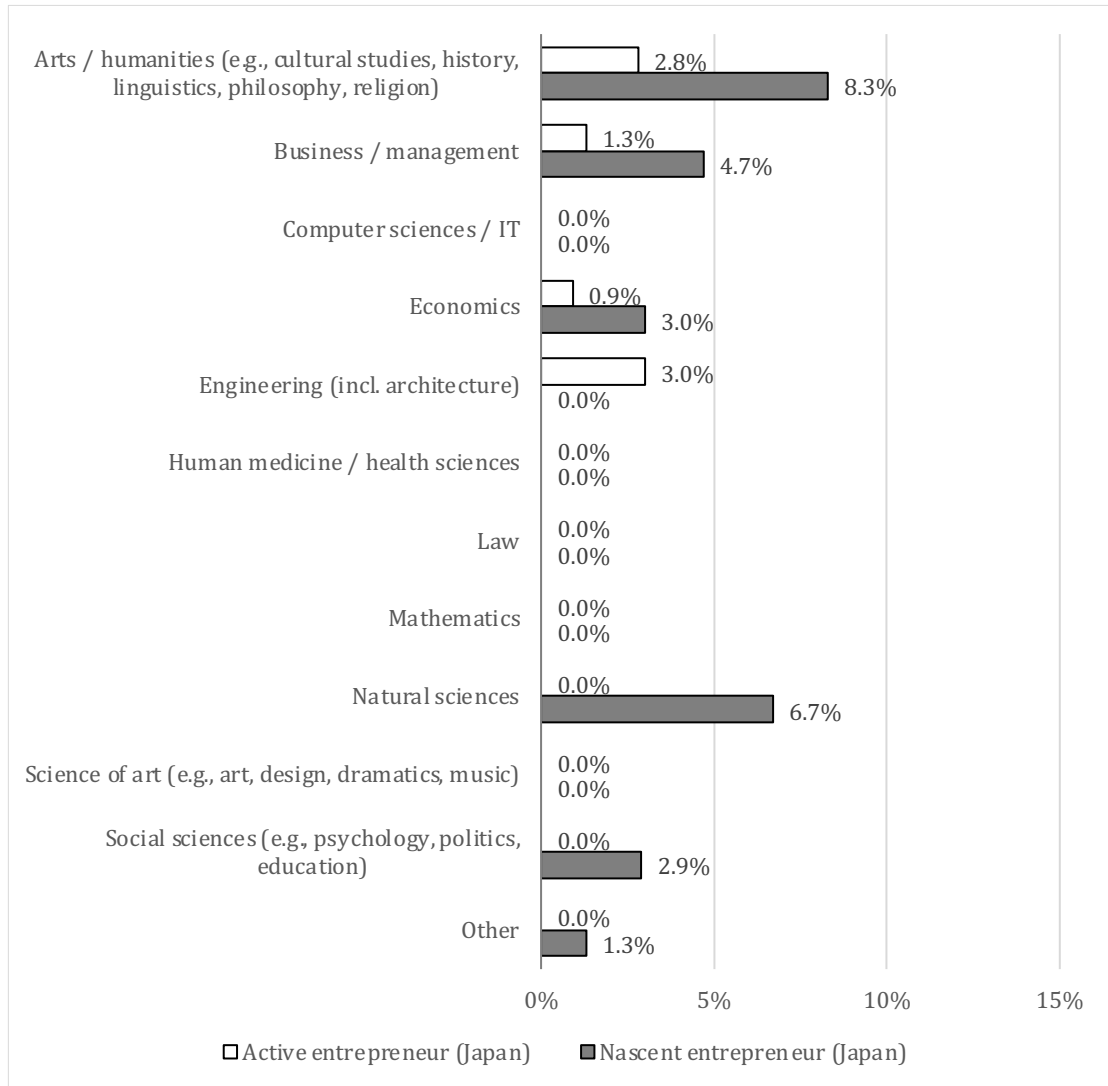
