

# Entrepreneurship Ambitions of BUas students

Study year 2021-2022



DISCOVER YOUR WORLD

# Preface

Entrepreneurship represents an important value for the economy. After all, entrepreneurs create jobs. Research within the Global Entrepreneurship Monitor (GEM, 2019) shows that countries in which entrepreneurship is supported by society tend to be more prosperous and competitive. Entrepreneurship stimulates innovation, knowledge growth, sustainability, and international cooperation. In particular, ambitious entrepreneurs contribute to job growth, innovation, and exports. The current economic developments therefore require employees to adopt an independent and proactive, entrepreneurial attitude with responsibility for the organisation; education plays an important role in this (Ondernemend.nu, 2020).

Within Breda University of Applied Sciences (BUAs) much attention is paid to entrepreneurship. Both entrepreneurship and entrepreneurial attitude are part of the central educational vision of BUAs and part of our DNA.

Entrepreneurship remains an important pillar of Dutch society and at national and regional level, government funded, initiatives that encourage and stimulate entrepreneurship are in place. In higher education too, entrepreneurship is an integral part of curricula. This development has stimulated the curiosity of researcher Adriaan van Liempt and coordinator of entrepreneurship education Tijs van Es about the status of entrepreneurial ambitions within the ranks of BUAs.

This research offers the organisation insight into the entrepreneurial ambitions of our students within BUAs and can follow this development over the years. Thanks to this research, valuable insights have been created that are used to continuously improve entrepreneurship education and to provide support for students with start-up ambitions.

Thanks to our consortium partners from the regional network Braventure ([www.braventure.nl](http://www.braventure.nl)) and particularly Avans University of Applied Sciences for sharing their experiences in conducting this research.



Tijs van Es

A handwritten signature in blue ink, appearing to read 'Tijs van Es', with a large, stylized flourish underneath.

Coordinator Entrepreneurship Education  
Breda University of applied sciences

# Contents

<b>Preface</b>	<b>1</b>
<b>Contents</b>	<b>2</b>
<b>Summary</b>	<b>3</b>
<b>1 Entrepreneurship ambitions among BUAs students</b>	<b>5</b>
<b>2 Methodology</b>	<b>6</b>
2.1 Data analysis	6
<b>2.1.1 Data from prior years</b>	<b>6</b>
<b>3 Results</b>	<b>7</b>
3.1 Response	7
3.2 A BUAs wide look at students' entrepreneurial ambitions	8
<b>3.2.1 Comparing entrepreneurial ambitions of students at BUAs over the period 2018-2020</b>	<b>8</b>
3.3 A closer look at entrepreneurial ambitions of BUAs students	8
<b>3.3.1 Entrepreneurial ambitions per BUAs domain</b>	<b>9</b>
<b>3.3.2 Entrepreneurship by year of registration</b>	<b>9</b>
<b>3.3.3 Entrepreneurship at BUAs controlled for study delay</b>	<b>10</b>
3.4 Demographic outlook of entrepreneurial ambition	11
<b>3.4.1 The influence of age on interest in entrepreneurship</b>	<b>11</b>
<b>3.4.2 The influence of gender on entrepreneurial ambitions</b>	<b>12</b>
<b>3.4.3 The influence of nationality on interest in entrepreneurship</b>	<b>13</b>
3.5 Stability and change in entrepreneurial ambition of Cohort 2018-2019	16
<b>3.5.1 Change and stability: tables</b>	<b>16</b>
<b>3.5.2 Cohort 2018-2019: plotting dynamics</b>	<b>17</b>
<b>3.5.3 Cohort 2018-2019 by sex</b>	<b>19</b>
<b>3.5.4 Cohort 2018-2019 by domain</b>	<b>21</b>
<b>4 Conclusion</b>	<b>29</b>
4.1 Conclusion and discussion	29
4.2 What drives student's intentions?	30
<b>5 References</b>	<b>31</b>
<b>6 Appendix</b>	<b>32</b>
<b>7 About the author</b>	<b>33</b>

# Summary

This study aims at answering two questions related to BUAs students' interest in starting/owning a business and whether this interest changes during their study. The first question is answered by looking at figures extracted from BUAs internal database. The second question is predominantly answered by following a specific cohort (Cohort 2018-2019) over several years. This cohort has been followed for four years now and trends and patterns are emerging from the data. Students' preferences stabilize in the sense that they are more certain in what direction they are moving. Fewer students have doubts. In general, the inclination to start a business declines for this cohort.

## *Entrepreneurial ambitions of BUAs students in study year 2021-2022*

BUAs wide 17.1 percent of the students indicate they are interested in starting a business in study year 2021-2022. 4.1 percent has already started a business during their study, 3.1 percent plans to do so whilst they are still studying and 10.0 percent plans to do so after their study. 49.4 percent of the students is uncertain whether they want to become entrepreneurs and 33.4 percent is certain they do not. Compared to study year 2018-2019, these figures have changed in favor of those that have optimistic entrepreneurship intentions for three years in a row now.

The above figures are slightly biased towards favoring entrepreneurship as 31.1 percent of the group of students that own a business already during their studies, is defined by students that have a mild to severe study delay. The effect is not severe. After correcting, 17.0 percent of the students have positive ambitions and the percentage of students that has already started a business drops to 3.3 percent. We have to keep in mind that students with a study delay are automatically also older students than average, are nearing the end of their studies and have a more clear picture of their future than starting students.

A closer look at the eight domains BUAs offers studies in, shows that there are noticeable differences. Particularly the domains of Media, where 25.5 percent of the students thinks that they will start a business at some point, Hotel and leisure & Events deviate positively from the overall BUAs figures. Facility, Logistics, Games, Tourism and Built Environment all deviate negatively in terms of student entrepreneurship intention from the overall BUAs figures.

Gender also has an important effect on entrepreneurship intentions. In all three positive entrepreneurship intention categories, males are overrepresented to females. Females say 'no' to a future as entrepreneur more often than males.

Nationality also seems to influence the outcomes. Students with a non-Dutch nationality tend to entertain the thought of becoming an entrepreneur more so than Dutch students. However, these figures are biased towards those that plan to start a business after their study. Here also differences between the various domains can be discerned. It is mostly those international students within the domains of media, Games and Logistics that plan on starting a business.

## *Cohort 2018-2019: Developments in entrepreneurial ambitions of BUAs students*

Looking at a cohort provides more insight into the development in entrepreneurship intention than looking at the overall figures for all students. Where there is growth in ambition in the overall figures over the years, this is not the case when looking at this cohort. Within this cohort we see a growth in the relative number of students saying 'no' to a future as entrepreneur, whilst the number of those saying 'yes' remains stable at best.

Looking even closer at the figures by splitting these up by sex, we see that female students, over time, are less inclined to say 'yes' to a future as entrepreneur, whilst male students are more inclined to do so over time. Both males and females show an increase in the number of students that say 'no' over time, which is in line with the general trend.

Differences can be spotted as well when we look closer within the various domains students of this cohort are studying in. Within the domains of Games, Media, and Hotel, there is an overall decline in positive entrepreneurship intention. In the domain Facility this remains stable. Growth can be seen in domains of Logistics, Built Environment, Tourism, and Leisure & Events. In all domains the number over students saying 'no' to a career as entrepreneur grows during their studies, but this is more pronounced in the domains of Games, facility and Logistics than in other domains.

Overall, it is interesting to point out that the year to year dynamics in entrepreneurship intention remain, for lack of a reference point, 'high'. 26 percent of the students changed their opinion in 2019-2020 compared to the previous year. In the following two year the same percentage was 24 percent in 2020-2021 and 22 percent in 2021-2022.

# 1 Entrepreneurship ambitions among BUAs students

In college year 2018-2019, a project started to monitor the interest in entrepreneurship of students of Breda University of Applied Sciences (BUAs in short) (Van Liempt & Van Es, 2019, 2020, 2021). Similar studies had already taken place at Saxion and Avans (cf. Rovers, 2016) and this study started with the same basic question as the other studies: "Are you planning to start your own business?". One simple question that aims to monitor students' interest and ambition to start their own business. One of the main reasons to monitor students' ambitions in entrepreneurship is to get a clearer picture of our students overall. As educational institutions we tend to focus on preparing people for the work field, to become employees, without assuming students might want to employ themselves, or even become employers. Or, as Borbye (2010) suggests, to get out of our own comfort zones and adapt the way we teach more in line with students' wishes, interests and abilities.

This is already the fourth year in which data was collected. It also happens to be the second year where students have experienced the impact of the COVID-19 pandemic. As such, one of the questions which the this year's analysis may answer, is whether the pandemic, so far, has had an impact on students' entrepreneurship ambitions. The main results from the previous years can be summarized as following: overall, approximately 16% of the students have plans to start a business during or after their studies or have already started a business. This percentage is different for the various BUAs domains. Sex and nationality also influence the outcomes.

The overall goal of these studies is to gather insights in order to support both students and entrepreneurship education at BUAs in their goals and ambitions. Data used in this publication was collected at three points in time (each time in November) over a period of three years, 2018, 2019, 2020 and, again, in November 2021. The report itself reports on study year 2021-2022 and pays special attention to a cohort of students that started studying in 2018-2019. By following a single cohort during their study, we hope to get a better look at the dynamics in entrepreneurial ambition over the years of a single cohort.

Reporting is thus limited to an analysis of quantitative data that was available during the registration process. No interviews were held, nor were external sources and publications consulted to reach conclusions about students' motivations to become entrepreneurs. This report is thus a description of the situation at a point in time in November 2021.<sup>1</sup>

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<sup>1</sup> The authors would like to thank Tom Konings from Team Control at BUAs for providing the data and answering many questions.

## 2 Methodology

This study aims to answer the following research questions:

1. To what extent are BUAs students interested in becoming entrepreneurs?

And, based on cohort data of students that started their studies in study year 2018-2019:

2. How does the interest of students in becoming an entrepreneur develop over the course of their study at BUAs?

The question asked to students has been used in other studies and has been copied from Rovers (2016), which itself has used the question from a comparable study by Saxion to which Rovers (2016) refers. Using the same question allows us to compare the results of these various reports to one another. The question used in these studies is phrased in the following manner: "Do you intend to start your own business?". The following answer categories were available for students in both Dutch and English:

- > No.
- > Maybe.
- > Yes, after my studies.
- > Yes, during my studies.
- > Yes, I have already started my own business.

### 2.1 Data analysis

Data of all students that were enrolled and active in November 2021 has been imported from the BUAs central student administration system. Data was cleaned in R (R Core Team, 2021) in the R-studio environment (RStudio Team, 2021). The following packages were used for cleaning and reporting data: 'haven' by Wickham and Miller (2021) for importing SPSS datasets, 'readxl' by Wickham and Bryan (2019) for importing Excel datasets, and 'writexl' for exporting Excel datasets (Ooms, 2021), 'psych' for data manipulations (Revelle, 2021); 'lubridate' for date calculations (Grolemund & Wickham, 2011); and, finally, 'summarytools' for descriptive purposes (Comtois, 2021). The analyses reported on in this study involved the data of 7,326 students. After a check for double enrolments, 6,848 students were included in the final dataset. In the report, however, sometimes a total number of 6,847 respondents is reported because of missing data.

The analyses are solely descriptive in nature (frequencies and percentages). Techniques that are used include frequency tables and cross tables. In most cases, these tables were exported to Excel 365, where they were processed into tables and figures that could be used in this report. Sankey diagrams have been used to visualize the year-to-year aggregate changes in entrepreneurship intentions of the 2018-2019 student cohort. These were generated with SankeyMATIC (SankeyMATIC, 2014) and further edited in Adobe Illustrator (25.1) before being imported into this report.

#### 2.1.1 Data from prior years

In some cases, such as the cohort analysis, data from various study years has been used: 2018-2019 (N=7,049), 2019-2020 (N=7,060), and 2020-2021 (N=7,159). These data only list students that had been enrolled in November of that particular study year.

## 3 Results

In the following sections both the total response as well as answer to the main research question 'Are you planning to start your own business?' will be discussed. In the process, we will try to make a comparison to prior years, and when possible, talk about trends. Finally, students' intentions to start their own business is analysed in relation to their domain, sex, and nationality.

### 3.1 Response

Almost seven percent of the students is enrolled in more than one program. The figures in the report, however, are limited to a student's main study. Figure 1 below provides an overview of our students based on the data in their passports.

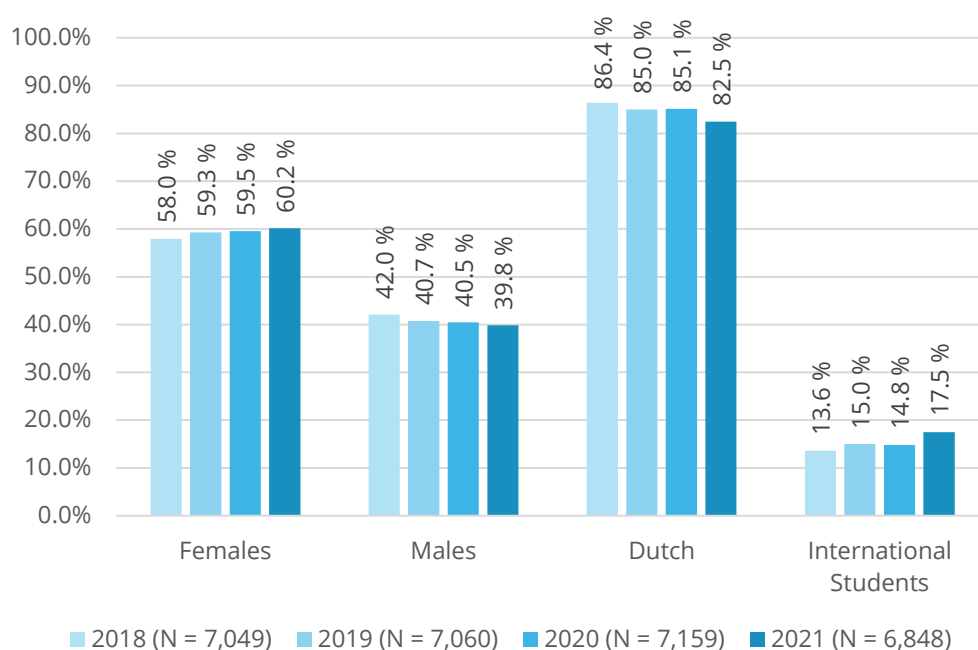


Figure 1 Response study years 2018-2019 to 2021-2022

The relative number of women studying at BUAs is close to 60 percent. BUAs offers several large study programs such as Leisure and Tourism, where women are overrepresented. The relative number of international students (students that are not listed as having a Dutch nationality in their passport) has risen to 17.5% of the total study population. COVID-19 did not have a negative impact on the influx of international students to BUAs. Their increase was not solely relative, also in absolute figures their number has increased to 1,199 from 1,061 last year.