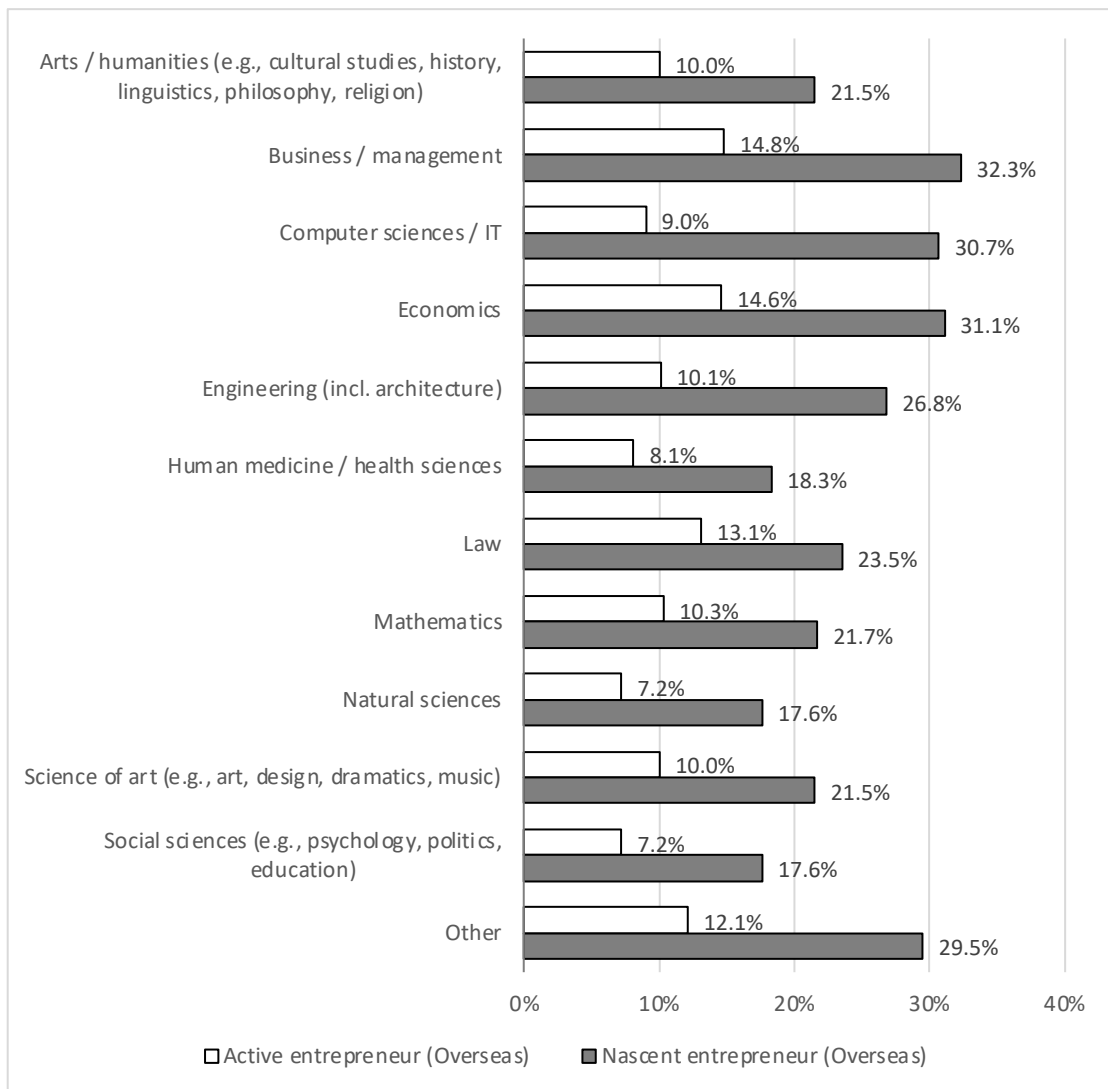


Figure 20. Entrepreneurial activity by major (World) (N=226,512)



5.3 Gender

Looking at entrepreneurial activity status by gender of respondents and their willingness to start a business immediately after graduation from college and five years later, the Japanese responses show that women account for less than half of the male respondents in all categories except for the preliminary entrepreneurial activity, while the global responses show 70-80% of men in both entrepreneurial intention and entrepreneurial activity, with little difference between men and women in entrepreneurial intention and entrepreneurial activity.

Figure 21. Entrepreneurial activity and percentage of those intending to start a business, by gender (Japan)

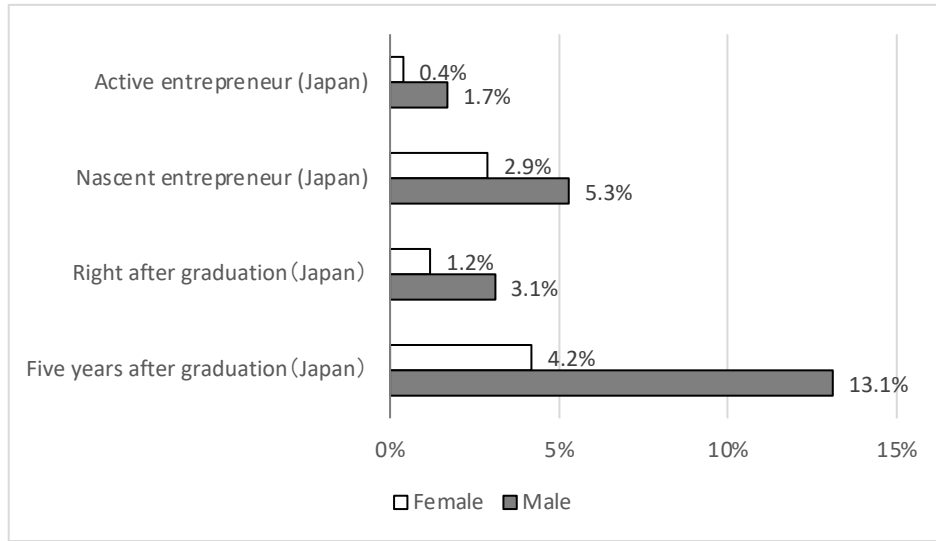
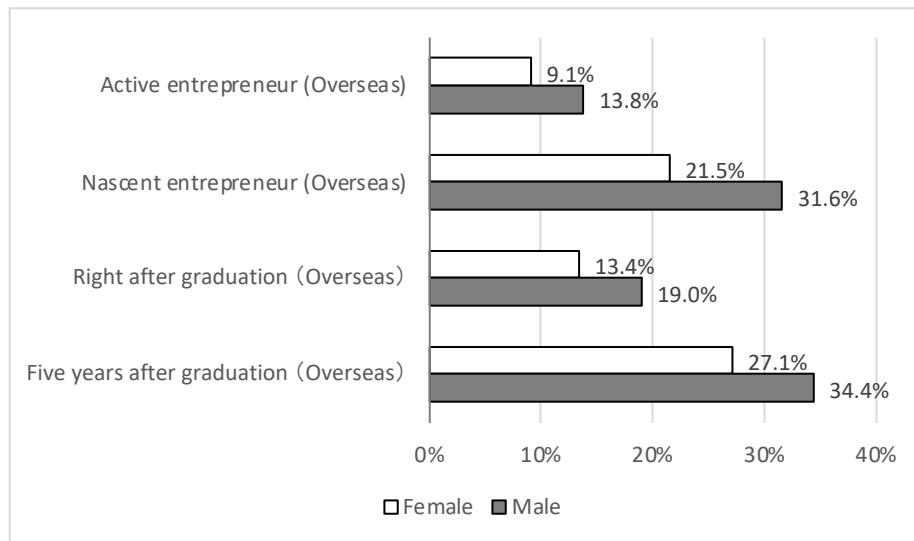


Figure 22. Entrepreneurial activity and percentage of those intending to start a business, by gender (Overseas)



5.4 Family Situation

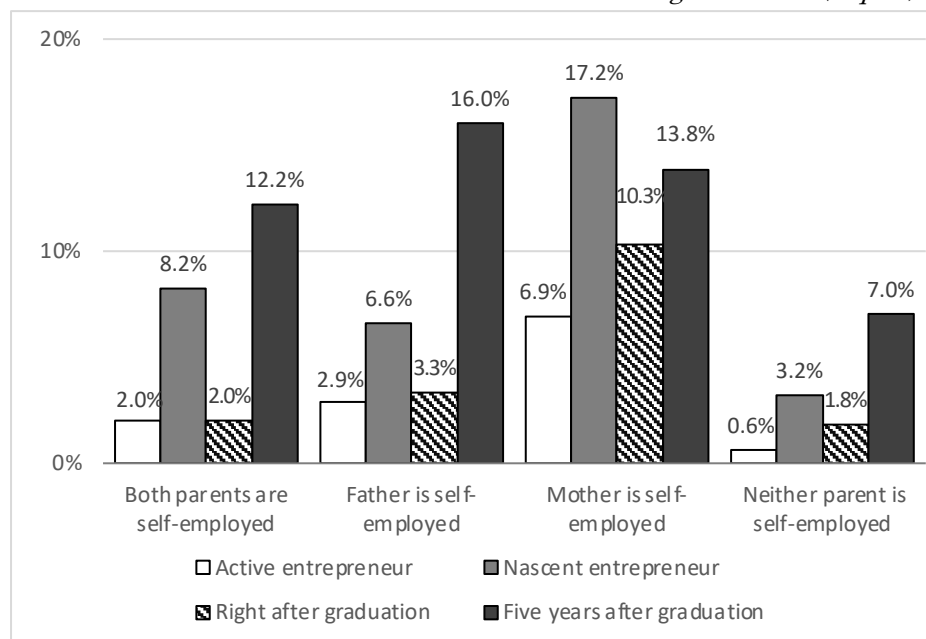
We present the aggregate results for Japan on whether the respondent's parents are self-employed or not. The percentages of respondents whose parents are either or both self-employed are shown in Table 5. This distribution trend is generally similar to the results of the 2021 survey. Note that the Global GUESSS Report 2023 does not present this data.