### 3.2 A BUAs wide look at students' entrepreneurial ambitions

This study's central question is: "Are you planning to start your own business?". In Figure 2 and Figure 3 below, this question is answered. Figure 2 shows that 17.1 percent of the students intent to, or have already started, a business in 2021. The type or form of business students have in mind, is unknown. Figure 3 shows that, compared to 2018, there seems to be a small overall increase in interest in starting a business.

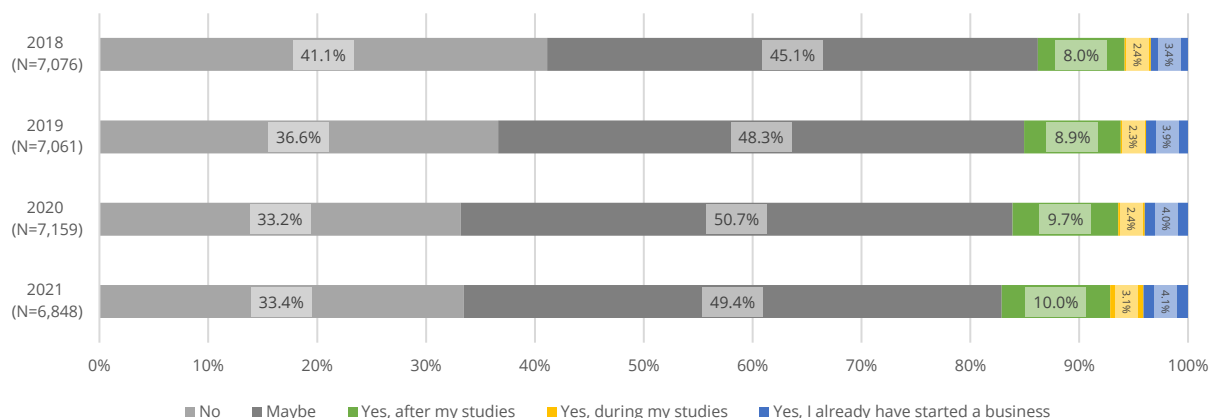


Figure 2 Four years of entrepreneurship intention of students at BUAs 2018-2021.

As Figure 2 demonstrates, 1,173 (17.1 percent) of our 6,848 students indicate an interest in starting a business. 4.1 Percent has already started a business, 3.1 percent thinks about starting a business during their studies and the largest share, 10.0 percent, aims to start a business after their studies. Slightly fewer than 50 percent of the students indicated that *maybe* they will start a business somewhere in the future.

#### 3.2.1 Comparing entrepreneurial ambitions of students at BUAs over the period 2018-2020

Figure 3 compares entrepreneurial ambitions of BUAs students over the years. The figures appear to be rather stable relatively, but in absolute terms the increase is more notable: 1,173 in 2021 compared to 977 in 2018. Relatively, the growth in absolute numbers to the prior year has dropped to 102 percent compared to 108 percent in the two previous years.

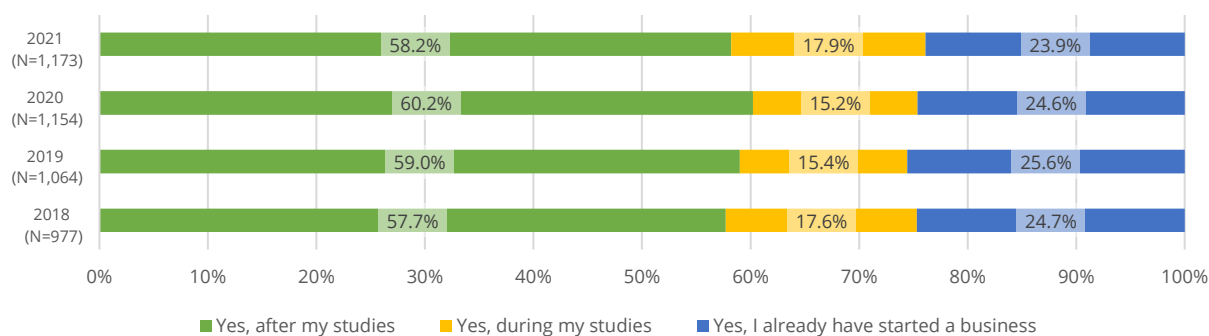


Figure 3 Four years of positive entrepreneurship intention of students at BUAs 2018-2021.

### 3.3 A closer look at entrepreneurial ambitions of BUAs students

The following sections try to relate students' choices to some of their properties such as the domain in which they study, how long they have been studying at BUAs and the extent to which this impacts their study progress measured in study credits (ECTS). Each ECTS represents 28 hours of studying. Students are expected to obtain 60 ECTS annually. During a four year study, students are thus expected to acquire a minimum of 240 study credits.

### 3.3.1 Entrepreneurial ambitions per BUAs domain

BUAs is active in eight different domains. Figure 4 shows that there are considerable differences in entrepreneurial intentions per domain. First of all, it should be noted that the categories 'no' and 'maybe' are not considered in this figure. By excluding these two categories we get a better view of the actual differences between domains. The domains in the graph are ordered by the total relative percentage of students within an academy who have positive entrepreneurship intentions.

As was the case in the previous years, from a BUAs-wide perspective, three domains, Leisure & Events, Hotel and Media, stand out in terms of students having entrepreneurial ambitions. In the other five domains students seem to be less interested in becoming entrepreneurs. There is probably a logical explanation for the variance in entrepreneurial ambitions amongst students in the various domains. E.g., it could be argued that it is more difficult to run a hotel next to your study than, let's say, a design company. From such a pragmatic point of view, it seems to make sense that fewer students in the Hotel domain seem interested in combining a study with an education. Most of the students indicate they think they will start their business after their studies.

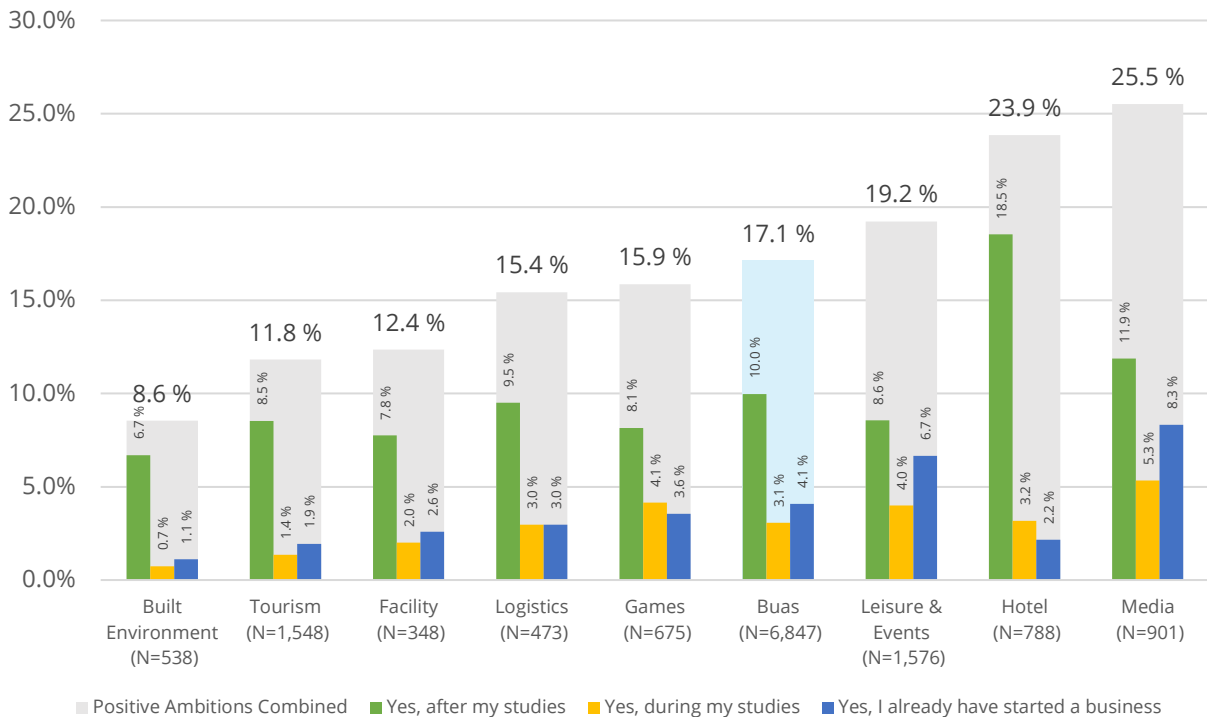


Figure 4 Positive entrepreneurial ambitions per BUAs domain

### 3.3.2 Entrepreneurship by year of registration

In order to determine whether there is a relation between year of registration and intention to become an entrepreneur, Figure 5 has been generated. In terms of structure, this figure is the same as the previous figure with the difference that the N mentioned per year indicates the total number of students enrolled as active students since that year. This number drops considerably after the first year but remains relatively steady during the following three years.

When considering the students' ambitions, the trend is interesting as there is a pretty strong relation between study delay and having started a business during their studies. The patterns for the other two categories are less pronounced. Students appear to be less inclined to start a business when their study lasts longer, but this may be explained by the fact that they have already started a business.

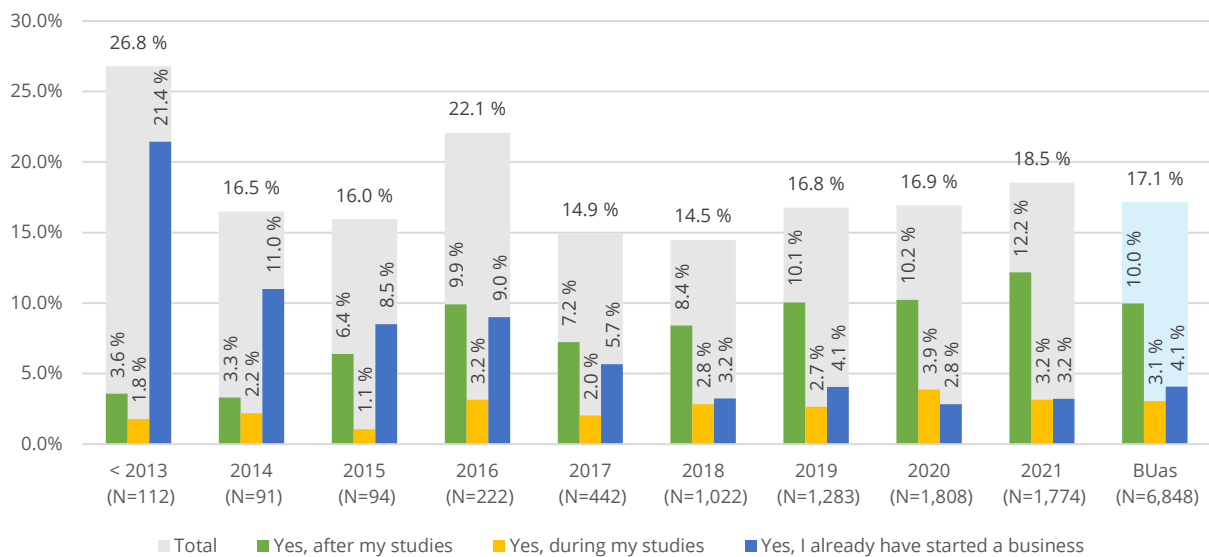


Figure 5 Positive entrepreneurship ambitions of BUAs students by year of registration

### 3.3.3 Entrepreneurship at BUAs controlled for study delay

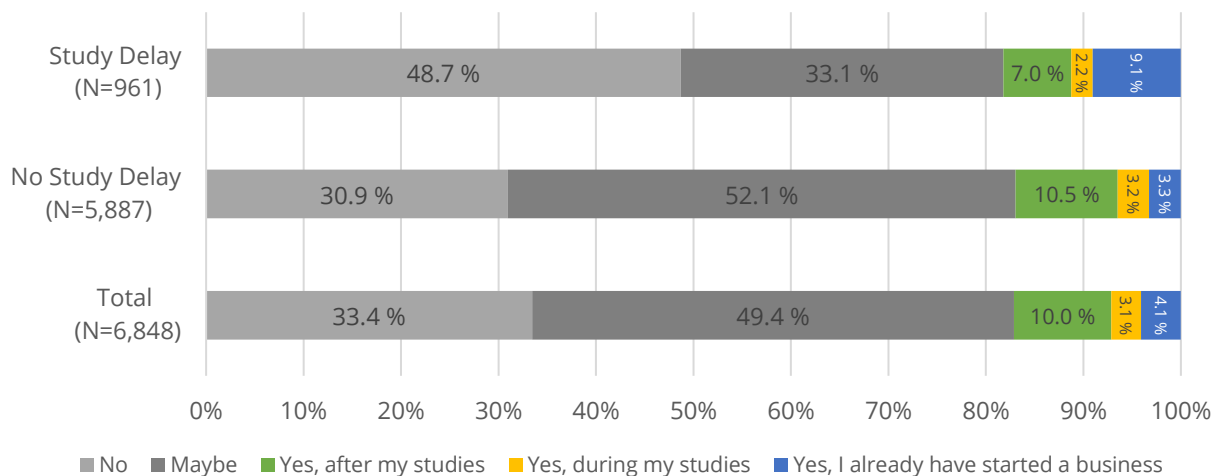


Figure 6 Entrepreneurship at BUAs controlled for study delay

When controlling for study delay (see Figure 6), the figures do not show an entirely different picture, but a moderated one. Study delay was set arbitrarily to those students that are still registered as students in 2021-2022 and have enrolled at BUAs prior to study year 2018-2019. What the figure probably demonstrates is the effect of students becoming more certain about their future as they progress throughout their studies (i.e., they become more certain about a future that includes entrepreneurship).

The differences between the those that experience study delay and those that do not, are emphasized more clearly in Figure 7. 31.1 percent of all students that have started a business during their study are students with a mild to severe study delay. This figure was 41.5 percent in the previous study year 2020-2021

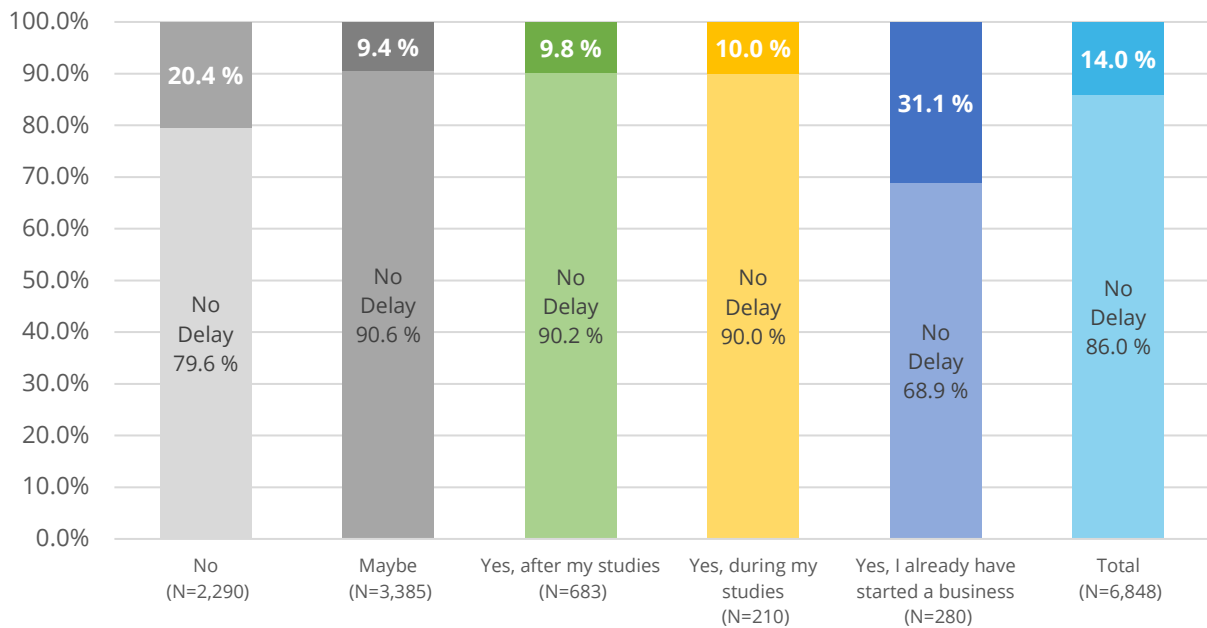


Figure 7 Comparison of students with a study delay to students without a study delay

### 3.4 Demographic outlook of entrepreneurial ambition

The sections below explore the influence of certain demographic characteristics such as age, gender, and nationality on interest in entrepreneurship.

#### 3.4.1 The influence of age on interest in entrepreneurship

Figure 8 below, essentially a boxplot, shows the relation between age and entrepreneurship intention. The coloured area represents the interquartile range and the black stripe the median. The figure again expresses that overall, the differences are not as great and only those that have started a business already are, on average, older. Which makes sense considering they are also the population with the greatest study delay.

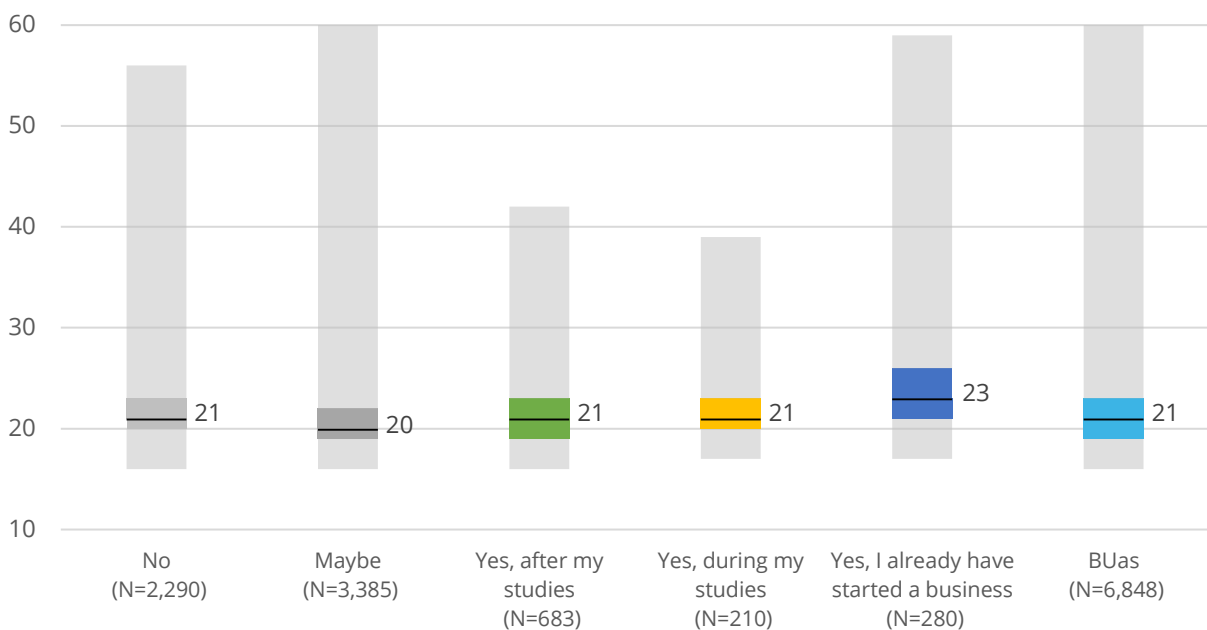


Figure 8 Entrepreneurship ambitions of BUAs students by age

### 3.4.2 The influence of gender on entrepreneurial ambitions

Figure 9 below shows the distribution between men and women within the three positive entrepreneurship intention categories. Overall, at BUAs more than 60 percent of the students is female and close to 40 percent is male. When considering the positive ambition categories, it is mostly males that have already started a business, or intent to do so during they show that men are more inclined to have entrepreneurial ambitions than females. This difference is more pronounced to those that have already started a business, than it is for those that plan to do so after their studies. Students' ambitions to start a business after their studies is almost similar to that of the total population, which indicates that the differences in ambitions between men and women, at least in terms of ambitions, seem to be limited to have started a business during their studies, or having plans to do so during their studies.

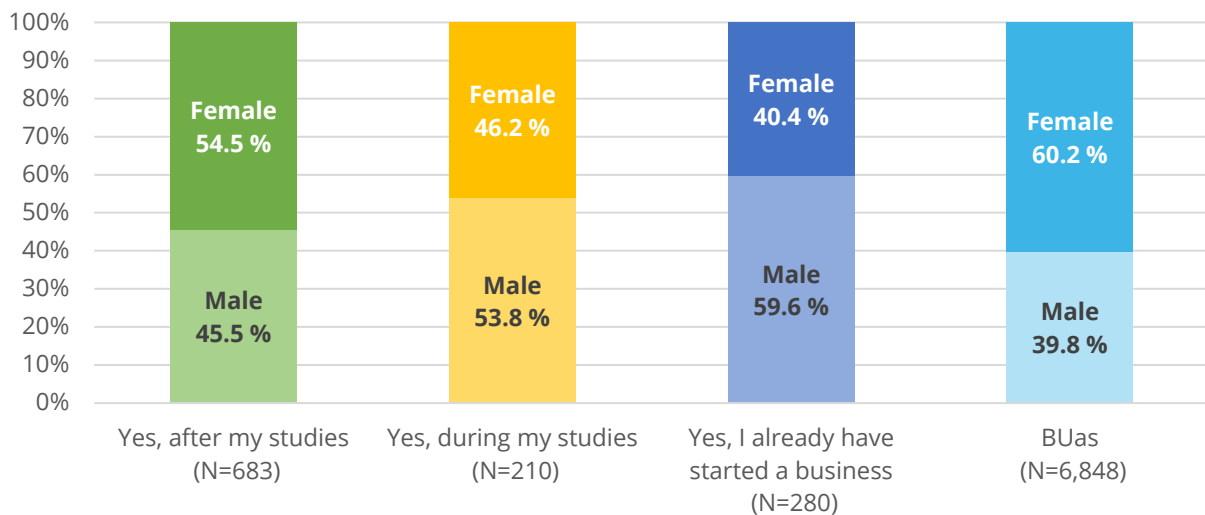


Figure 9 Positive entrepreneurship ambitions of BUAs students by sex

Figure 10 below attempts to provide a more detailed impression of the differences between males' and females' entrepreneurial intentions.

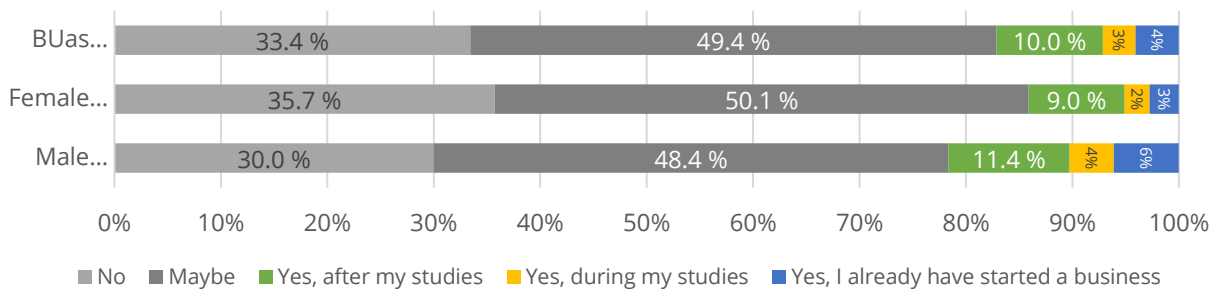


Figure 10 Entrepreneurship ambitions of BUAs students by sex

In order to visualize these differences more clearly Figure 11 and Figure 12 were created. In these figures the domains have been ordered from low to high by relative number of male students. What is mostly interesting about these figures is that when you look at the order, there are a few striking differences. Compared to other domains, females in the gaming domain are more interested to start a business than their male counterparts. A more striking difference in this sense is perhaps Facility, where males are relatively more inclined to start a business than females.

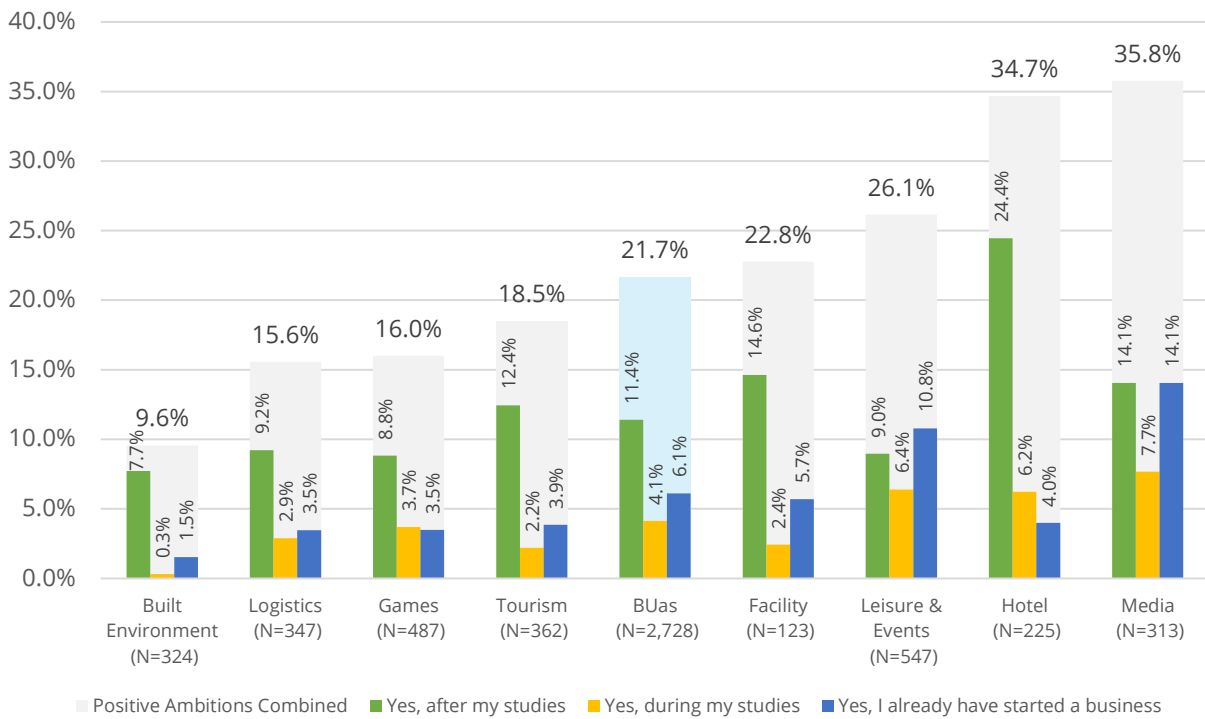


Figure 11 Entrepreneurial ambitions of male students by domain

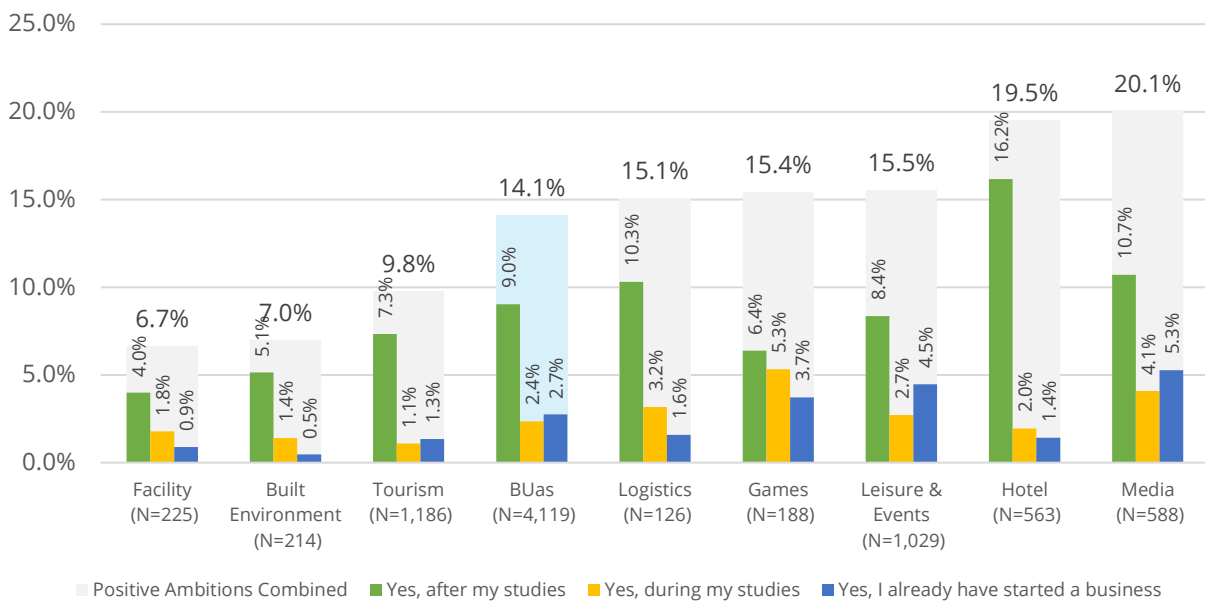


Figure 12 Entrepreneurial ambitions of female students by domain

### 3.4.3 The influence of nationality on interest in entrepreneurship

Finally, it is interesting to examine whether nationality affects the intention to become an entrepreneur. In the first instance, the population is divided into Dutch and non-Dutch nationality. The result of this can be seen in Figure 13. It seems logical that students with a non-Dutch nationality are less likely than students with a Dutch nationality to have already started a business during their studies. Assuming that it concerns a business established in the Netherlands, this is less obvious for students who may not stay in the Netherlands after their studies.