Table 5. Percentage of parents who are self-employed (Japan)

	2023 Survey	2021 Survey	2018 Survey
Neither parent is self-employed	81.0%	82.1%	79.9%
Father is self-employed	14.4%	12.3%	14.8%
Mother is self-employed	1.7%	2.2%	2.1%
Both parents are self-employed	2.9%	3.3%	3.3%

Looking at the relationship between whether the respondent's parent is self-employed and the respondent's entrepreneurial activity status and desire to start a business after graduation, the results showed that the intention to start a business after graduation and actual entrepreneurial activity were highest when the mother was self-employed. When the father was self-employed, the intention to start a business five years after graduation was higher, but the percentage of pre-entrepreneurs and active entrepreneurs was higher when the mother was self-employed.

Figure 23. Parents' self-employment/non-self-employment and respondents' entrepreneurial activities and intentions to start a business after graduation (Japan)



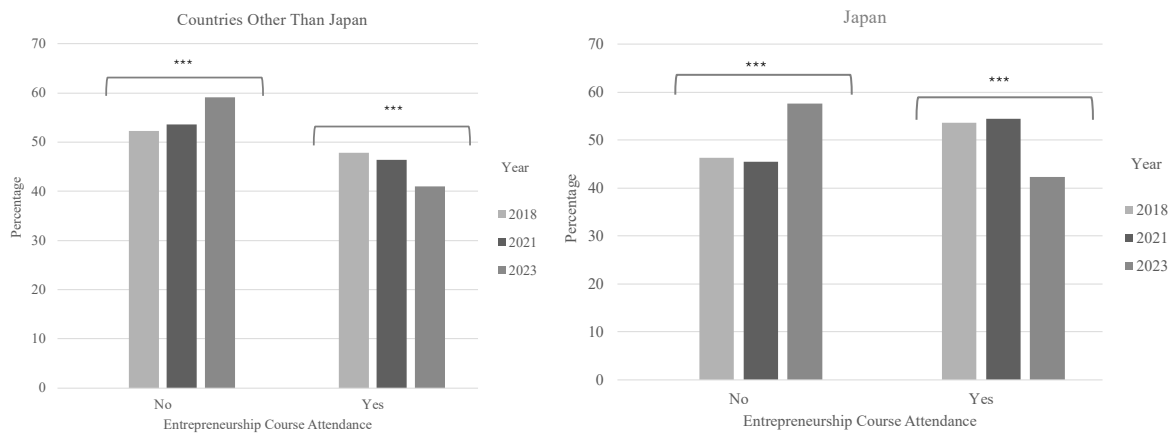
6 Trends in students' entrepreneurial intentions in Japan: a comparative analysis of 2018, 2021, and 2023

Japan has participated in the GUESS survey since 2011, with the 2023 survey marking the seventh time. This continuous participation over the past 12 years has resulted in an accumulation of data on entrepreneurship among Japanese students. This long-term dataset provides an opportunity for detailed analysis of changes in Japanese students' entrepreneurial attitudes and behaviors over time. In particular, comparing the results of three surveys in 2018, 2021, and 2023 allows us to clearly identify recent trends and changes. During this period, from 2020 onward, the COVID-19 pandemic has caused major changes in lifestyles and economic activity around the world. The accelerating pace of digitization and the emergence of new business models have also had a profound impact on the entrepreneurial environment. Exploring how these socioeconomic changes have affected student entrepreneurship is another important aspect of the multi-year comparison.

Therefore, in this analysis, we compared trends in entrepreneurial intentions of students in Japan and the rest of the world using the GUESS 2018, 2021, and 2023 global response data. One-way ANOVA was employed as the statistical method, with a particular focus on participation in entrepreneurship education and Entrepreneurial Intention (EI).

First, the status of Entrepreneurship Education (EE) enrollment was as follows.