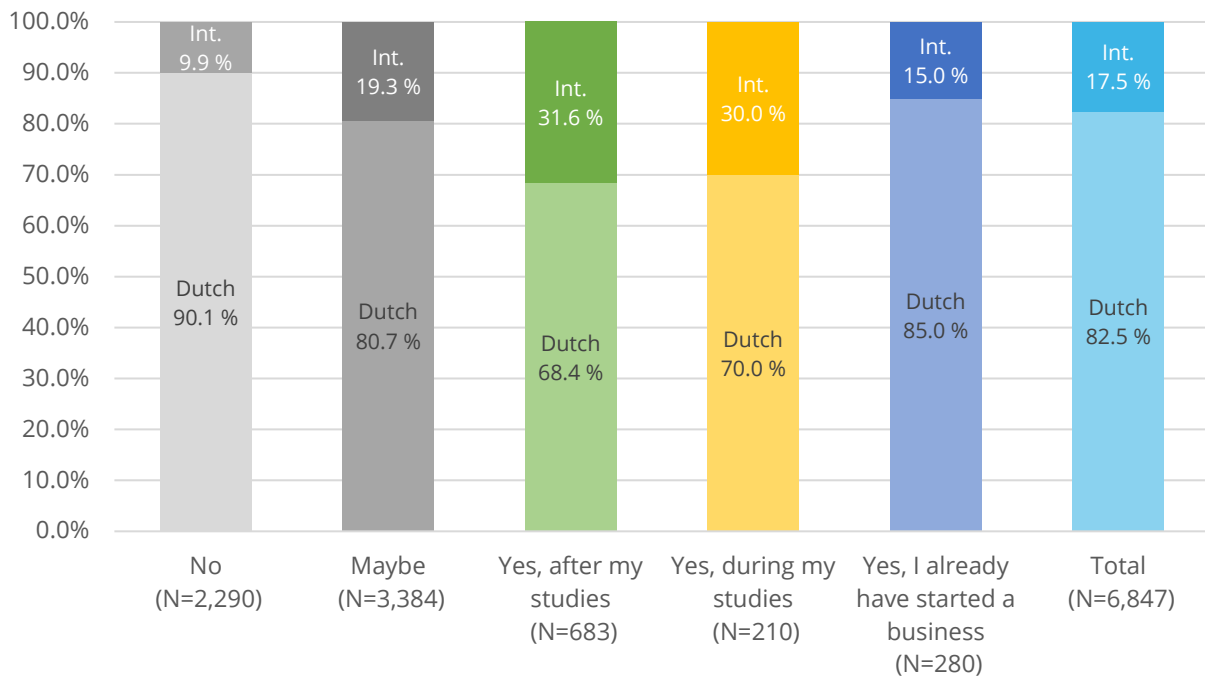


Figure 13 Positive entrepreneurship ambitions of BUAs students by nationality

However, this does not yet answer the question whether the nationality of students affects their intention to become entrepreneurs. After all, this has only been compared within the group of students who have indicated that they actually want to start a business or have already started one. To illustrate this, Figure 14 below shows that students with a non-Dutch nationality are relatively more inclined to start a business (26.7 percent) than students with a Dutch nationality (15.1 percent).

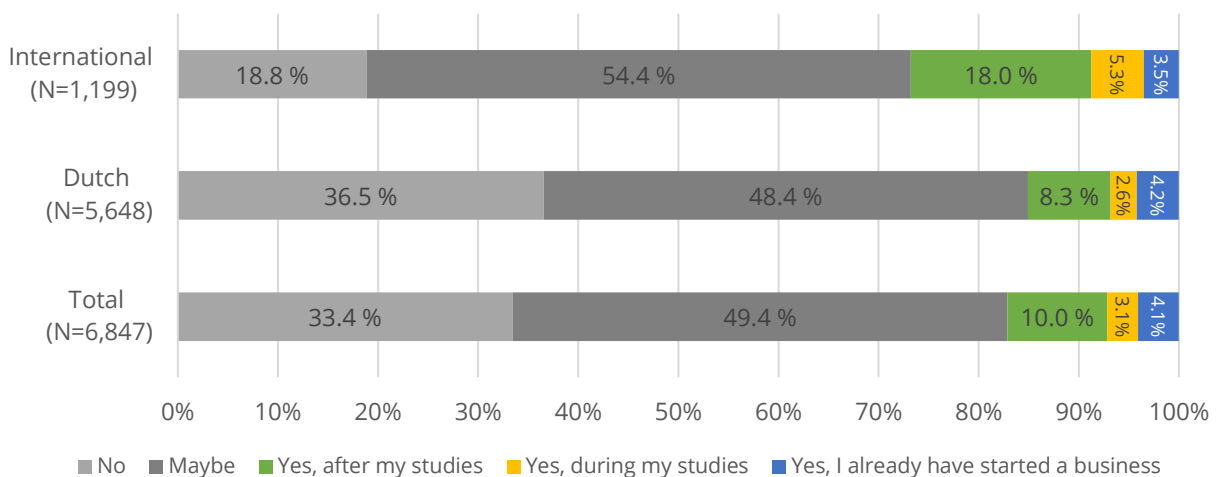


Figure 14 Entrepreneurship ambitions of BUAs students by nationality

The differences in nationality per domain are considerable as can be seen in Figure 15 and Figure 16. It is important to look at the total number of students when looking at the percentages below. Some studies (facility and Built Environment) have far fewer international students than other domains. It is interesting to note that particularly in the Leisure & Events and Media domains, international students have relatively higher numbers of students that have already started a business during their studies.

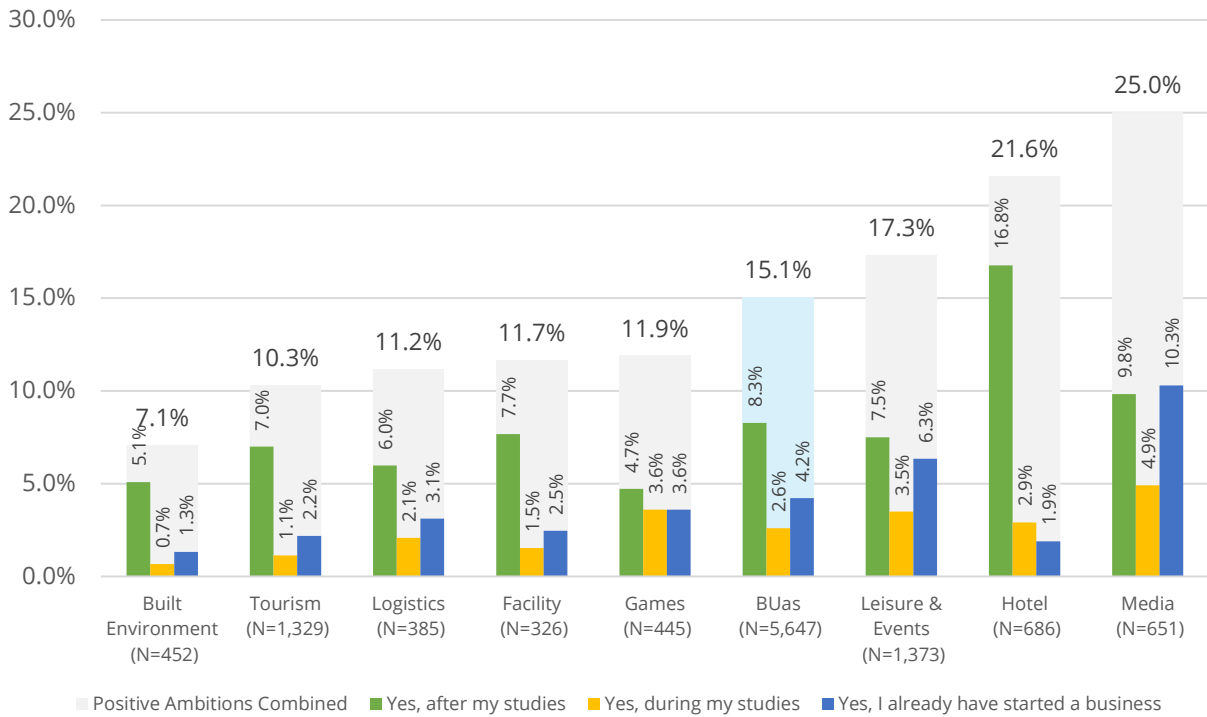


Figure 15 Positive entrepreneurship ambitions of BUAs students by domain and Dutch nationality

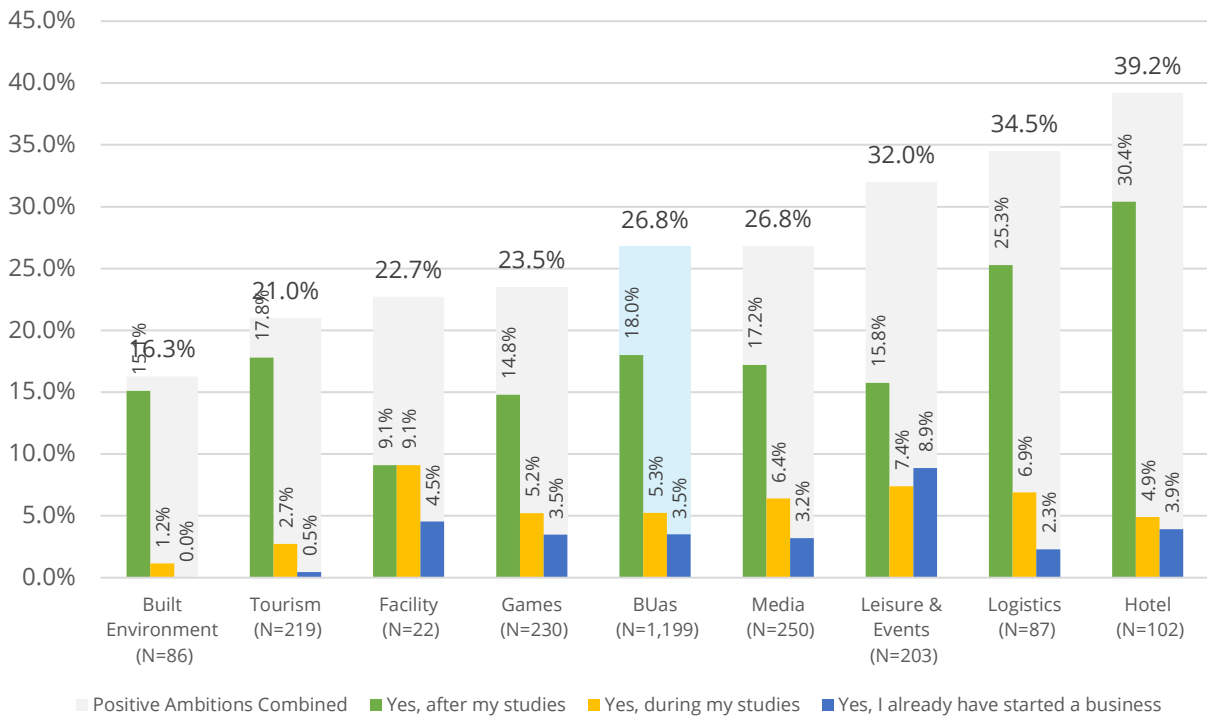


Figure 16 Positive entrepreneurship ambitions of BUAs students by domain and non-Dutch nationality



### 3.5 Stability and change in entrepreneurial ambition of Cohort 2018-2019

In this section we try to show, at an aggregate level, the changes per year in entrepreneurial ambition. We do so by following a particular cohort (those students starting their studies in 2018-2019) and follow their pattern over the course of four years.

#### 3.5.1 Change and stability: tables

The cells in Table 1, Table 2, and Table 3 below depict stability and change from year to year. The top left to bottom right diagonal shows those students' intentions that have not changed. Green cells represent changes in intention in favour of a future as entrepreneur. The pink cells depict changes in the opposite direction.