Figure 24. Entrepreneurship education enrollment

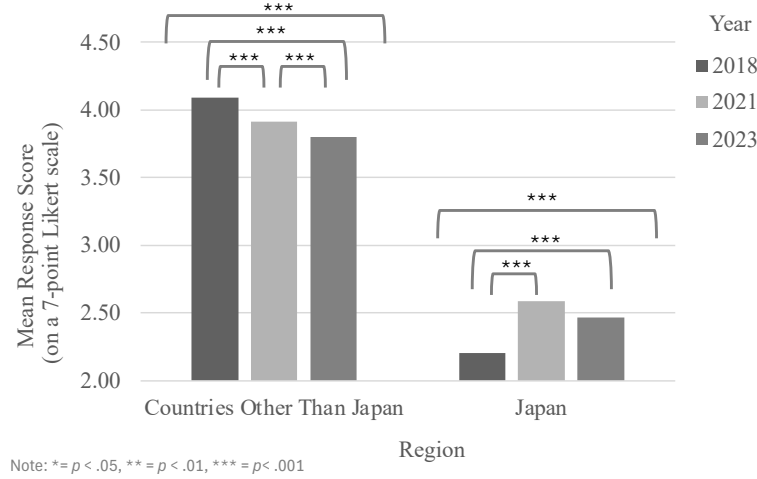


The global trend has been a continuous decline in the rate of EE attendance since 2018. The trend in Japan also shows a temporary increase in 2021, but by 2023 it has dropped to a level below that of 2018. These results suggest that there are challenges in the positioning and effective implementation of entrepreneurship education in higher education institutions. The temporary increase in enrollment in 2021 in Japan is likely a temporary response to the socioeconomic changes caused by the pandemic. It should be noted that since the number of countries and universities responding to the survey varied from year to year, a more accurate understanding of the situation would require analysis in a region- and university-specific manner.

Next, the changes in entrepreneurial intention (EI) were as follows.

For this entrepreneurial intention, we use a composite measure of entrepreneurial preference and determination based on responses to questions consisting of items such as "I want to start a company someday" and "I am ready to become an entrepreneur."

Figure 25. Entrepreneurial Intention (EI)



The global trend shows a continuous significant decline in EI from 2018 to 2023. The Japanese trend shows a significant increase in 2021, followed by a leveling off in 2023. This result shows an interesting divergence between Japan and the rest of the world. It should be noted that Japan's EI increases in 2021, while the world's EI continuously declines. This difference suggests that differences in cultural backgrounds and economic structures may be influencing the formation of attitudes toward entrepreneurship.

As mentioned above, an overview of the results of the analysis for the period 2018-2023 shows that there has been no increase in the global enrollment rate of EE, and conflicting results for EI between Japan and the rest of the world. In addition, it is necessary to consider the impact of the COVID-19 pandemic, especially after 2020, as well as the changes in responding countries and responding universities during the relevant period. The increase in EI in Japan in 2021 may have been influenced by the focus on new business opportunities during the pandemic period and the recognition of the need to adapt to change. However, it is also clear that there is a gap between the perception of business opportunities and actual outcomes. On the other hand, the downward trend in EI worldwide may be an indication of a cautious attitude toward entrepreneurship, due to increasing economic uncertainty and the need to change traditional business models.

7 Summary

The 2023 Global Report of the GUESSS survey showed that Japanese students' intention to start a business after graduation is the second worst in the world, and those who are actually preparing to start a business or have already started a business are among the worst in the world. Japan's worst ranking has persisted since the 2011 survey, when Japan first participated in the GUESSS survey. It should be noted, however, that this may be due to the

presence of entrepreneurship-related courses and programs at the universities participating in the survey, as well as the possibility that students with high entrepreneurial intentions or who are already entrepreneurs are taking entrepreneurship-related courses and responding to the GUESSS survey with interest at the same time.

In Japan, the government, local governments, and several universities are strengthening their efforts to support startups and promote entrepreneurship education year after year, and it is hoped that these measures will lead to improvements in the indicators in future surveys.

The GUESSS 2023 survey in Japan was conducted in a situation where, although the social turmoil caused by the pandemic had been settled to a certain extent, university classes were being conducted not only in the traditional offline format, but also in a variety of online and hybrid formats. In such a situation, the complexity of the survey notice and operational procedures could not be denied, resulting in a decrease in the number of responses. In future surveys, it is necessary to expand the number of universities that responded to the survey and to devise a method to call for survey cooperation so that more students will respond to the survey. Finally, we would like to thank the university administrators and students who responded to the GUESSS 2023 survey.