Table 1 Cohort 2018-2019: Changes in entrepreneurial ambitions between 2018-2019 and 2019-2020 (N=1,756)

		Ambitions to start as an entrepreneur (2019)					Total	
		No	Maybe	Yes, after I graduate	Yes, during my studies	I have already started my own business		Not registered
Ambitions to start as an entrepreneur (2018)	No	185	81	7	0	0	109	<b>382</b>
	Maybe	185	486	58	16	2	356	<b>1103</b>
	Yes, after I graduate	10	56	62	13	4	64	<b>209</b>
	Yes, during my studies	1	12	6	4	1	11	<b>35</b>
	I have already started my own business	0	4	1	1	10	11	<b>27</b>
	Not registered	0	0	0	0	0	0	<b>0</b>
Total		<b>381</b>	<b>639</b>	<b>134</b>	<b>34</b>	<b>17</b>	<b>551</b>	<b>1756</b>

#### Maybe

In absolute numbers, *maybe* is the most dynamic of all five categories. After one year of study 261 changes were recorded, 203 after two years of study, and 185 after three years of study.

#### Yes, I have already started a business

*Yes, I have already started a business* is absolutely and relatively the most stable of all five categories. After one year of study 6 changes were recorded, 1 after two years of study, and again 6 after three years of study.

#### Not registered

The category *Not registered* refers to those students that have either graduated, or have stopped their studies. In the first year mostly the latter. Sometimes we see students return and pick up their study again after one or two years.

Table 2 Cohort 2018-2019: Changes in entrepreneurial ambitions between 2019-2020 and 2020-2021 (N=1,756)

		Ambitions to start as an entrepreneur (2020)					Total	
		No	Maybe	Yes, after I graduate	Yes, during my studies	I have already started my own business		Not registered
Ambitions to start as an entrepreneur (2019)	No	240	88	9	3	0	41	<b>381</b>
	Maybe	135	378	51	10	7	58	<b>639</b>
	Yes, after I graduate	13	48	52	6	1	14	<b>134</b>
	Yes, during my studies	2	11	5	7	2	7	<b>34</b>
	I have already started my own business	0	0	0	1	10	6	<b>17</b>
	Not registered	6	15	6	2	2	520	<b>551</b>
Total		<b>396</b>	<b>540</b>	<b>123</b>	<b>29</b>	<b>22</b>	<b>646</b>	<b>1756</b>

Table 3 Cohort 2018-2019: Changes in entrepreneurial ambitions between 2020-2021 and 2021-2022 (N=1,756)

		Ambitions to start as an entrepreneur (2021)					Total	
		No	Maybe	Yes, after I graduate	Yes, during my studies	I have already started my own business		Not registered
Ambitions to start as an entrepreneur (2020)	No	261	88	5	3	2	37	<b>396</b>
	Maybe	127	289	37	11	10	66	<b>540</b>
	Yes, after I graduate	9	55	36	5	5	13	<b>123</b>
	Yes, during my studies	1	7	7	9	4	1	<b>29</b>
	I have already started my own business	1	1	2	2	15	1	<b>22</b>
	Not registered	2	8	0	0	0	636	<b>646</b>
Total		<b>401</b>	<b>448</b>	<b>87</b>	<b>30</b>	<b>36</b>	<b>754</b>	<b>1756</b>

### 3.5.2 Cohort 2018-2019: plotting dynamics

Though it is interesting to look at the numbers from year to year, it is difficult to get a proper view of the dynamics from year to year. Particularly whether patterns can be discerned. Figure 17 below, visualizes the above numbers. It should be noted again that these are aggregate changes and do not show individual paths.

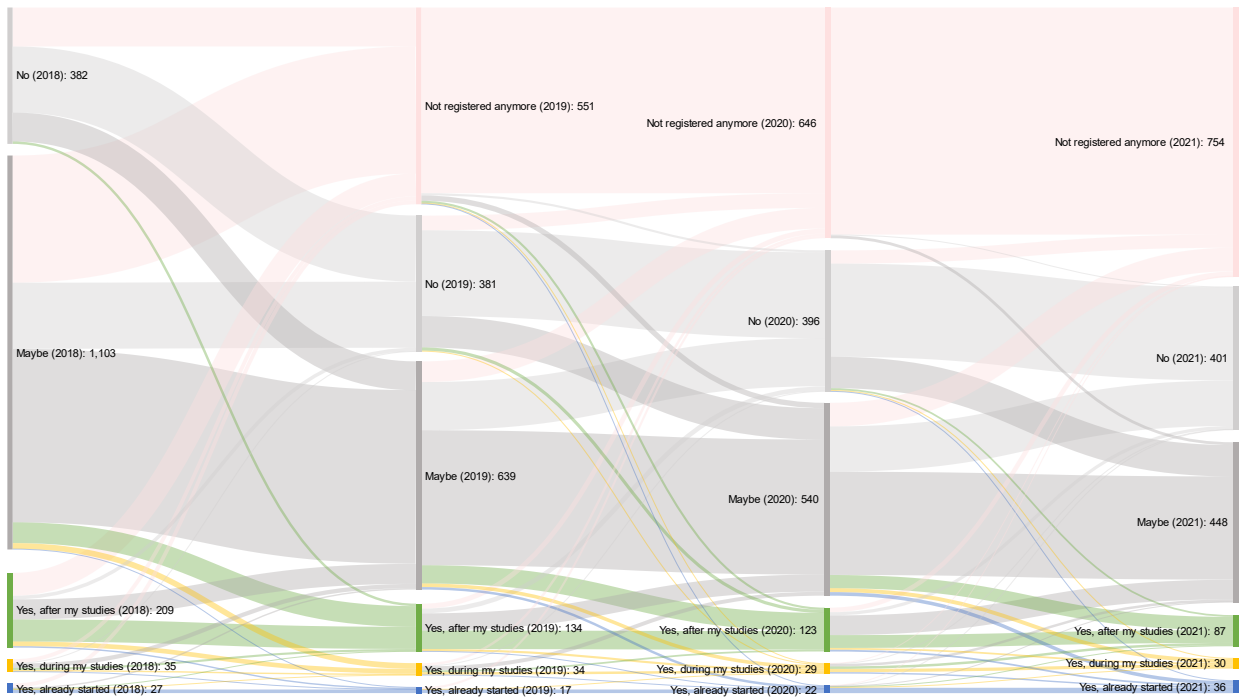


Figure 17 Sankey diagram of changes in entrepreneurial ambitions within cohort 2018-2019 (N=1,756)

Figure 17 does make it easier to see the changes over the years. The big changes in the maybe category from year to year, the pattern towards more certainty (increase of the absolute and relative size of the no category). The *Yes, after my studies* category is the positive entrepreneurship intention category that suffers the greatest losses in numbers over the years. Close to graduation, students appear to have a clearer idea about their future. In 2021-2022, the start of the fourth and likely last year of study, 30 students are still positive about starting a business during their studies.

Figure 18 below aims to display the absolute totals per category from year to year. It mostly shows that the number of students is stabilizing after the first year.

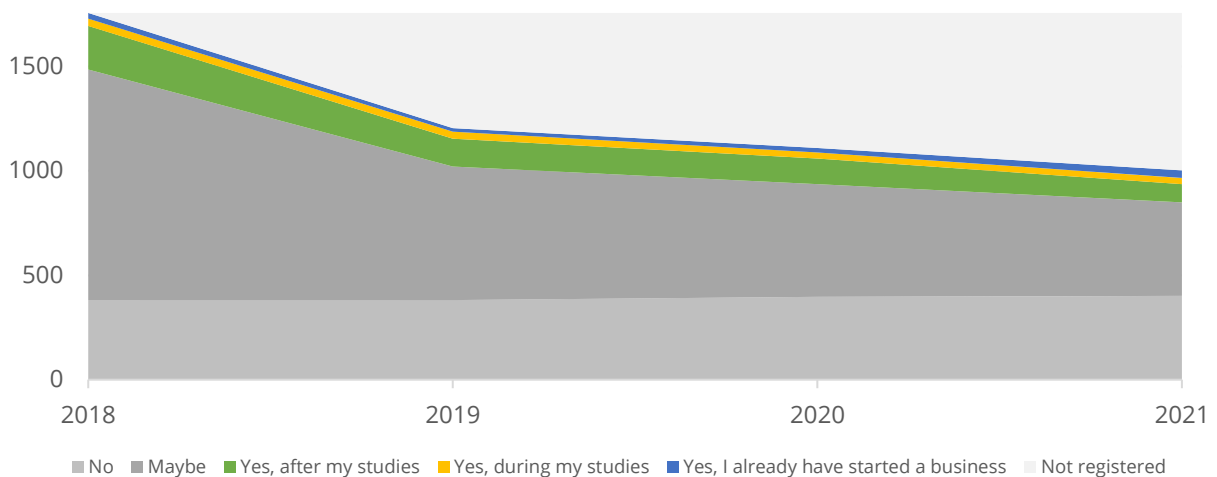


Figure 18 Stacked area plot of changes in entrepreneurial ambitions within cohort 2018-2019 (N=1,756)

Figure 19 does not include students that are not registered at BUAs anymore. As such it gives a better portrayal of the distribution within the five ambition categories. Here also the picture is one of 'certainty'. Both 'no' and 'yes', though mostly 'no' increases at the cost of 'maybe'.

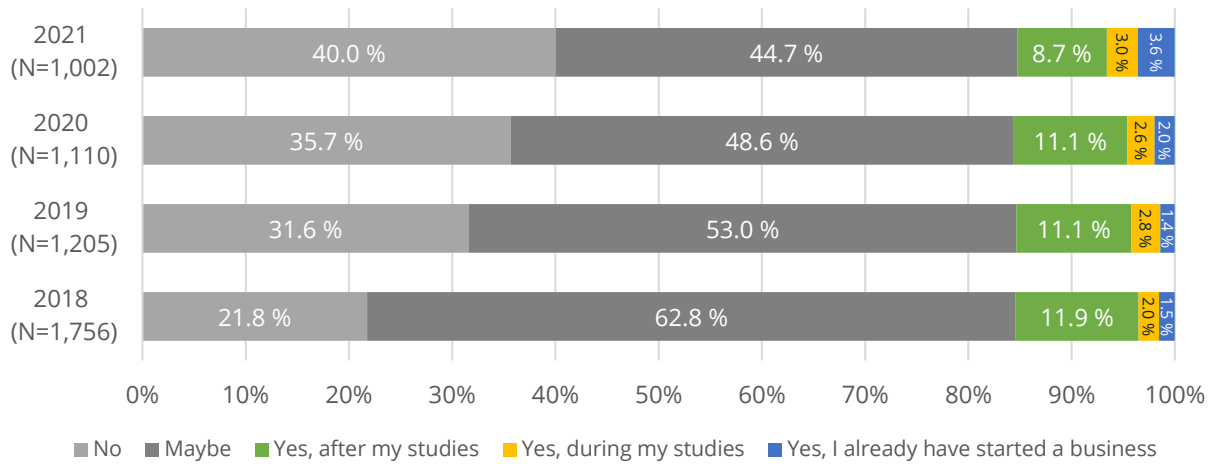


Figure 19 Stability and change in entrepreneurial ambitions within cohort 2018-2019

### 3.5.3 Cohort 2018-2019 by sex

From the main analysis we have seen that males and females have different preferences on average in terms of entrepreneurial intention. It will be interesting to look at how these differences are reflected within a cohort.

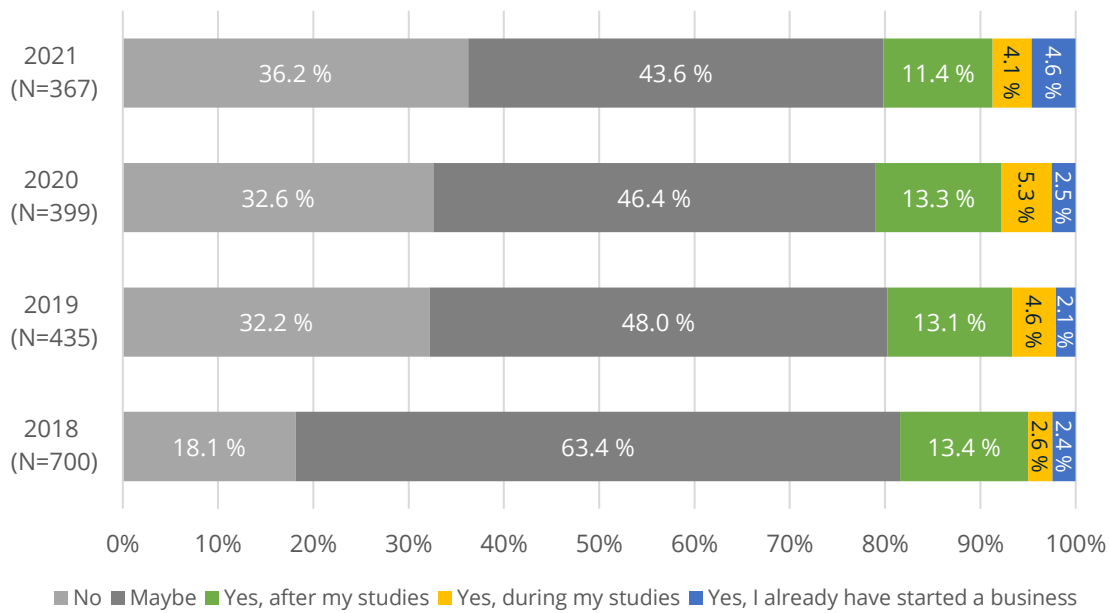


Figure 20 Stability and change in entrepreneurial ambitions of males within cohort 2018-2019

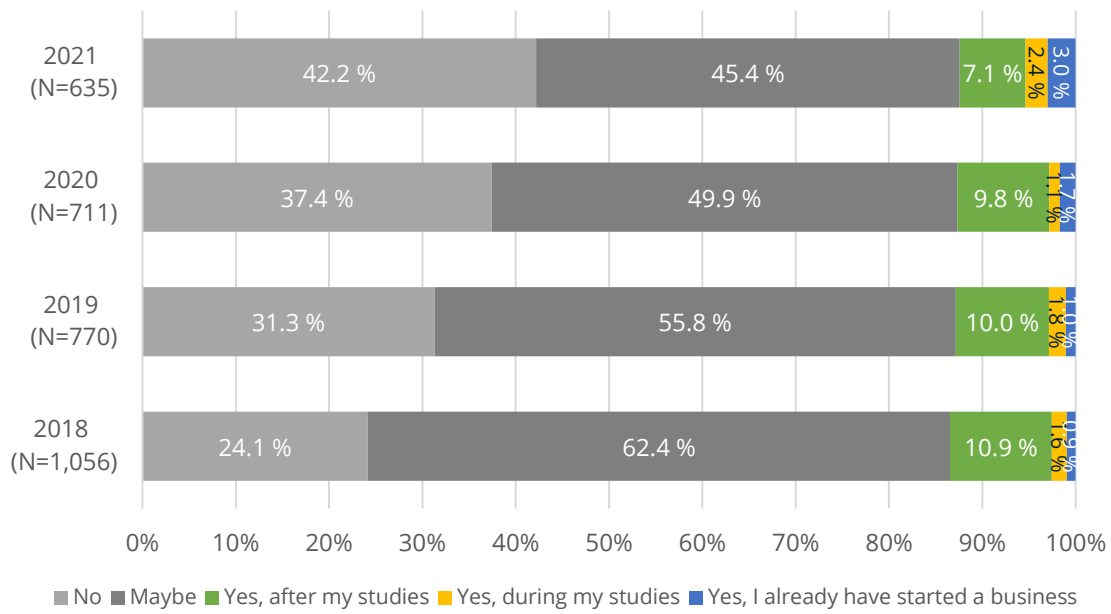


Figure 21 Stability and change in entrepreneurial ambitions of females within cohort 2018-2019

It is interesting to see that over the years, it is particular female students that lower their entrepreneurial ambitions over the years within a cohort.

### 3.5.4 Cohort 2018-2019 by domain

Similar to the previous section, but instead of looking at the students' sex in relation to entrepreneurship intention, we will now look at the domain they are studying in.

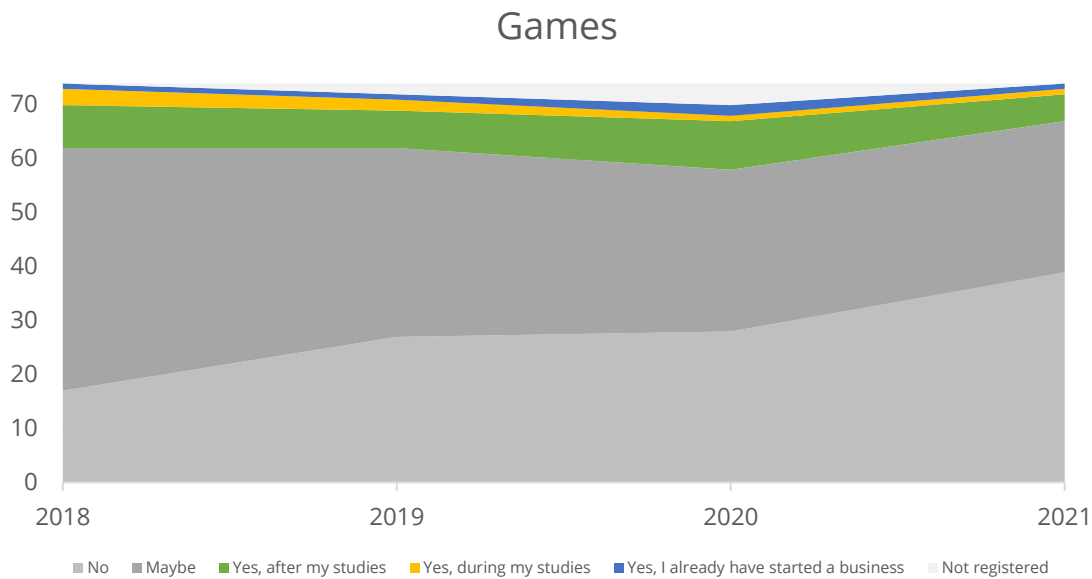


Figure 22

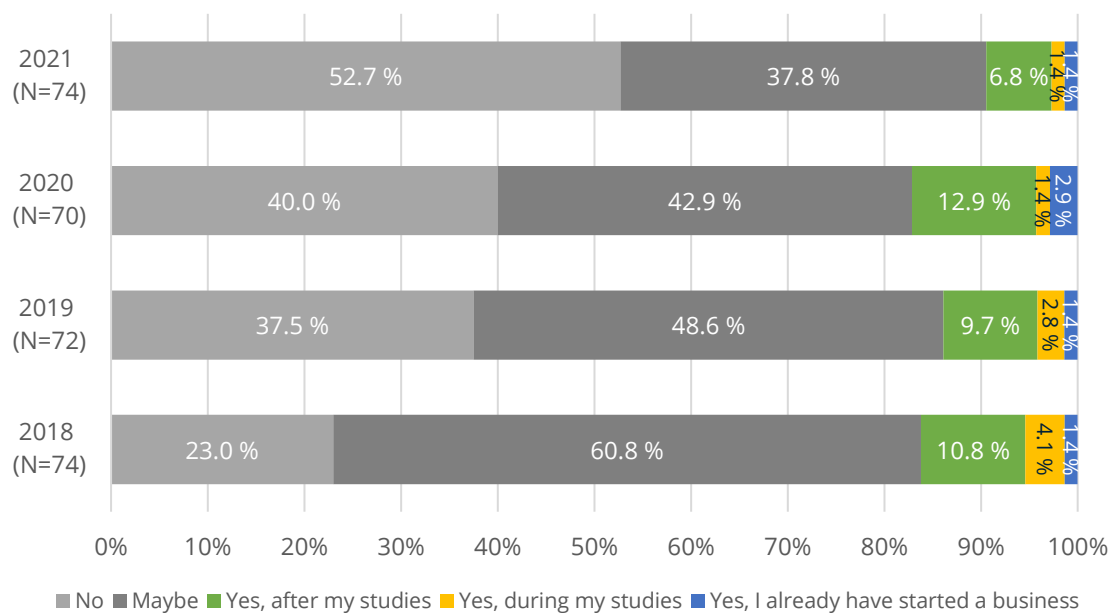


Figure 23

The number of students over the years is very stable in the games domain compared to other domains. Probably because of the relatively low number of students compared to other domains, the changes per year seem to be erratic and quite dramatic

## Media

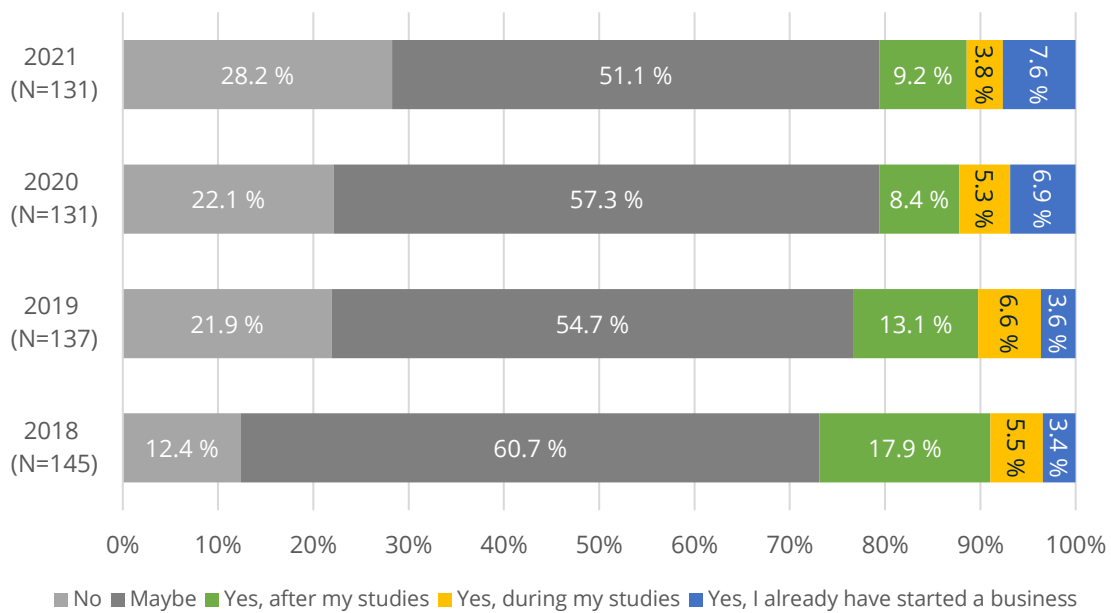
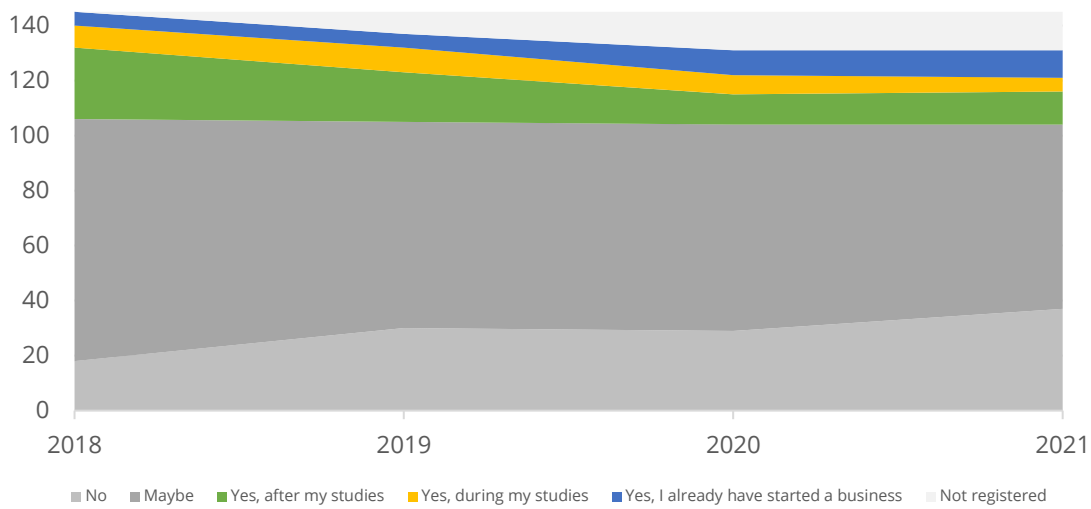


Figure 24

It is quite interesting to note that looking at a particular cohort within the media domain shows such a decline in entrepreneurship intention over the years. After two years of study, the number of students that has already stated a business has almost doubled, but it is in particular the two other positive categories that contribute to the overall decline.

## Hotel

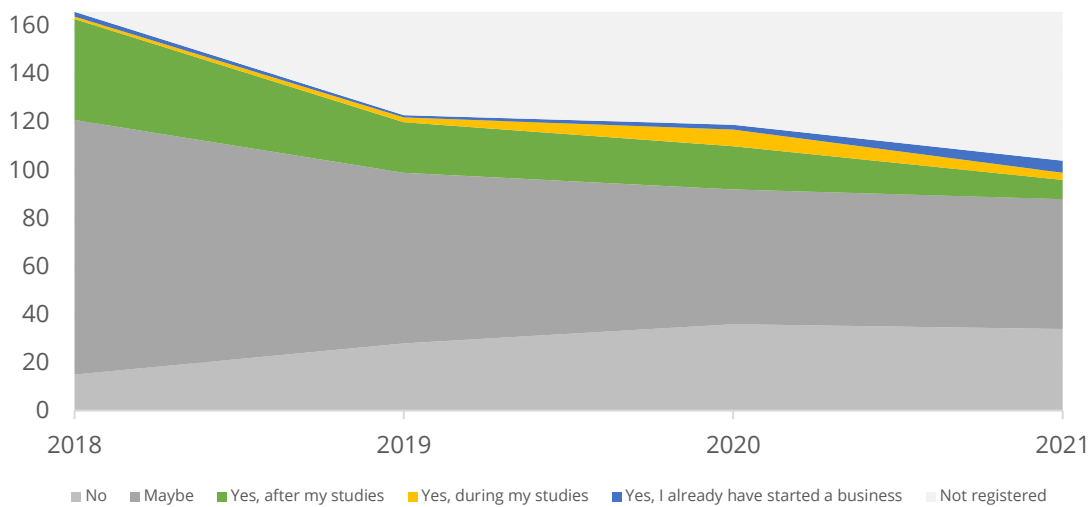
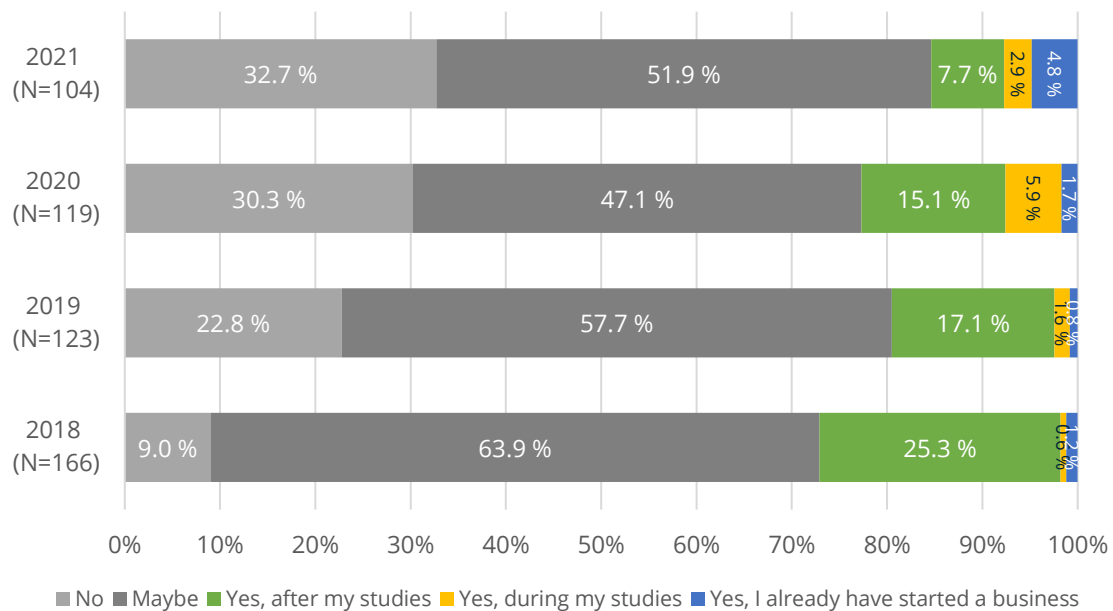


Figure 25



Where the hotel domain had one of the highest entrepreneurship ambitions of all BUAs domains, in the fourth year this has almost halved. Still, almost 5 percent managed to have started a business, which is interesting as earlier on it was suggested that starting a business, e.g., a hotel, seemed less likely during a person's study. This perhaps indicates this remark was too ill-informed in retrospect.



## Facility

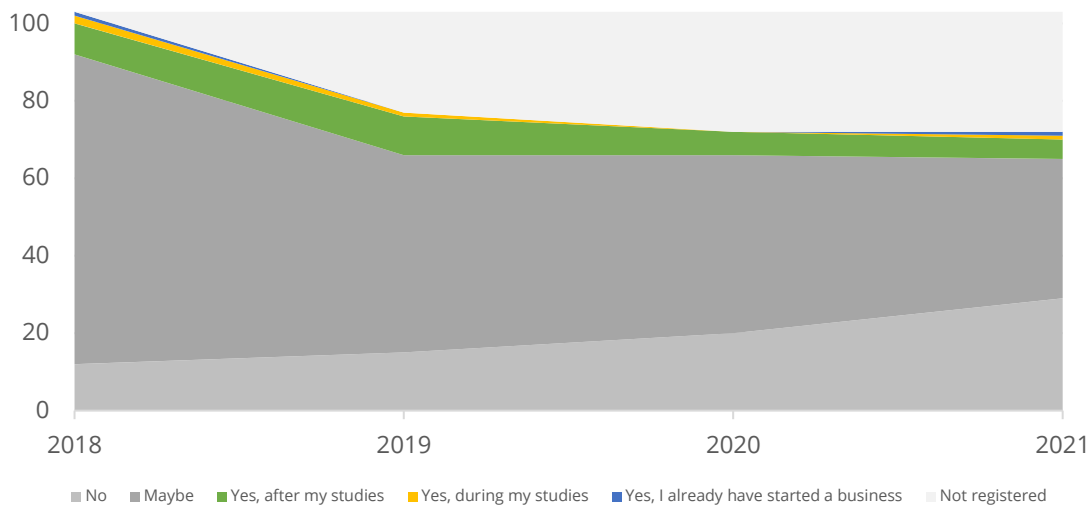
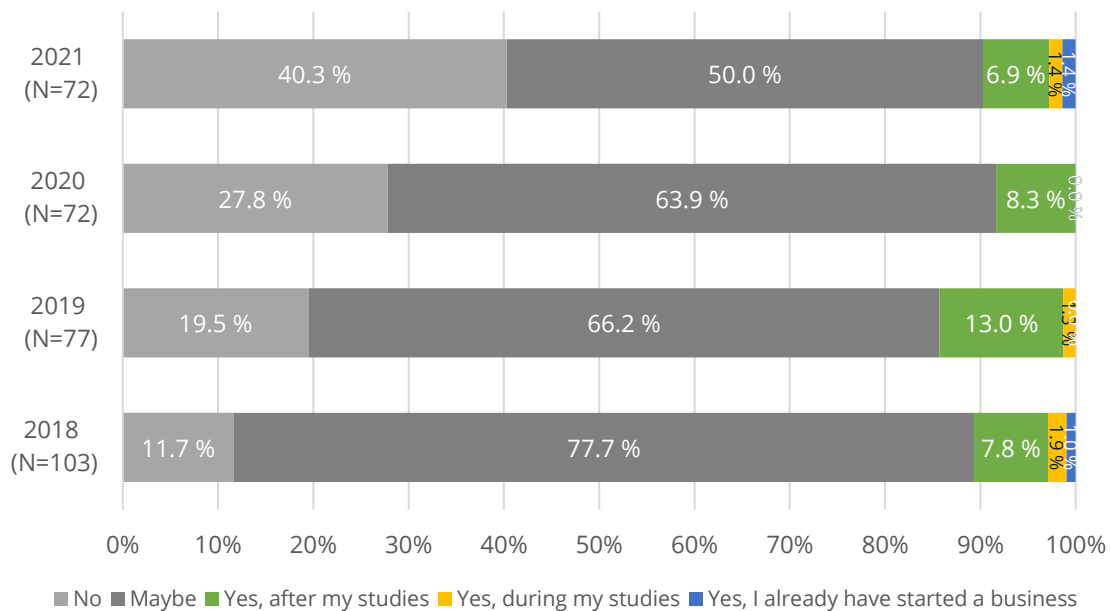


Figure 26



Facility has amongst the lowest entrepreneurship intentions of all BUAs domains. It is difficult to see a clear pattern here. Like in the main survey, also here the polarization between positive and negative intentions is greater as can be seen by the decrease in the relative number of students that choose *maybe*.

## Logistics

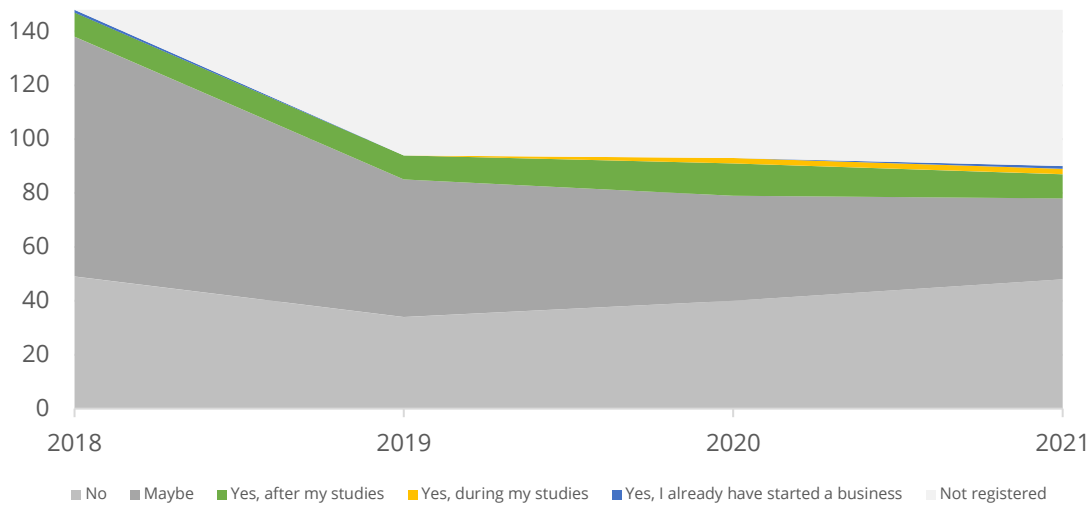


Figure 27

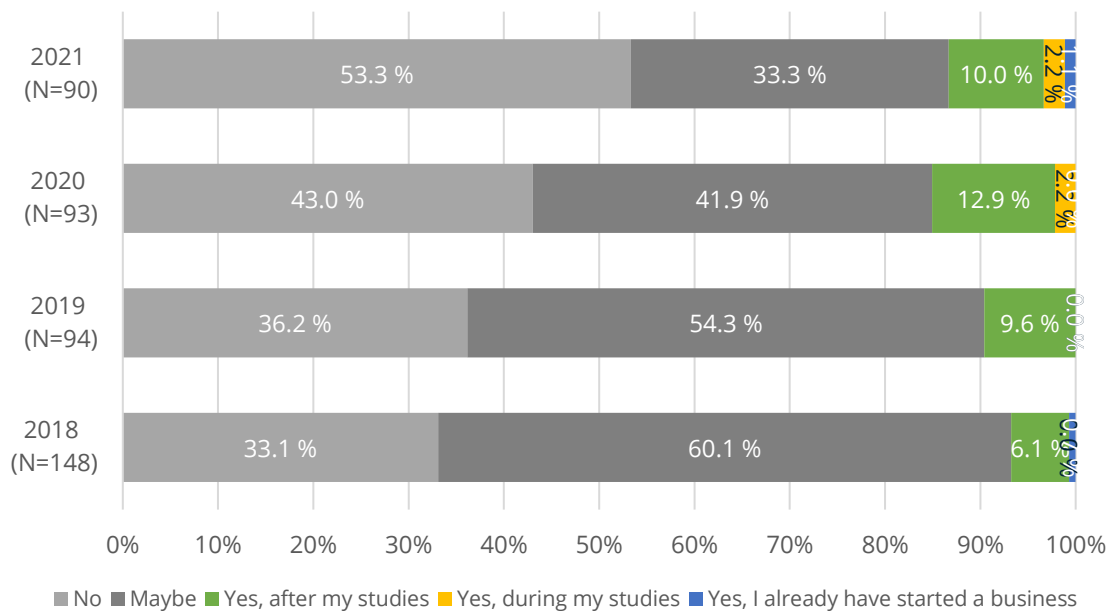


Figure 28

Logistics is another domain where students are not likely to start a business during their study. The category *maybe* is among the lowest of all domains in the fourth year of their study. Most of them opt to not start a business at all.

## Built Environment

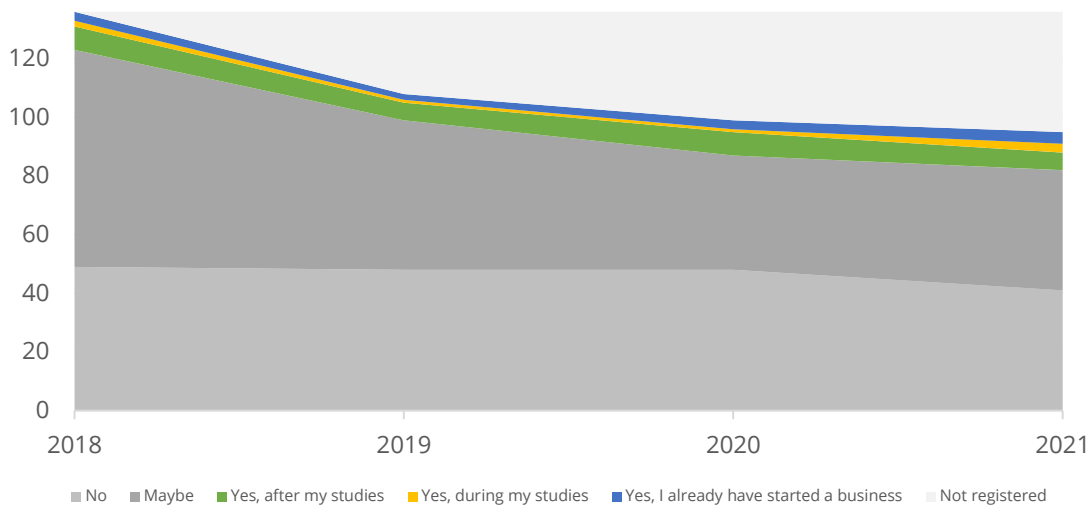
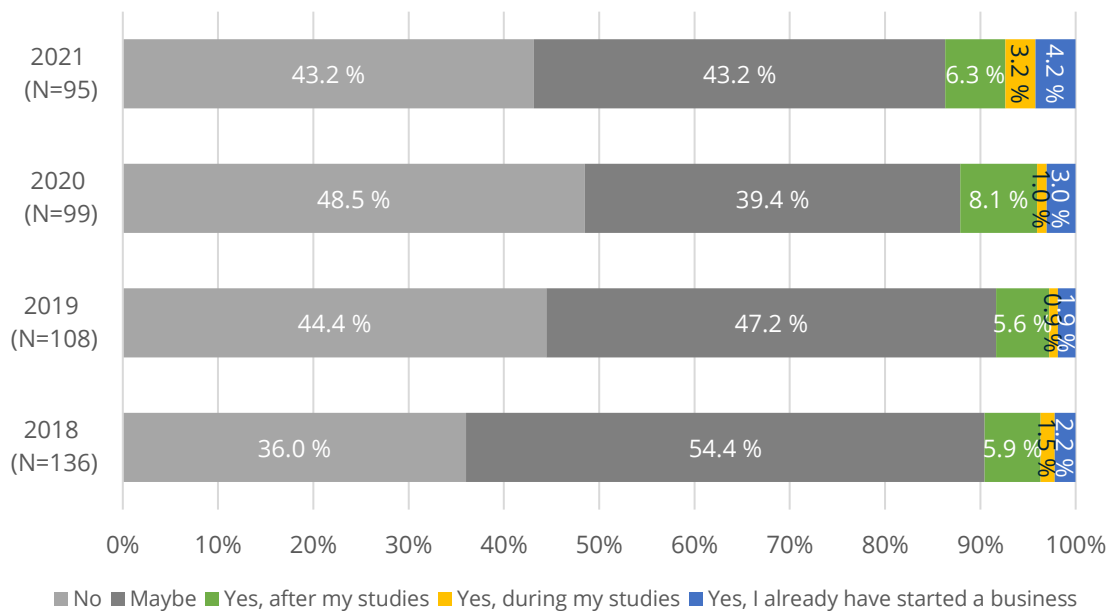


Figure 29



Contrary to most other domains, Built environment shows an actual increase in entrepreneurial ambition over the years.

## Tourism

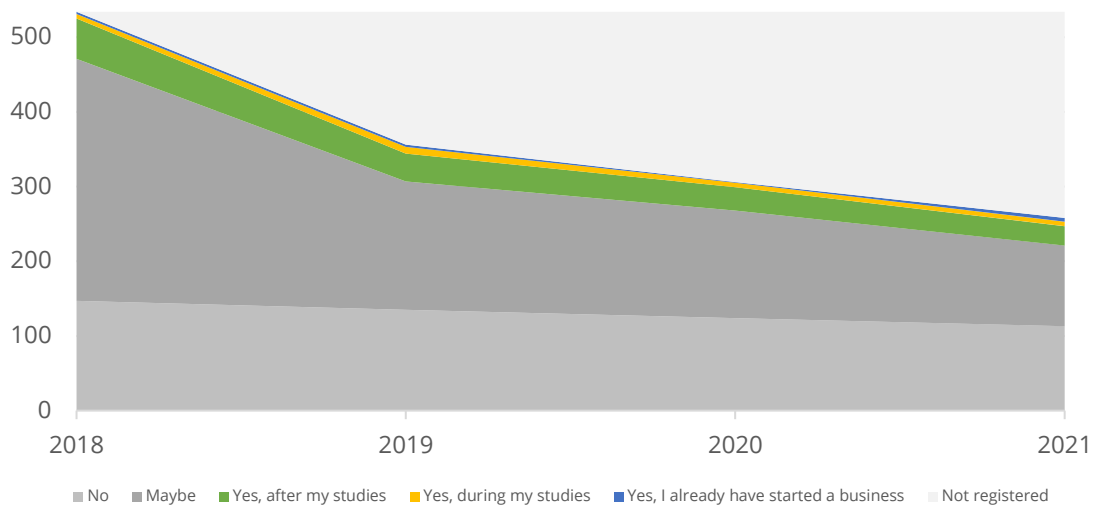


Figure 30

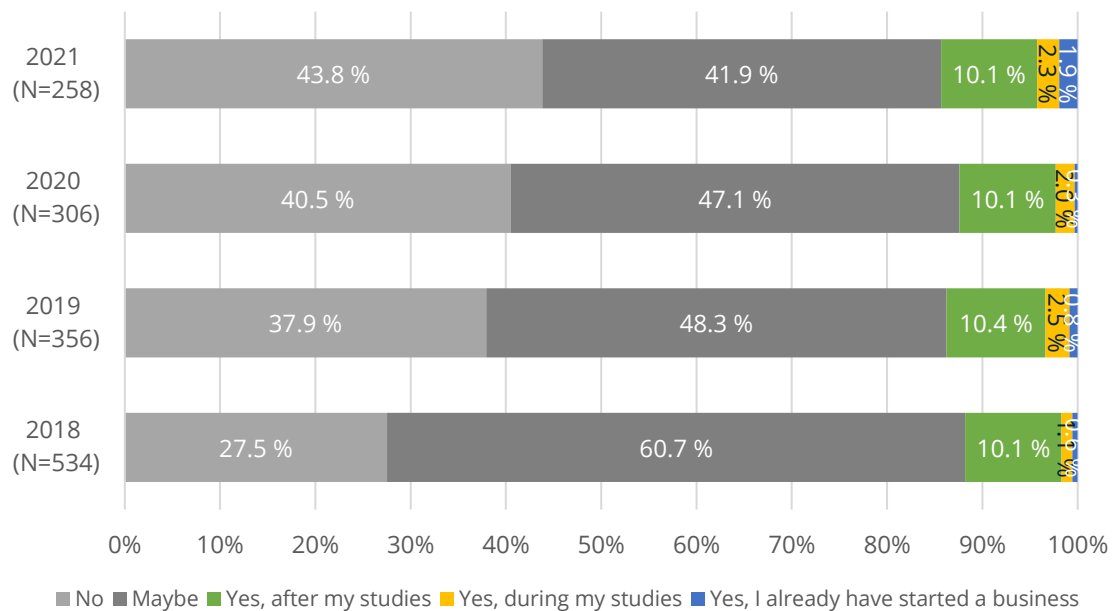


Figure 31

Though less dramatic, tourism, like Built environment, shows a slight increase in relative positive entrepreneurship intentions over the years.

## Leisure & Events

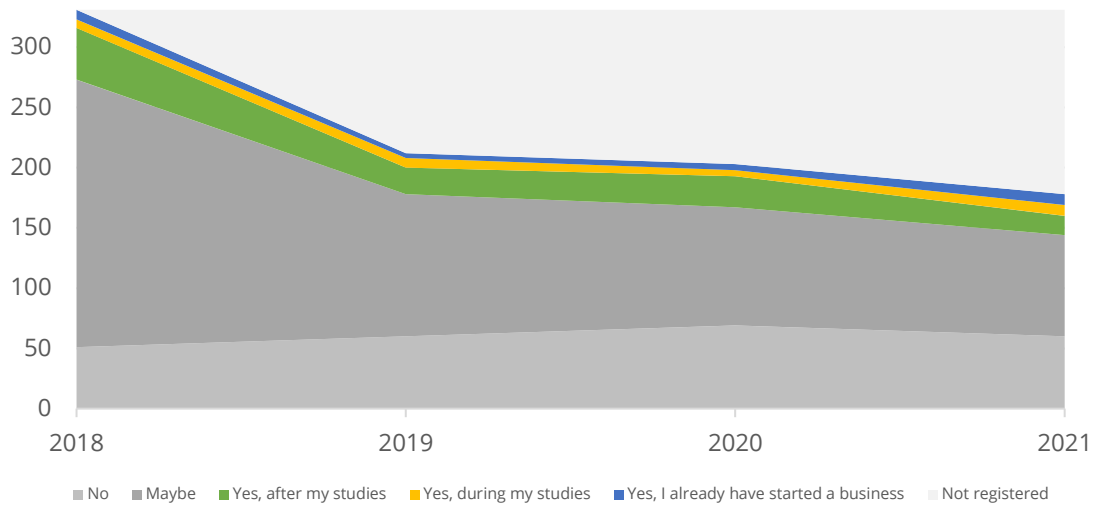


Figure 32

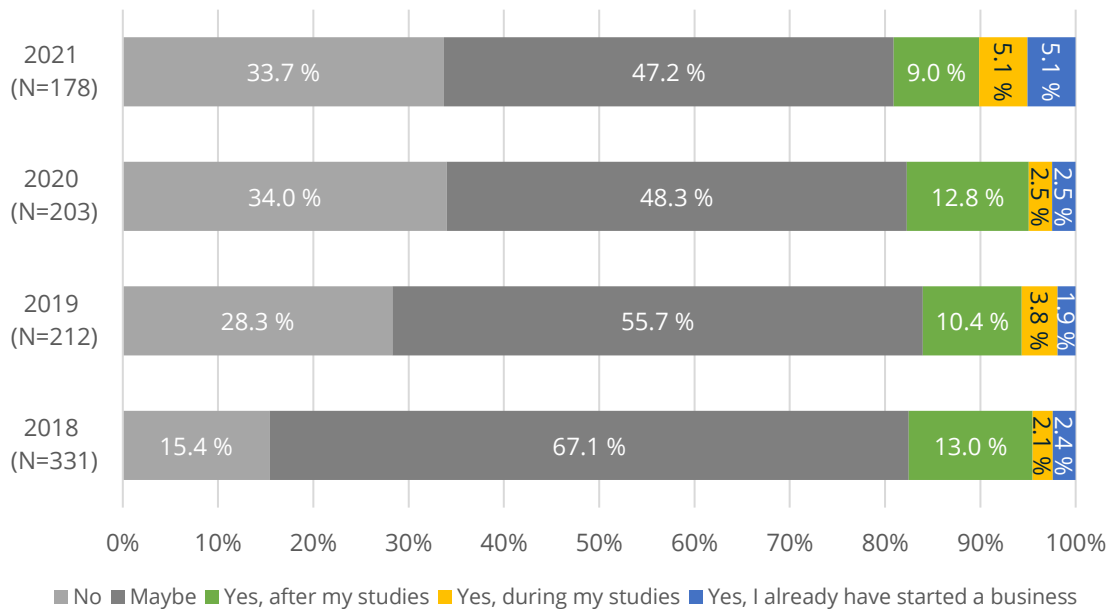


Figure 33

Like Tourism, Leisure & Events lost close to a third of their students after the first year. It is one of the few domains where the positive intentions relatively increase over the years. The relative number of students that say outright no to a future without entrepreneurship is among the lowest.

## 4 Conclusion

This study aims to answer the following research questions:

1. To what extent are BUAs students interested in becoming entrepreneurs?

And, based on cohort data of students that started their studies in study year 2018-2019:

2. How does the interest of students in becoming an entrepreneur develop over the course of their study at BUAs?

### 4.1 Conclusion and discussion

This study's central question "To what extent are BUAs students interested in becoming entrepreneurs?" can be concluded that 17.1 percent of BUAs students answer the main question positively. 4.1 percent has started a business during their study already! This figure, however, is slightly inflated by a number of student entrepreneurs that both run a business, are enrolled as students at the same time, and suffer a study delay because of this. Correcting the figures by excluding students with study delay results in 3.3 percent of the students already having started a business during their studies. In 2018 the total percentage of students with a positive entrepreneurship intention was 14 percent. This number increased relatively fast with 8 to 9 percent annually, but the growth has slowed down in 2021 to 2 percent.

It is debatable whether the slower growth discussed previously can be attributed to COVID-19, or whether there are other trends that are influencing the entrepreneurial spirit of students. When we look at national entrepreneurial figures they also show a slightly lower growth rate in 2021 (1.3 percent) than 2020 where the growth rate was 3.6 percent (CBS StatLine, 2022). What would have happened if COVID-19 had not taken root is counterfactual. We will see what happens when society is able to return to a pandemic free 'normal'. More influential will probably be the development of the labour force regulations in the foreseeable future. There is a strong relation between entrepreneurship and self-employment, which is not necessarily a good thing. This, however, goes beyond the scope of this study and the answers it aims to provide.

The data demonstrates that both a student's sex and domain he or she is studying in are important determinants of entrepreneurship intention. The differences in ambitions differ quite dramatically per domain. Media students lead in terms of ambition and Built Environment students are relatively least interested in starting a business. Students that run a business during their studies usually take longer to graduate and are generally a few years older. Students with entrepreneurial ambitions at BUAs are often men. Even in studies dominated by women in terms of numbers, men are overrepresented when the focus is on entrepreneurial ambitions whilst they are studying. Women tend to postpone their ambitions usually until after their studies. This picture is the same now for two years in a row.

As this is the fourth year we gather data, we are for the first time able to follow students throughout their entire study career. It is fascinating what insights a story of one cohort can tell compared to the aggregate results of the main story. Looking at both sex and the domains students study in already give a clearer picture of what goes on in the minds of students in terms of entrepreneurship ambition, but a look at one particular cohort gives a much clearer picture of the process and dynamics of this ambition throughout a student's study career. These transitions are simply lost in aggregated results, which really hide the internal dynamics, because all students are put into the same box

What following this cohort indicates is that interest in entrepreneurship is dropping on average, compared to the aggregate results in the main survey that indicate a positive trend over the years. It is predominantly the two larger domains, Tourism and Leisure & Events, that drive these trends. Other domains show different patterns.

The results suggest that students may interpret the term 'business' differently than we think. Particularly looking at the dynamics in entrepreneurial ambitions of the first two years of cohort 2018-2019, it does not look like they are certain of what they want. Though there is a trend towards a stability in choice caused by the stable decline of those that indicate 'maybe', there is still roughly between 26 to 23 percent of the students that change their preference from year to year. Even in their last year of study.

#### **4.2 What drives student's intentions?**

During 2021 a sample survey was taken in which roughly 600 students participated. We hope to answer a some of the key questions as to what drives students' intentions in this study. The study in front of you based on single question has already shown that sex and domain appear to be important determinants of entrepreneurship intention. However, literature has indicated that personality characteristics, available role models, and support also seem to play an important role in students' entrepreneurship intentions. In that sense, we hope to provide a clearer answer to this question in the near future.

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## 6 Appendix

Table 4 Quick overview of the number of Businesses in the Netherlands operating in the fields of hospitality, leisure and media, 4th quarter 2019.

<i>Standard Dutch Industrial Classification (SBI) 2008</i>	<i>Total number of businesses</i>	<i>Number of businesses employing 1 person</i>	<i>Percentage of businesses employing 1 person</i>
<i>A-U All economic activities</i>	1828160	1421160	77,74%
<i>1814 Graphic finishing</i>	515	365	70,87%
<i>1820 Repro of sound, video and software</i>	460	415	90,22%
<i>Traditional Catering</i>	42770	13645	31,90%
<i>I Catering</i>	60600	26530	43,78%
<i>55 Accommodation</i>	9355	4815	51,47%
<i>551 hotels</i>	4900	2530	51,63%
<i>55101 Hotel-restaurants</i>	1535	260	16,94%
<i>55102 Hotels (not hotel-restaurants)</i>	3365	2270	67,46%
<i>552 Holiday home rentals etc.</i>	1945	1055	54,24%
<i>55201 Rental of holiday homes</i>	1835	1010	55,04%
<i>55202 Youth hostels, group accommodations</i>	110	50	45,45%
<i>553 Campsites</i>	1990	820	41,21%
<i>559 Other accommodation</i>	520	410	78,85%
<i>56 Eating and drinking establishments</i>	51240	21715	42,38%
<i>561 Restaurants, other eateries</i>	28735	7555	26,29%
<i>56101 Restaurants</i>	14310	2585	18,06%
<i>59 Motion picture and TV production; sound recording</i>	19610	17475	89,11%
<i>591 Production, distribution of films, TV</i>	16360	14690	89,79%
<i>5911 Motion picture and television production</i>	11995	10675	89,00%
<i>59111 Film production, not television films</i>	10890	9695	89,03%
<i>592 Making and publishing sound recordings</i>	3255	2790	85,71%
<i>5920 Making and editing sound recordings</i>	3255	2790	85,71%
<i>73-75 Advertising, design, other services</i>	121140	107865	89,04%
<i>74 Design, photography, translation agencies</i>	84150	77765	92,41%
<i>74101 Graphic design</i>	17180	16040	93,36%
<i>81 Cleaning contractors, gardeners, etc.</i>	28555	20465	71,67%
<i>8110 Facility management</i>	930	745	80,11%
<i>R-U Culture, recreation, other services</i>	221025	192645	87,16%
<i>R Culture, sport and recreation</i>	112285	99830	88,91%
<i>93 Sports and recreation</i>	22825	16355	71,65%
<i>932 Other recreation</i>	9415	7165	76,10%
<i>S Other services</i>	108590	92780	85,44%

Source: CBS StatLine (2020)

## 7 About the author



Adriaan van Liempt, PhD ([liempt.a@buas.nl](mailto:liempt.a@buas.nl)) works as a teacher and researcher in sociology and methodology at the Academy Leisure & Events (BUAs). He studied Sociology at Tilburg University and obtained his PhD at the University of Amsterdam on a study into the presence of collective labour agreements in the Dutch IT sector. Despite having had a software development agency from 1994 to 2010, during and after his studies, he was never a true entrepreneur in the sense of risk taking and taking on responsibility as an employer. Van Liempt was, above all, someone who was able to combine creativity and analytical skills with something that was in demand at the time.

Presently, Van Liempt is interested in a diverse array of topics including data science, machine learning, measuring experiences, social inequality, and the role and position of entrepreneurship in relation to the labour market and its institutions.



Games



Media



Hotel



Facility



Built Environment



Logistics



Tourism



Leisure & Events



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